

# **INDIAN STOCK MARKET- A DISTINCTION BETWEEN NSE AND BSE**

*Project Report submitted in  
partial fulfillment for the award  
of the degree of*

**BACHELOR OF BUSINESS  
ADMINISTRATION**

*Submitted by*

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19GSOB1010**

**IN BRANCH OF STUDY  
SCHOOL OF BUSINESS**

**Under the Supervision of  
Ms. Anam Khan  
(Assistant Professor)**



(Established under Galgotias University Uttar Pradesh Act No. 14 of 2011)

**APRIL 2022**

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## **SCHOOL OF BUSINESS**

### **BONAFIDE CERTIFICATE**

Certified that this project report “**INDIAN STOCK MARKET- A DISTINCTION BETWEEN NSE AND BSE**” is the bonafide work of “**VIVEK KUMAR, VISHAL KUMAR and VIPIN PANDEY**” who carried out the project work under my supervision.

**SIGNATURE**

**Dean of School**

**SIGNATURE**

**SUPERVISOR**

## Approval Sheet

This thesis/dissertation/report entitled Indian Stock Market- A Distinction Between NSE and BSE by Vivek Kumar, Vishal Kumar and Vipin Pandey is approved for the degree of Bachelor of Business Administration.

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**Place:**\_\_\_\_\_

# **Statement of Project Report Preparation**

**Thesis title: Indian Stock Market – A Distinction Between NSE and BSE**

1. Degree for which the report is submitted: BBA
3. Project Supervisor was referred to for preparing the report.
4. Specifications regarding thesis format have been closely followed.
5. The contents of the thesis have been organized based on the guidelines.
6. The report has been prepared without resorting to plagiarism.
7. All sources used have been cited appropriately.
8. The report has not been submitted elsewhere for a degree.

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## ABSTRACT

Stock Market is one of the most vibrant sectors in the financial system, marking an important contribution to economic development. Stock Market is a place where buyers and sellers of securities can enter into transactions to purchase and sell shares, bonds, debentures etc. In other words Stock Market is a platform for trading various securities and derivatives. Further, it performs an important role of enabling corporate, entrepreneurs to raise resources for their companies and business ventures through public issues. Today long term investors are interested to invest in the Stock market rather than invest anywhere. The Bombay Stock Exchange (BSE), the National Stock Exchange (NSE) and the Calcutta Stock Exchange (CSE) are the three large stock exchanges of Indian Stock Market. The stock market is an aggregation of investor sentiment that affects daily changes in stock prices. Investor sentiment remained a mystery and challenge over time, inviting researchers to comprehend the market trends. The entry of behavioral scientists in and around the 1980s brought in the market trading's human dimensions. Shortly after that, due to the digitization of exchanges, the mix of traders changed as institutional traders started using algorithmic trading (AT) on computers. Nevertheless, the effects of investor sentiment did not disappear and continued to intrigue market researchers. Though market sentiment plays a significant role in timing investment decisions, classical finance models largely ignored the role of investor sentiment in asset pricing. It is derived from the study that although some positive steps have been taken up, which are responsible for the substantial improvement of the Indian stock market, these are perhaps not sufficient enough to become a matured one and hence not integrated with the developed stock markets so far. Keywords: unit roots test, integration, Vector Auto regression Model, Variance Decomposition, Impulse Response Function.

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# CHAPTER-1

## 1.1 Introduction

Stock market refers to the accumulation of markets and trades in which normal operations are performed of buying, selling, and issuing shares of publicly owned companies takes place. Such financial transactions are performed through formal trading with institutional or over-the-counter (OTC) markets operating under a set of defined rules. There is have been many stock exchanges in the country or region that allow for stock trading and other types of securities. The stock market or equity market is also very popular stocks / shares, other financial securities - such as trading funds (ETFs), corporate bonds and other securities based on stocks, commodities, funds, and bonds - and are traded on the stock market. Although both terms - stock market and stock exchange – exist used interchangeably, the last word is usually the first part. If someone says that you trade in the stock market, which means you buy and sell shares / equities for one (or more) of the stock (s) that are part of the total stock market. Best stock Trading in the U.S. including the New York Stock Exchange (NYSE), Nasdaq, and Chicago Board Options Exchange (CBOE). These are the leading national debates, as well a few other changes that apply to the country, create a U.S. stock market.

A stock market is a place where people buy / sell shares of publicly listed companies. It offers a platform to facilitate seamless stock exchanges. In simple terms, if A wants to sell shares in Reliance Industries, the stock market will help him meet the seller intends to purchase Reliance Industries. However, it is important to note that one can trade in the stock market only through a registered attorney known as a stockbroker. I the buying and selling of shares takes place using an electronic medium. We'll talk more about stock buyers over time. There are two stock exchanges in India where most of the trade takes place - Bombay Stock Exchange (BSE) and National Stock Exchange (NSE). Despite this In two exchanges, there is another regional stock exchange like Bangalore Stock Exchange, Madras Stock Exchange etc but this exchange does not play a meaningful role.

### **National Stock Exchange (NSE)**

NSE is India's leading stock market where one can buy / sell stocks publicly companies. It was founded in 1992 and is based in Mumbai. The NSE has a fagship indicator called NIFTY50. The index contains the top 50 based companies its trading volume and market capitalization. This index is widely used by investors in India and globally as a barometer of India's largest oil markets.

### **Bombay Stock Exchange (BSE)**

The BSE is the first in Asia and the ancient stock exchange in India. It was founded in 1875 and is located in Mumbai. It has a total of ~ 5,295 companies listed ~ 3,972 available for sale as of August 21, 2017. BSE Sensex is a BSE flagship index. It

measures the performance of 30 large, liquid and financially sound companies in all important fields. Historically, stock trading may have taken place in the visible market. With the establishment of new technology and due to the covid-19 epidemic, the stock market is electronically, through the internet and online stockbrokers. Each trade takes place on a stock basis, but wholesale stock prices often go hand in hand because of news, political events, economics reports and other features.

## **1.2 Significance of the study**

The stock market is the best indicator of how well the economy is performing. Stock markets include all industries in all sectors of the economy. This means that they work as a barometer for what cycle the economy is in and the hopes and fears of the producers growth and wealth. The stock market is regulated where people can buy and sell shares of different companies. Stock markets today are emerging as the most popular and a the best financial market tool for a large number of investors. Large variety of stocks or stocks are available in the Indian stock market to cater for the needs and expectations of all types of investors. Rapid growth in the number of mediators and the stock market applications show a growing value for investment in the stock market. It's still great part of Indian investors have little experience in making wise investment decisions. Such information drought is one of the reasons for breeding errors, leading investors to choose with a particular stock or share without in-depth analysis, leading to dissatisfaction in return. The stock market enables companies to trade publicly and to raise money. The money transfers and ownership are sold in a controlled, secure environment. Stock markets encourage investment. Increases allow companies to grow businesses, increase employment and create jobs in the economy. The current study analyzes key Indian stock market (NSE and BSE) in relation to their market capitalization, annual outcome, risk and return from 2000 to 2020. Additional data on the history and performance of BSE and NSE.

## **1.3 Objectives**

1. Learning about emerging stock markets in india like NSE and BSE.
2. Learning about the annual results of the Indian stock market (BSE and NSE) from 2000 to 2020.
3. Indian stock market market analysis (NSE and BSE) from 2000 to 2020.
4. Assessing the risk and return of the Indian stock market (NSE and BSE) from 2000 to 2020.
5. Learning about the type of trading preferred by investors in the stock market.

## **1.4 Methodology**

The purpose of this study was to analyze market capitalization, annual outcome and risk and significant stock market return (NSE and BSE) for about 20 years from 2000

to 2020 and analyzing the investment pattern of traders in the stock market. To check the purpose both primary and secondary data were used. Key data collected from 30 respondents from the Thrichur region using the google form. The second data was collected in various journals, articles, publications and online websites.

## **1.5 Limitation**

The study was conducted primarily based on secondary data. As our study was in the middle During the covid-19 epidemic and lockdown, data collection has been reduced online sources. Many online sites provide adequate information and data. Thus, there was a dependence on various sites. Lack of books and other material has been a major limitation of our project.

## **1.6 Chapter Scheme**

The first chapter shows the introduction, the importance of the research, the purpose of the research, text review, methodology, limitations and chapter plan. Chapter two includes the stock market, How the stock market works, stock market operations, stock market stakeholders, Types of stock markets, Stock market overview. The third chapter covers Indian stock market: Nse and Bse, annual result of Nse and Bse, market capitalization of Nse and Bse, Risk and Recovery of Nse and Bse, Intermediate trading pattern analysis shareholders. Chapter 4 covers research findings, Bibliography, websites, Conclusion.

## **1.7 Literature of Review**

*Kian –Pinhg Lim & Robert Brooks (2011)* provides a systematic review of the weak-form market efficiency literature that examines return predictability from past price changes, with an exclusive focus on the stock markets. Our survey shows that the bulk of the empirical studies examine whether the stock market under study is or is not weak-form efficient in the absolute sense, assuming that the level of market efficiency remains unchanged throughout the estimation period. However, the possibility of time-varying week-form market efficiency has received increasing attention in recent years. We categorize these emerging studies based on the research framework adopted, namely non- overlapping sub-period analysis, time-varying parameter model and rolling estimation window.

*Anju Bala (2013)* evaluated that stock market is one of the most vibrant sectors in the financial system, marketing an important contribution to economic development. Stock market is a place where buyers and sellers of securities can enter into transaction to purchase and sell shares, bonds, debentures etc. In other words, stock market is a platform for trading various securities and derivatives. Further, it preforms an important role of enabling corporate, entrepreneurs to raise resource for their companies and business venture through public issues. Today long-term investors are interested to invest in the stock market rather than invest anywhere.

*Ross Levine & Sara Zervos* empirically evaluate the relationship between stock market development and long-term growth. The data suggest that stock market

development is positively associated with economic growth. Moreover, instrumental variables procedures indicate a strong connection between the predetermined component of stock market development and economic growth in the long run. While cross-country regressions imply a strong link between stock market development and economic growth, the results should be viewed as suggestive partial correlations that stimulate additional research rather than as conclusive findings. Much work remains to be done to shed light on the relationship between stock market development and economic growth. Careful case studies might help identify causal relationships and further research could be done on the time-series property of such relationships. Research should also be done to identify policies that facilitate the development of sound securities markets.

**Samveg Patel** is an Assistant Professor in S. K. Patel Institute of Management and Computer Studies, Gandhinagar. His areas of interest include Financial Econometrics and Financial Management. His most recent publication was in IUP Journal of Applied Finance. The study investigates the effect of macroeconomic determinants on the performance of the Indian Stock Market using monthly data over the period January 1991 to December 2011 for eight macroeconomic variables, namely, Interest Rate, Inflation, Exchange Rate, Index of Industrial Production, Money Supply, Gold Price, Silver Price & Oil Price, and two stock market indices namely Sensex and S&P CNX Nifty.

**Aman Srivastava (2010)** evaluated that Stock market is an important segment of the financial system of any country as it plays an important role in channelizing savings from deficit sector to surplus sector. These stock markets have always been an area of serious concern for policy makers, economists and researchers. They are often defined as the barometer of any economy because they reflect the change and direction of pressure on the economy. The movement and volatility in stock markets often reflect the direction of any economy. The available literature suggests that since the inception of stock markets researchers are making attempts to establish relationship between change in macroeconomic factors and stock market returns.

**Charles K.D, Adjasi, Nicholas B. Biekpe (2006)** studies the effect of stock market development on economic growth in 14 African countries in a dynamic panel data modelling setting. Results largely show a positive relationship between stock market development and economic growth. Further analyses, based on the level of economic development and stock market capitalization, are also conducted. The results reveal that the positive influence of stock market development on economic growth is significant for countries classified as upper middle-income economies. On the basis of market capitalization groupings, stock market developments play a significant role in growth only for moderately capitalized markets. The general trend in results shows that low-income African countries and less developed stock markets need to grow more and develop their markets to elicit economic gains from stock markets.

**L.M.C.S. (2006)** study investigates the effects of macroeconomic variables on stock prices in emerging Sri Lankan stock market using monthly data for the period from September 1991 to December 2002. The multivariate regression was run using eight macroeconomic variables for each individual stock. The null hypothesis which states that money supply, exchange rate, inflation rate and interest rate variables collectively do not accord any impact on equity prices is rejected at 0.05 level of significance in

all stocks. The results indicate that most of the companies report a higher R<sup>2</sup> which justifies higher explanatory power of macroeconomic variables in explaining stock prices.

**Roman Horvath & Dargan Petrovski (2012)** examine the international stock market comovements between Western Europe vis-à-vis Central (Czech Republic, Hungary and Poland) and South Eastern Europe (Croatia, Macedonia and Serbia) using multivariate GARCH models in the period 2006–2011. Comparing these two groups, we find that the degree of comovements is much higher for Central Europe. The correlation of South Eastern European stock markets with developed markets is essentially zero. An exemption to this regularity is Croatia, with its stock market displaying a greater degree of integration toward Western Europe recently, but still below the levels typical for Central Europe.

**Najeb M.H. Masoud (2013)** tries to explore the causal link between stock market performance and economic growth in terms of a simple theoretical and empirical literature framework. Researchers hold diverse opinions regarding the importance of stock markets playing a significant role in economic growth processes by performing the following functions: improving liquidity, aggregating and mobilising capital, observing managers and exerting corporate control, providing risk-pooling and sharing services including investment levels. The growing theoretical literature argues that stock markets are crucially linked to economic growth. The findings suggest a positive relationship between efficient stock markets and economic growth, both in short run and long run and there is evidence of an indirect transmission mechanism through the effect of stock market development on investment. They are seen as providing a service that boosts economic growth.

**Rafaqet Ali and Muhammad Afzal (2012)** devastating global financial crisis started from United States, spread all over the world and adversely affected real and financial sectors of developed as well as developing countries. This crisis is called the first largest crisis after the recession of 1930s. The prime aim of this study is to envisage the impact of recent global financial crisis on stock markets of Pakistan and India. For this purpose, daily data from 1st January 2003 to 31st August 2010 of KSE-100 and BSE-100 indices, representing stock markets' indices of Pakistan and India respectively, are used.

**Avijan Dutta, Gautam Bandopadhyay & Suchismita Sengupta (2012)** use logistic regression (LR) and various financial ratios as independent variables to investigate indicators that significantly affect the performance of stocks actively traded on the Indian stock market. The study sample consists of the ratios of 30 large market capitalization companies over a four-year period. The study identifies and examines eight financial ratios that can classify the companies up to a 74.6% level of accuracy into two categories – “good” or “poor” – based on their rate of return.

**Gagan Deep Sharma & B.S Bodla (2010)** states that financial markets of the world for foreign capital has led to the increased financial integration among different countries. This paper reviews and summarizes the research on the subject of integration and dynamic linkages between stock markets in different parts of the world. Majority of the studies suggested that market integration has increased significantly over the years, within an international context. We find that not many

studies have concentrated on the interaction

of Indian markets with the foreign markets, and most of the studies concerning Indian have concentrated at the inter-relationship of Indian stock market with those of the Developed nations. Therefore, there is a scope to study the inter-linkages between Indian stock markets and those of the other SAARC nations.

**Peter Sellin (2002)** gives a comprehensive view on the interaction between real stock returns, inflation, and money growth, with a special emphasis on the role of monetary policy. This is an area of research that has interested monetary and financial economists for a long time. Monetary economists have been interested in the question whether money has any effect on real stock prices, while financial economists have investigated whether equity is a good hedge against inflation. Empirical studies show that money can be helpful in predicting future stock returns. Empirical evidence also suggest that equity is not a good hedge against inflation in the short run but may be so in the long run.

**Alok Kumar Mishra (2004)** attempts to examine whether stock market and foreign exchange markets are related to each other or not. The study uses Granger's Causality test and Vector Auto Regression technique on monthly stock return, exchange rate, interest rate and demand for money for the period April 1992 to March 2002. The major findings of the study are (a) there exists a unidirectional causality between the exchange rate and interest rate and between the exchange rate return and demand for money; (b) there is no Granger's causality between the exchange rate return and stock return.

**Mara Madaleno & Carlos Pinho (2011)** accounts for the time-varying pattern of price shock transmission, exploring stock market linkages using continuous time wavelet methodology. In order to sustain and improve previous results regarding correlation analysis between stock market indices, namely FTSE100, DJIA30, Nikkei225 and Bovespa, we extend here such analysis using the Coherence Morlet Wavelet, considering financial crisis episodes. Results indicate that the relation among indices was strong but not homogeneous across scales, that local phenomena are more felt than others in these markets and that there seems to be no quick transmission through markets around the world, but yes, a significant time delay.

**Vivek Rajput & Sarika Bobde (2016)** study different techniques to predict stock price movement using the sentiment analysis from social media, data mining. In this paper we will find efficient method which can predict stock movement more accurately. Social media offers a powerful outlet for people's thoughts and feelings it is an enormous ever- growing source of texts ranging from everyday observations to involved discussions. This paper contributes to the field of sentiment analysis, which aims to extract emotions and opinions from text. A basic goal is to classify text as expressing either positive or negative emotion. Sentiment classifiers have been built for social media text such as product reviews, blog posts, and even twitter messages. With increasing complexity of text sources and topics, it is time to re-examine the standard sentiment extraction approaches, and possibly to redefine and enrich the definition of sentiment.

**Vanita Tripathi & Shruthi Sethi (2010)** evaluated the Financial integration is one of

the buzz words in financial world. The co movement of share prices across the stock markets in the world is a frequently experienced phenomenon. Especially during the times of crisis, it is observed that the stock markets crash together. The oil crisis of 1973, the October 1987 crash, the South East Asian crisis of 1997 and the present financial crisis evidence the same.

**Marxia Oli Sigao (2007)** investigated the effect of weather (temperature) factor, on the returns and volatility of the Indian stock indices (BSE Sensex and S&P CNX Nifty). This study examined how weather (temperature) affected the volatility of top stock market indices in India. The study used the monthly data of weather in five sample cities (Chennai, Mumbai, Delhi, Kolkata and Hyderabad) in India. This study applied statistical tools like Descriptive Statistics, ADF Test and GARCH (1, 1) model and found that the returns of sample stock market indices were influenced by weather (temperature) factor in Chennai, Mumbai, Kolkata and Hyderabad in India. But the returns of stock indices were not influenced by the temperature in Delhi City.

**Juhi Ahuja (2012)** presents a review of Indian Capital Market & its structure. In last decade or so, it has been observed that there has been a paradigm shift in Indian capital market. The application of many reforms & developments in Indian capital market has made the Indian capital market comparable with the international capital markets. Now, the market features a developed regulatory mechanism and a modern market infrastructure with growing market capitalization, market liquidity, and mobilization of resources. The emergence of Private Corporate Debt market is also a good innovation replacing the banking mode of corporate finance.

**Suresh G Lalwani (1999)** emphasized the need for risk management in the securities market with particular emphasis on the price risk. He commented that the securities market is a 'vicious animal' and there is more than a fair chance that far from improving, the situation could deteriorate.

**Debjit Chakraborty (1997)** in his study attempts to establish a relationship between major economic indicators and stock market behaviour. It also analyses the stock market reactions to changes in the economic climate. The factors considered are inflation, money supply, and growth in GDP, fiscal deficit and credit deposit ratio. To find the trend in the stock markets, the BSE National Index of Equity Prices (Natex) which comprises 100 companies was taken as the index. The study shows that stock market movements are largely influenced by, broad money supply, inflation, C/D ratio and fiscal deficit apart from political stability.

**Bhanwar Singh, Sahil Narang, (2020)** in his study examines the impact of the COVID- 19 outbreak on the stock markets of G-20 countries. We find statistically significant negative ARs in the four sub-event windows during the 58 days. Negative ARs are significant for developing as well as developed countries. The findings of this study reveal that cumulative average abnormal return (CAAR) from day 0 to day 43, ranging from – 0.70 per cent to –42.69 per cent, is a consequence of increased panic in the stock markets resulting from an increased number of COVID-19 positive cases in the G-20 countries.

**Rosy Call (2020)** examines the herding behaviour at the industry level from national stock exchange (NSE). Using daily stock closing prices of 191 firms, which constitute



the 12 industry indices for the period from 1 January 2015 to 1 June 2020, the results for the full sample period (1 January 2015 to 1 June 2020) and before COVID-19 outbreak period (1 January 2015 to 29 January 2020) indicate the non-existence of herding formation at the industry level, but they do suggest a strong evidence of anti-herding behaviour. Further, the findings suggest that COVID-19 pandemic caused the formation of herding behavior at the industry level. The study facilitates investors to devise their trading strategies in the regime of the COVID-19 pandemic.

**Krishna Reddy Chittedi** examined the stock market integration between India and developed countries such as USA, UK, Japan, France and Australia. The objective is to examine the stock indices of the above-mentioned developed countries with relation to India for a period of 10 years (1 October 1997-1 October, 2007) out the integration between them. For this purpose, Unit Roots, Granger Causality, cointegration and Error correction Mechanism are used. To examine the short-run and long-run relationships between India and the developing countries. The study found that co integration existing between India and developed countries. (USA, UK, Japan, France and Australia).

**T. P Madhusoodan** in his study applies the variance ratio tests under the null hypotheses of homoscedasticity as well as heteroscedasticity, to the Indian stock market. The tests are conducted at the aggregate level of market indices and disaggregate level of individual stocks. The results indicate that random walk hypothesis cannot be accepted in the Indian market. Both the market indices the author tested showed persistent behaviour, while most of the individual stocks also showed evidence on persistence. The variance ratios were significant under heteroscedasticity in most of the cases where it was significant under homoscedasticity assumption. This implies that heteroscedasticity does not play a major role in the Indian market.

## **CHAPTER-2**

### **STOCK MARKET AN OVERVIEW**

#### **2.1 STOCK MARKET**

A stock market, equity market, or share market is the aggregation of buyers and sellers of stocks (also called shares), which represent ownership claims on businesses; these may include securities listed on a public stock exchange, as well as stock that is only traded privately, such as shares of private companies which are sold to investors through equity crowd funding platforms. Investment in the stock market is most often done via stockbrokerages and electronic trading platforms. Investment is usually made with an investment strategy in mind.

Stocks can be categorized by the country where the company is domiciled. For example, Nestlé and Novartis are domiciled in Switzerland and traded on the SIX Swiss Exchange, so they may be considered as part of the Swiss stock market, although the stocks may also be traded on exchanges in other countries, for example, as American depositary receipts (ADRs) on U.S. stock markets.

#### **2.2 HOW THE STOCK MARKET WORKS**

Stock markets provide a secure and regulated environment in which market participants can confidently use stocks and other appropriate financial instruments with minimal or low operating risk. Operating under the stated rules as stated by the regulator, the stock markets act as the primary market and as the secondary markets.

As a major market, the stock market allows companies to issue and sell their shares to the general public for the first time through the initial public offering (IPO) process. This work helps companies raise the required amount of money for investors. It basically means that a company divides itself into a number of shares (say, 20 million shares) and sells part of those shares (say, 5 million shares) to the general public at a price (say, \$ 10 per share).

To facilitate this process, the company needs a market place where these shares can be sold. This market place is provided by the stock market. If all goes according to plan, the company will successfully sell 5 million shares for \$ 10 per share and collect.

\$ 50 million. Investors will be able to obtain company shares that they can expect to have at their discretion, anticipating an increase in the share price and any potential revenue in the form of share payments. The stock exchange acts as the promoter of this fundraising process and finances its services to the company and its financial partners.

Following the IPO stock exchange program for the first time called the listing process, the stock exchange also serves as a trading platform that facilitates the normal buying and selling of listed shares. This creates a secondary market. The stock exchange earns money from all trades that take place in its area during the second market

activity.

The stock exchange bears the responsibility for ensuring price transparency, liquidity, price acquisition and proper co-operation in such trading activities. With almost all major stock markets around the world now operating electronically, trading keeps trading systems that manage to effectively buy and sell orders from various market participants. They do pricing work to promote fair value for both buyers and sellers.

The listed company may also offer new shares, in addition to other contributions over time, such as in the case of rights or subsequent offers. They may repurchase or cancel their shares. The stock exchange facilitates such transactions.

The stock exchange tends to create and maintain a variety of market level indicators and specific sectors, such as the S&P 500 index or the Nasal 100 index, which provides a measure of tracking the overall market movement. Other methods include the Stochastic Oscillator and the Stochastic Momentum Index.

The stock market also maintains all corporate news, announcements, and financial reporting, which are often accessed through their official websites. The stock exchange also supports other business-related, job-related activities. For example, profitable companies can reward investors by paying dividends that usually result in a portion of the proceeds. The exchange stores all such information and may support its processing to some extent. (For details, see "How Does the Stock Market Work?")

## **2.3 FUNCTIONS OF A STOCK MARKET**

A stock market primarily serves the following functions:

**Fair Dealing in Securities Transactions:** Depending on the standard rules of demand and supply, the stock exchange needs to ensure that all interested market participants have instant access to data for all buy and sell orders thereby helping in the fair and transparent pricing of securities. Additionally, it should also perform efficient matching of appropriate buy and sell orders.

For example, there may be three buyers who have placed orders for buying Microsoft shares at \$100, \$105 and \$110, and there may be four sellers who are willing to sell Microsoft shares at \$110, \$112, \$115 and \$120. The exchange (through their computer operated automated trading systems) needs to ensure that the best buy and best sell are matched, which in this case is at \$110 for the given quantity of trade.

**Efficient Price Discovery:** Stock markets need to support an efficient mechanism for price discovery, which refers to the act of deciding the proper price of a security and is usually performed by assessing market supply and demand and other factors associated with the transactions.

Say, a U.S.-based software company is trading at a price of \$100 and has a market capitalization of \$5 billion. A news item comes in that the EU regulator has imposed a fine of \$2 billion on the company which essentially means that 40 percent of the company's value may be wiped out. While the stock market may have imposed a trading price range of \$90 and \$110 on the company's share price, it should

efficiently change the permissible trading price limit to accommodate for the possible changes in the share price, else shareholders may struggle to trade at a fair price.

**Liquidity Maintenance:** While getting the number of buyers and sellers for a particular financial security are out of control for the stock market, it needs to ensure that whosoever is qualified and willing to trade gets instant access to place orders which should get executed at the fair price.

**Security and Validity of Transactions:** While more participants are important for efficient working of a market, the same market needs to ensure that all participants are verified and remain compliant with the necessary rules and regulations, leaving no room for default by any of the parties. Additionally, it should ensure that all associated entities operating in the market must also adhere to the rules, and work within the legal framework given by the regulator.

**Support All Eligible Types of Participants:** A marketplace is made by a variety of participants, which include market makers, investors, traders, speculators, and hedgers. All these participants operate in the stock market with different roles and functions. For instance, an investor may buy stocks and hold them for long-term spanning many years, while a trader may enter and exit a position within seconds. A market maker provides necessary liquidity in the market, while a hedger may like to trade in derivatives for mitigating the risk involved in investments. The stock market should ensure that all such participants are able to operate seamlessly fulfilling their desired roles to ensure the market continues to operate efficiently.

**Investor Protection:** Along with wealthy and institutional investors, a very large number of small investors are also served by the stock market for their small number of investments. These investors may have limited financial knowledge, and may not be fully aware of the pitfalls of investing in stocks and other listed instruments. The stock exchange must implement necessary measures to offer the necessary protection to such investors to shield them from financial loss and ensure customer trust.

For instance, a stock exchange may categorize stocks in various segments depending on their risk profiles and allow limited or no trading by common investors in high-risk stocks. Exchanges often impose restrictions to prevent individuals with limited income and knowledge from getting into risky bets of derivatives.

**Balanced Regulation:** Listed companies are largely regulated and their dealings are monitored by market regulators, like the Securities and Exchange Commission (SEC) of the U.S. Additionally, exchanges also mandate certain requirements – like, timely filing of quarterly financial reports and instant reporting of any relevant developments - to ensure all market participants become aware of corporate happenings. Failure to adhere to the regulations can lead to suspension of trading by the exchanges and other disciplinary measures.

**Regulating the Stock Market:** A local financial regulator or competent monetary authority or institute is assigned the task of regulating the stock market of a country. The Securities and Exchange Commission (SEC) is the regulatory body charged with overseeing the U.S. stock markets. The SEC is a federal agency that works independently of the government and political pressure. The mission of the SEC is

stated as: "to protect investors, maintain fair, orderly, and efficient markets, and facilitate capital formation."

## **2.4 STOCK MARKET PARTICIPANTS**

Along with long-term investors and short-term traders, there are many different types of players associated with the stock market. Each has a unique role, but many of the roles are intertwined and depend on each other to make the market run effectively.

- Stockbrokers, also known as registered representatives in the U.S., are the licensed professionals who buy and sell securities on behalf of investors. The brokers act as intermediaries between the stock exchanges and the investors by buying and selling stocks on the investors' behalf. An account with a retail broker is needed to gain access to the markets.
- Portfolio managers are professionals who invest portfolios, or collections of securities, for clients. These managers get recommendations from analysts and make the buy or sell decisions for the portfolio. Mutual fund companies, hedge funds, and pension plans use portfolio managers to make decisions and set the investment strategies for the money they hold.
- Investment bankers represent companies in various capacities, such as private companies that want to go public via an IPO or companies that are involved in pending mergers and acquisitions. They take care of the listing process in compliance with the regulatory requirements of the stock market.

## **2.5 TYPES OF STOCK MARKET**

### **1. Classification based on stock classes**

There are some stocks that do not give the shareholders the power to vote at the annual meetings where the decisions regarding the management of the company and such issues take place. Unlike these stocks, there are some other stocks that allow shareholders to participate in the decision making in the company matters, by casting their votes. Another kind of stocks offer shareholders the opportunity to cast multiple votes in matters pertaining to different aspects of the company.

### **2. Classification based on market capitalization**

Stocks can be classified on the basis of the market capitalization of the company, which is the total shareholding of a company. This is calculated by multiplying the current price of the company stock with the total number of shares outstanding in the market. Listed below are the types of stocks based on market capitalization.

#### **i. Large Cap Stocks**

These are often stocking of Blue-chip companies which are established enterprises with large reserves of cash at their disposal. It is interesting to note that the larger size of the large cap companies does not mean that they grow more rapidly. In fact, it is

the small stock companies that tend to outperform them over the longer time frame. But large cap stocks do come with the benefit of allowing the investors to reap higher dividends in comparison to the smaller and mid cap companies' stocks, ensuring that the capital is preserved over the long-term period.

## **ii. Mid Cap Stocks**

These are the stocks of medium sized companies that have a market capitalization of INR 250 Crore to about INR 4000 crore. These companies have a well recognize name in the market which brings along the benefit of potential for growth, as well as the stability that is usually accompanied with being a seasoned player in the market. Mid cap companies have a good track record of steady growth and are very similar to blue chip stocks barring their size. In the long term these stocks do and grow well.

## **iii. Small Cap Stocks**

As is suggestive of the name, small cap stocks have the smallest value in the market as compared to its counterparts. These are small sized companies that have a market capitalization of up to INR 250 and have the potential to grow at a good pace in the future. Investors who are willing to commit to a long term and are not very particular about the current dividends, and are willing to stand their ground during price volatility, can make significant gains in the future. As an investor you can buy these stocks when they are available at a cheap price during the initial stage of the company. There is no surety about the how the company will perform in the market since they are relatively new. Because these small cap companies are new, they are highly volatile and their growth impacts the value and revenue of the company to a huge extent.

### **3. Classification based on ownership**

Based on wonder ship, there are three types of stocks that investors can own which offer them different rights and growth potential.

#### **i. Preferred & common stocks**

Preferred stocks offer investors a fixed amount of dividend every year unlike common stocks. The price of preferred stocks is not as volatile as a common stock but it is common stock that gets the benefit of priority when the company has surplus money to distribute. At the time of company liquidation, it is the company's creditors, its bond holders, debenture holders who get priority over the preferred shareholders. Common stockholders have voting rights, a privilege preferred shareholder do not enjoy.

#### **ii. Hybrid Stocks**

There are companies that offer preferred shares with the option of converting them to common shares, with conditions, at a certain point in time. These are known as hybrid stocks or convertible preferred shares and may or may not have voting rights.

#### **iii. Stocks with embedded derivative options**

Stocks that come with the embedded derivative option means that they can be 'callable' or 'puttable' and are not as commonly available. A 'callable' stock has the option of being bought back by the company for a certain price at a certain point in time. Similarly, a 'puttable' stock offers its holder to sell it to the company at a certain price and time.

#### **4. Classification based on dividend payment**

##### **I. Growth Stocks**

These stocks do not pay high dividends as the company prefers to reinvest the earnings to enable it to grow faster, hence, the name growth stocks. The value of the shares of the company rises with the fast growth rate which in turn allows investors to profit through higher returns. It is best suited for those investors who seek long term growth potential and not an immediate second source of income. Growth stocks carry higher risk than their counterpart.

##### **ii. Income Stocks**

In comparison to growth stocks, income stocks hand out a higher dividend in relation to the price of the share. Higher dividends translate to higher income; hence, the name Income Stocks. Income stocks are indicative of a stable company that can afford consistent dividends but these are also companies that do not promise very high growth. This means that the stock price of such companies may not rise much. Income stocks also includes preferred stocks. IT is a good investment for those investors who seek a secondary source of income through relatively low risk stocks. The dividend income in income stocks is not taxed and thus is great for investors of low risk profile who want long term investment. You may want to use the dividend yield measure to find such stocks that offer high dividends.

#### **5. Classification based on fundamentals**

Investors who believe that a share price must equal the intrinsic value of the company's share, the value investing investors, compare the share prices with components like per share earnings, profits etc. to reach at an intrinsic value per share.

##### **I. Overvalued Shares**

These are shares with prices that exceed the intrinsic value and are considered overvalued.

##### **ii. Undervalued Shares**

These types of shares are popular amongst the value investors as they believe that the price of the share would rise in the future.

#### **6. Classification based on Risk**

The risk level of stocks differs depending on the share price fluctuations. Stocks with

higher risk reward the investor with higher returns, while low risk stocks generate low returns.

## **I. Beta Stocks**

The beta or the measure of risk is derived by calculating the price volatility of the stock. Beta can be positive or negative which denotes whether it moves in sync with the market or against it. The higher the beta, higher is the risk quotient of the stock. If the beta value is more than 1 it means that the stock is more volatile than the market. A lot of investors with knowledge of this measure use it to make their investment decisions.

### **ii. Blue Chip Stocks**

Blue chip stocks are stocks of those companies that have lower liabilities and stable earnings and which pay regular dividends. These very large and well-recognised companies that have a long history of sound financial performance are a good bet for Investors who seek safer avenues of investment.

## **7. Classification based on price trends**

This classification is based on the movement of stock prices in tandem with or against the company earnings.

### **I. Defensive Stocks**

These are stocks that are somewhat unfazed by economic conditions and are preferred when the market conditions are poor. Food and beverage companies are a common example.

### **ii. Cyclical Stocks**

Stocks of companies that are greatly affected by economic conditions and see high price fluctuations with market changes are cyclical stocks. These types of stocks grow rapidly during the boom cycle but the growth is slowed down in the slow economy. Automobile stocks fall in this category.

## **2.6 OVERVIEW OF STOCK MARKET**

### **2.6.1 STOCK MARKET AT GLOBAL LEVEL**

Stock markets are some of the most important parts of today's global economy. Countries around the world depend on stock markets for economic growth. However, stock markets are a relatively new phenomenon. They haven't always played an important role in global economics.

The first genuine stock markets didn't arrive until the 1500s. However, there were plenty of early examples of markets which were similar to stock markets. In the 1100s, for example, France had a system where courtiers de change managed agricultural debts throughout the country on behalf of banks. This can be seen as the



first major example of brokerage because the men effectively traded debts. Later on, the merchants of Venice were credited with trading government securities as early as the 13th century. Soon after, bankers in the nearby Italian cities of Pisa, Verona, Genoa, and Florence also began trading government securities. The world's first stock markets are generally linked back to Belgium. Bruges, Flanders, Ghent, and Rotterdam in the Netherlands all hosted their own "stock" market systems in the 1400s and 1500s. However, it's generally accepted that Antwerp had the world's first stock market system. Antwerp was the commercial centre of Belgium and it was home to the influential Van der Buerse family. As a result, early stock markets were typically called Beursen. All of these early stock markets had one thing missing: stocks. Although the infrastructure and institutions resembled today's stock markets, nobody was actually trading shares of a company. Instead, the markets dealt with the affairs of government, businesses, and individual debt. The system and organization were similar, although the actual properties being traded were different.

### **The top 10 biggest stock exchanges in the world:**

#### **1. New York Stock Exchange**

The New York Stock Exchange (NYSE) is additionally referred to as 'The Big Board'. The NYSE is the first on the list of the largest stock exchanges in the world and is a highly esteemed stock exchange in the USA. The NYSE has remained the largest stock exchange in the world by market capitalisation ever since the end of World War. It is located at 11, Wall Street, Lower Manhattan, New York City. It consists of 2,400 listed companies which span sectors such as finance, healthcare, consumer goods and energy. The blue-chip companies which are listed under NYSE are Berkshire Hathaway Inc, Coca-Cola, Walt Disney Company, Mc Donald's Corporation, etc. Date of establishment: May 17, 1792. Valuation: \$19.3 Trillion.

#### **2. NASDAQ**

Second on the list of the largest stock exchange in the world is NASDAQ, an abbreviation of National Association of Securities Dealers Automated Quotations. Nasdaq, an American stock exchange is headquartered at 151 W, 42nd Street, New York City. Nasdaq never operated on a usual open outcry system, instead, it has always used a computer and telephone-based system of trading, which has made the NASDAQ the world's first electronically traded stock market. The enlistment of the world's humongous tech giants such as Apple, Microsoft, Google, Facebook, Amazon, Tesla, and Intel make NASDAQ 'The Mecca of Technology Companies'. Date of establishment: February 4, 1971. Valuation: \$13.8 Trillion.

#### **3. Tokyo Stock Exchange**

The Tokyo Stock Exchange (TSE) which is also known as TYO and Tōshō is located in Tokyo, Japan. It is listed as the third-largest stock exchange in the world. TSE has around 3,575 listed companies which has taken its market capitalization to a whopping US\$ 5.67 trillion. The TSE's benchmark index is Nikkei 225 and it is home to Japanese giants with international exposure, including Toyota, Suzuki, Honda, and Mitsubishi and Sony. Date of establishment: January 1, 2003. Valuation: \$5.7 Trillion.

**4. Shanghai Stock Exchange**

The Shanghai Stock Exchange (SSE) is a Chinese stock exchange situated in the city of Shanghai, China. It is one of the three stock exchanges plying autonomously in the People's Republic of China. Date of establishment: November 26, 1990. Valuation: \$4.9 Trillion.

**5. Hong Kong Stock Exchange**

The Hong Kong Stock Exchange (SEHK) is located in Hong Kong and is the world's fifth-largest and Asia's third-largest stock exchange on the basis of market capitalization. It is one of the three stock exchanges in China. SEHK consists of 2,315 listed companies with a wholesome market capitalization of HK\$29.9 trillion. It is reported as the fastest-growing stock exchange in Asia. Date of establishment: February 3, 1891. Valuation: \$4.4 Trillion.

**6. EURONEXT**

EURONEXT stands for European New Exchange Technology. With its registered office in Amsterdam and corporate address at La Défense in Greater Paris, EURONEXT was established in 2000 to represent Europe's economy which is also the reason why it operates in euros. It is the sixth-largest stock exchange in the world with a market capitalization worth €4.1 trillion. Date of establishment: September 22, 2000. Valuation: \$3.9 Trillion.

**7. Shenzhen Stock Exchange**

The Shenzhen Stock Exchange (SZSE) is one of the three independently working stock exchanges in China. Although it was founded in 1987, it wasn't established until 1990. It is the 7th largest stock exchange in the world and has approximately 1,300 listed companies with a combined market capitalization of \$3.92 trillion. Date of establishment: December 1, 1990. Valuation: \$3.5 Trillion.

**8. London Stock Exchange**

The London stock exchange (LSE) is based in London and is the sixth-largest stock market within the world. It was established in 1571 and is the oldest stock exchange in the world. It has more than 3,000 listed companies with a combined market capitalization of \$4.59 trillion. Date of establishment: January 23, 1571. Valuation: \$3.2 Trillion.

**9. Toronto Stock Exchange**

The Toronto Stock Exchange (TSX) is situated in Toronto, Canada. It was introduced in 1852 and is held and wielded as a subsidiary of the TMX Group. Enlistment of 2,207 companies with a combined market capitalization of \$2.3 trillion. Date of establishment: October 25, 1861. Valuation: \$2.1 Trillion.

## **CHAPTER- 3**

### **DATA ANALYSIS**

#### **3.1 EMERGING STOCK MARKETS IN INDIA**

##### **3.1.1 NSE EMERGE**

NSE EMERGE is a new NSE program for small and medium enterprises (SMEs) and start-up companies in India. These companies can be listed on the NSE without initial public offering (IPO). This forum will help SME's & Start-ups to connect with investors and assist them with fundraising. On 8 July 2015, Sucheta Dalal wrote an article on Financial Life alleging that some NSE employees were releasing sensitive data related to the most common trading or local servers on a selected set of market participants so that they could trade faster than their competitors. The NSE accuses blasphemy in the article on Money life. On 22 July 2015, the NSE filed a \$ 1 billion (US \$ 14 million) lawsuit against Money's health. However, on September 9, 2015, the Bombay Supreme Court dismissed the case and fined the NSE ₹ 5 million (US \$ 70,000) in a defamation suit against Money life (High Court asked the NSE to pay ₹ 150,000 (US \$ 2,100) for each journalist Debashis Basu.

The Bombay High Court suspended the order for two weeks, pending a hearing by an NSE appeal. In May 2019 SEBI barred the NSE from reaching the markets for a period of 6 months. Although the NSE has confirmed that this will not affect its operations, it will not be able to document its IPO or introduce any new trading products of the time. In addition, the watchdog also instructed the NSE to spend Rs 624.9 crores (plus interest earned for that period), an amount equal to the profit made by the wrong trading practice of local servers given during the period 2010-11 2013–14. The board also issued orders against 16 people including former executives and executives Ravi Narain and Chitra Ramakrishna ordering them to pay 25% of their salaries at that time and interest. All money should be paid into a fund for protection and investors and education. These people are also removed from the market or hold any position in the listed company for a period of five years. The 1991 collapse After India's economic downturn in 1991, the stock market saw many cycles of explosions and explosions, some related to scams similar to those created by players like Harshad Mehta and Ketan Parekh, some due to global events and few to follow. in circular trading, inflation and unrealistic expectations of investors leading to bubbles that eventually exploded.

##### **Crashes of 2020**

On 1 February 2020, as the FY 2020-21 Union budget was presented in the lower house of the Indian parliament, Nifty fell by over 3% (373.95 points) while Sensex fell by more than 2% (987.96 points). The fall was also weighed by the global breakdown amid coronavirus pandemic cantered in China. On 28 February 2020, Sensex lost 1448 points and Nifty fell by 432 points due to growing global tension caused by coronavirus, which W.H.O said has a pandemic potential. Both BSE and NSE fell for the entire five days of the week ending with the worst weekly fall since 2009.

On March 4 and 6, markets fell by around 1000 points and several crores of wealth was wiped out. On 6 March 2020, Yes Bank was taken over by RBI under its management for reconstruction and will be merged with SBI. This was done to ensure smooth functioning of the bank as it was struggling for couple of years to cope up with heavy pressure due to cleaning of bad loans. On 9 March 2020, the Sensex fell by 1,941.67 points, while Nifty- 50 broke down by 538 points. The fear of COVID-19 outbreak has created havoc all over the globe and India is no exception. Further, the recent Yes, Bank crisis also made the markets fell. The markets ended in red with Sensex closing on 35,634.95 and Nifty-50 on 10,451.45.

On 12 March 2020, the Sensex fell by 2919.26 points (-8.18%), the worst continuation of the week in the history while Nifty-50 broke down by 868.25 points (-8.30%) amid World Health Organisation (WHO) declaring Coronavirus outbreak as “pandemic”. Sensex ended to 33-month low of 32778.14. On 16 March 2020, Sensex plunged by 2,713.41 points (around 8%), the second worst fall in its history. On the other hand, Nifty ended below 9200–mark at 9,197.40 due to global economic recession. However, the Sensex continued to fall straight for 4–continuous days till 19 March 2020, losing 5815 points during the period. On 23 March 2020, Sensex lost 3,934.72 points (13.15%) and Nifty plunges 1,135 points (12.98%) at 7610.25 as coronavirus-led lockdowns across the world triggered fears of a recession. These are now the lowest levels since 2016. It’s witnessing the biggest weekly loss since October 2008, as the increasing number of coronavirus cases in India as well as globally.

### **3.1.2 BOMBAY STOCK EXCHANGE (BSE)**

BSE Limited, formerly known as the Bombay Stock Exchange is an Indian government-owned stock exchange located on Dalal Street in Mumbai. Founded in 1875, it is the oldest stock exchange in Asia. BSE is the 7th largest market in the world with a market capitalization of more than US \$ 2.8 trillion since February 2021. Although Bombay Stock Exchange Limited is now similar to Dalal Street, this has not always been the case. In the 1850s, five merchants gathered under a Banyan tree in front of Mumbai City Hall, where the Horniman Circle now stands. Ten years later, merchants relocated to another leafy area, this time under banyan trees at the crossroads of Meadows and what was then known as Esplanade Road, now Mahatma Gandhi Road. With the rapid growth in the number of buyers, they had to change locations repeatedly. Finally, in 1874, the merchants acquired a permanent estate, a place they could call their own. A group of traders became the official organization known as the "Native Share & Stock Brokers Association" in 1875. The Bombay Stock Exchange continued operating outside the City Hall until 1928. The current location near Horniman Circle was acquired alternately. in 1928, and a building was built and used in 1930. The street where the site was located was called Dalal Street in Hindi (meaning "Broker Street") because of the exchange area.

On 31 August 1957, BSE became the first stock market to be recognized by the Indian Government under the Securities Contracts Act. Construction of the current building, the Piroze Jeejeebhoy Towers on Dalal Street, in the Fort area, began in the late 1970s and was completed with the BSE in 1980. It was originally called BSE.

Towers, the name of the building was changed soon after occupation, in memory of Sir Phiroze Jamsheji Jeejeebhoy, chairman of the BSE since 1966, following his death.

BSE established India INX on 30 December 2016. India INX is the first international exchange of India. Mr. Ashish Kumar Chauhan. Shri Ashish Kumar Chauhan is the MD & CEO of BSE (Bombay Stock Exchange), the first stock exchange of Asia. He is one of the founders of India's National Stock Exchange ("NSE") where he worked from 1992 to 2000. Based in Mumbai, India, the BSE lists close to 6,000 companies and is one of the largest exchanges in the world, along with the New York Stock Exchange (NYSE), Nasdaq, London Stock Exchange Group, Japan Exchange Group, and Shanghai Stock Exchange. The BSE has helped develop India's capital markets, including the retail debt market, and has helped grow the Indian corporate sector. The BSE is Asia's first stock exchange and also includes an equities trading platform for small-and-medium enterprises (SME). BSE has diversified into providing other capital market services including clearing, settlement, and risk management. The BSE has been instrumental in developing India's capital markets by providing an efficient platform for the Indian corporate sector to raise investment capital. In the 1850s, stockbrokers would conduct business under a banyan tree in front of the Mumbai town hall. After a few decades of various meeting locations, Dalal Street was formally selected in 1874 as the location for the Native Share and Stock Brokers' Association, the forerunner organization that would eventually become the BSE. Mumbai is now a major financial center in India and Dalal Street is home to a large number of banks, investment firms, and related financial service companies. The importance of Dalal Street to India is significant.

In the third week of January 2008, the SENSEX experienced huge falls along with other markets around the world. On 21 January 2008, the SENSEX saw its highest ever loss of 1,408 points at the end of the session. The SENSEX recovered to close at 17,605.40 after it tumbled to the day's low of 16,963.96, on high volatility as investors panicked following weak global cues amid fears of a recession in the US.

The next day, the BSE SENSEX index went into a free fall. The index hit the lower circuit breaker in barely a minute after the markets opened at 10 am. Trading was suspended for an hour. On reopening at 10.55 am, the market saw its biggest intra-day fall when it hit a low of 15,332, down 2,273 points. However, after reassurance from the market bounced back to close at 16,730 with a loss of 875 points. Over the course of two days, the BSE SENSEX in India dropped from 19,013 on Monday morning to 16,730 by Tuesday evening or a two-day fall of 13.9%. Less than a month later, on 11 February 2008, the SENSEX lost 833.98 points, when Reliance Power fell below its IPO price in its debut trade after a high-profile public offer. On 2015, The index crossed the historical mark of 30,000 after repo rate cut announcement by RBI. The index plummeted by over 1,624.51 points on 24 August 2015, the then worst one-day point plunge in the index's history. On 9 March 2020, Sensex tumbled down by 1941.67 points amid the fears of and crisis. This was the second worst single-day fall in the history, where the investors lost ₹ 6.50 lakh crores.

While on 12 March 2020, the index plunged down by 2919.26 points, the second-worst fall in the history, ending in red to a 33-month low at 32,778.14. The fall wiped off ₹ 11.2 lakh crores wealth. On March, trading was halted for 45 minutes for the first time in 12 years since January 2008 due to lower circuit. Sensex touched a low of 29,687.52 down by 3090.62 points (or 9.43%). However, after the 45-minute halt, the

index saw biggest intra-day recovery by 5,380 points to end up by 1325 points. Continuing the losing streak, wealth worth ₹14.22 lakh crore was erased on 23 March 2020 as BSE SENSEX lost 3,934.72 points to end at 25,981.24. As on 21 January 2021, Sensex has recovered to 50,167.71.

## **3.2 YEAR EFFECT OF STOCK MARKETS**

### **3.2.1 YEAR EFFECT OF NSE**

Indian benchmark indices posted their biggest daily percentage decline in 10 months on Friday, as a North Korean threat to carry out a hydrogen bomb test in the Pacific Ocean rattled global markets. The Indian government's stimulus spending plan and jitters that it

would widen the fiscal deficit also contributed to the decline, which was led by bank stocks. The National Stock Exchange's 50-share Nifty index dipped 1.56% to close below the psychological 10,000-point mark at 9,964.40 points. The BSE Sensex tumbled 1.38% to end at 31,922.44 points. North Korea struck back at US President Donald Trump's threats to destroy it, with Kim Jong Un warning of the "highest level of hard-line countermeasure in history" and his foreign minister suggesting that could include testing a hydrogen bomb in the Pacific Ocean.

Indian stocks are the most expensive among peers, prompting concerns about valuations overshooting fundamentals amid slow economic growth and an elusive corporate earnings recovery. "Impact of good and services tax (GST) could be more prolonged and earnings recovery could be delayed by a quarter or two. As a result, a market correction at this juncture should not come as a surprise," said Ravi Gopala Krishnan, head of equities at Canara Robeco Mutual Fund. The price-to-earnings ratio for FY19 is 18.48 and 18.18 for the Sensex and Nifty respectively, whereas that for MSCI Emerging Markets is 12.76 and MSCI World 16.50. Analysts described the correction in the Indian markets as healthy and long overdue.

Most stocks in the capital goods, healthcare and metals sectors were under pressure on Friday. Among sectoral indices, the BSE Metal index fell 3.9%, reacting to China's credit downgrade by S&P Global Ratings, triggering concerns that demand from the world's second-biggest economy may decline. So far this year, FIIs have bought a net \$6.4 billion worth of stocks, but sold \$761.55 million worth of Indian equities in September.

Even as the Nifty surged to fresh record high on April 3 2019, it's intriguing to note that the index has grown by a whopping 11.70 times in the last 25 years. Notably, the Nifty surged past its earlier high of 11,760.20 in the morning trade on Tuesday, on the back of sustained FII flows ahead of the general elections due to fresh optimism that PM Narendra Modi will return to power in 2019, say experts. Investors are convinced that Modi will retain power in the upcoming election 2019, veteran investor Raamdeo Agrawal said in an interview to ET Now.

**Journey to 10,000:** After the Narendra Modi-led government rose to power, the Nifty scaled the 7,000-mark on 12 May 2014. On the back of a euphoria, it soon surged past the 8000- mark on 01 September 2014. The next 1,000 took a while, as the Nifty breached 9,000 on 14 March 2017. "In 2017, Nifty spurred too the 9,000-mark backed by strong buying from foreign investors," noted a Kotak report. The Nifty finally crossed the much awaited 5-figure mark of 10,000 on 25th July 2017, amid good

monsoons, strong corporate earnings and the rollout of Goods and Services Tax (GST).

Gain to 11,000: Nifty crossed the 11,000-mark on January 23rd 2018, on the back of fall in US crude oil prices and the World Bank's positive update on Indian economy. The move was significant. as it came ahead of Union Budget 2018 presented on February 1 later that year. Record high of 11,761, the Nifty hit a fresh record high of 11,761 on Monday. The index gained nearly 17% from record lows hit on October 26, 2018. In the near-term, the Nifty could top the crucial 12,000-mark. "We remain positive on markets in long-term, but one can expect some profit booking from 12,000 levels, and near-term volatility from events like credit policy, election results etc. cannot be ruled out. Any decline to around the 11,200 levels would be a good opportunity to create long positions," B Gopkumar, ED & CEO, Reliance Securities said as it came ahead of Union Budget 2018 presented on February 1 later that year. Record high of 11,761

This morning, the Nifty hit a fresh record high of 11,761 on Monday. The index gained nearly 17% from record lows hit on October 26, 2018. In the near-term, the Nifty could top the crucial 12,000-mark. "We remain positive on markets in long-term, but one can expect some profit booking from 12,000 levels, and near-term volatility from events like credit policy, election results etc. cannot be ruled out. Any decline to around the 11,200 levels would be a good opportunity to create long positions," B Gopkumar, ED & CEO, Reliance Securities said. The S&P BSE Sensex and NSE Nifty 50 indices ended on a flat note on last session of 2020 as losses in FMCG, IT and state-run banking offset gains in metal, pharma and media shares. Both benchmarks traded on a choppy note for the most part of the day, as derivatives (futures and options) contracts for the month of December expired at the end of the session. The Nifty touched a record high of 14,024.85 during the session and the Sensex touched an all-time high of 47,896.97.

The Sensex ended 5 points higher at 47,751 and Nifty 50 index closed unchanged at 13,982. In the calendar year 2020, the Sensex rallied 15.75 per cent and the Nifty climbed 14.90 per cent, making it the best year for the indices since 2017, news agency Reuters reported. For the decade ended 2020, the Sensex has gained a whopping 173 per cent and Nifty surged 169 per cent. A gush of liquidity by foreign investors has lifted the benchmarks to new highs, according to analysts. On Wednesday, foreign institutional investors (FIIs) had net bought Indian shares worth ₹ 1,824 crore. So far this calendar year, FIIs have net purchased domestic equities worth \$22.44 billion but net sold assets worth \$14 billion in the debt markets, NSDL data showed.

Six of 11 sector gauges compiled by the National Stock Exchange ended higher, led by the Nifty Metal and Pharma indices, which rose 0.7 per cent each. Auto, financial services, media and realty shares also witnessed buying interest. On the other hand, PSU banking, FMCG, IT and private banking shares witnessed mild selling pressure. Mid- and small-cap shares witnessed buying interest, with the Nifty Midcap 100 index rising 0.5 per cent and the Nifty Small cap 100 index gaining 0.3 per cent. HDFC was the top Nifty gainer, rising 1 per cent to close at ₹ 2,550 apiece on the BSE. Sun Pharma, Divi's Labs, ICICI Bank, Asian Paints, Dr Reddy's Labs, Hindalco and HCL Technologies were also among the gainers. NSE believes that Small and Medium Enterprises (SME) are crucial not only for economic growth, but also critical for employment and inclusive growth. As of March 31, 2019, there are 189 SME companies listed on NSE Emerge (SME Platform), of which 62 were listed during

2018-19 raising more than H1,048 crores. During fiscal 2019, the aggregate value of Initial Public Offerings (IPOs) and Offer for Sale (OFS) was around H208.33 billion. During FY2019, the number of listed companies available for trading on NSE was 1,884 compared to 1,758 at the end of March 31, 2018. The market capitalisation of securities available for trading on the Capital Market segment has increased by 6.34% during 2018-19.

**TABLE 3.1 YEAR EFFECT OF NSE**

<b>Year</b>	<b>Year effect</b>
2000	1264
2001	1059
2002	1094
2003	1880
2004	2081
2005	2837
2006	3966
2007	6139
2008	2959
2009	5201
2010	6185
2011	4624
2012	5905
2013	6304
2014	8283
2015	7946
2016	8786
2017	10531
2018	10863
2019	12168
2020	13982



Out of the total market capitalisation of H1,49,34,227 crores as on March 29, 2019, H1,05,921 crores were contributed by newly listed companies. Introduction of an electronic platform for the IPO process has resulted in paperless filing and significantly easing the process for the issuers. Intermediaries and issuers no longer need to be present at Exchange premises for completing the activity of allotment. NSE has taken proactive measures by sending email alerts to shareholders of listed companies alerting them on non-compliances and impending suspension of the listed company in which they hold shares which shareholders have found to be very valuable. NSE has accorded high priority for resolution of investor complaints and the Investor Services Cell facilitates resolution of complaints of investors against the listed corporate entities and NSE members.

### **3.2.2 YEAR EFFECT OF BSE**

Ariel (1987) found that, on an average, rates of return were significantly lower during the second half of the month as compared to the first half. This research found that month of the year effect occurred in USA as well as few other developed countries. The research revealed that the return was higher in January month and in December was generally lower in comparison to returns in other months. Similar results were found by Jeffrey Jaffe and Randolph Westfield (1988) in their investigation of stock markets of Australia, UK, Japan, and Canada. This research found that returns over the second half of the month were lower than the returns over the first half for Australia, UK and Canada. Wachtel (1942) was the first researcher to investigate the January Effect. Haugen and Lakonishok (1988) studied the January Effect in detail and has authored a book on this well-known calendar effect. Kok Kim Lian (2002) studied the Year of Month Effect and Half Month Effect in the Asia Pacific stock markets.

The government had proposed to increase the surcharge levied on top of the applicable income tax rate from 15 per cent to 25 per cent for those with taxable incomes between Rs 2 crore and Rs 5 crore, and to 37 per cent for those earning over Rs 5 crore, taking the effective tax rate for them to 39 per cent and 42.74 per cent, respectively. The Sensex rallied 1,922 points, or 5.3 per cent, to end at 38,015, while the Nifty surged 569 points, or 5.3 per cent, to close at 11,274.2. That apart, the government announced a slew of policy reforms, which included strategic sales of select public sector enterprises (PSEs) merger of select public sector banks (PSBs), and an alternative investment fund of Rs 25,000 crore for the realty sector among others. US-China trade talks: At the global level, flip-flop by the United States (US) on trade related issues, especially with China, kept market participants on tenterhooks throughout the year.

In November, market scaled fresh peaks one after another on the optimism around trade talks between the two largest economies. In the latest development, both the countries have agreed on the terms of a “phase one” trade deal that reduces some US tariffs on Chinese goods while boosting Chinese purchases of American farm, energy and manufactured goods. Pre COVID-19, market capitalisation on each major exchange in India was about \$2.16 trillion. The 2019 stock market rally was limited to 8-10 stocks within the large caps. The Sensex returned around 14% (excluding dividends) for the year 2019 but prominently featured blue-chip companies such as HDFC Bank, HDFC, TCS, Infosys, Reliance, Hindustan Unilever, ICICI Bank and Kotak Bank, without which Sensex returns would have been negative? However, in the start of 2020, there was overall recovery which led to both NSE and BSE traded at their highest levels ever, hitting peaks of 12,362 and 42,273 respectively. At the beginning of the year, there were close to 30 companies that were expected to file IPO’s. The market conditions were generally favourable as they witnessed record highs in mid-January.

Ever since COVID 19 strike, markets loom under fear as uncertainty prevails. It has sent markets around the world crashing to levels not witnessed since the Global Financial Crisis of 2008. Following the strong correlation with the trends and indices of the global market as BSE Sensex and Nifty 50 fell by 38 per cent. The total market cap lost a staggering 27.31% from the start of the year. The stock market has reflected the sentiments this pandemic unleashed upon investors, foreign and domestic alike. Companies have scaled back; layoffs have multiplied and employee compensations have been affected resulting in negligible growth in the last couple of months. Certain sector such as hospitality, tourism and entertainment have been impacted adversely and stocks of such companies have plummeted by more than 40%. While the world has witnessed many financial crises in the past, the last one being the global recession of 2008, the current coronavirus crisis is different from the past fallouts. In response to current turmoil, RBI and the Government of India has come up with a slew of reforms such as reductions of repo rate, regulatory relaxation by extending moratorium and several measures to boost liquidity in the system howsoever the pandemic has impacted the premise of the corporate sector. Payment’s deferrals, subdued loan growth, rising cases of bad loans and sluggish business conditions have impaired the growth and the health of the economic activity. Deceleration of GDP growth, demand-supply chain, cut in discretionary expenses and CAPEX has been the observed during the lockdown, which has led to falling in household incomes, marketing spends, reduced travel cost and hiring freeze.

Companies with innovative products, increasing distribution reach, technology-driven processes and healthy balance sheet would revive the growth momentum post lockdown. Lower oil prices and high capital expenditure by the government in turn creating capital which will provide a platform to flourish when we overcome COVID 19 pandemic.

**TABLE 3.2 YEAR EFFECT OF BSE**

<b>Year</b>	<b>Year effect</b>
2000	5006
2001	3972
2002	3262
2003	3377
2004	5839
2005	6603
2006	7378
2007	13787
2008	20187
2009	9647
2010	17465
2011	20509
2012	15455
2013	19427
2014	21171
2015	27499
2016	26118
2017	26626
2018	34057
2019	36054
2020	41306

### 3.3 MARKET CAPITALISATION OF STOCK MARKETS (2000-2020)

Market capitalization Market capitalization is one of the most effective ways of evaluating the value of a company. The evaluation of a company's value is done based on a company's stocks. Essentially, this is defined by the total market value of the outstanding shares of a company. This simple fact also means that publicly owned companies are the only ones which can be evaluated by this method of evaluation. Fluctuating market conditions and stock prices also impact the evaluation of a company when this method of evaluation is being used.

**Large-cap:** These are some of the most stable groups of companies in the market. Consequently, investing in these companies is the least risky option.

**Mid-cap:** Companies which have had a certain growth and are somewhat stable; and yet have immense potential of growth, come under this group of evaluation by market capitalization.

**Small-cap:** Constituting companies which have the least market cap are the riskiest of all stocks.

**TABLE 3.3 Top ten Indian companies based on market cap**

Company name	Market capitalization (in crore)
Reliance Industries Limited	Rs.8,49,234
Tata Consultancy Services Limited	Rs.7,91,772
HDFC Bank Limited	Rs.6,22,521
ITC Limited	Rs.3,73,950
Hindustan Unilever Limited	Rs.3,72,708
Development Finance Corporation	Rs.3,46,629
Infosys Limited	Rs.3,16,410
State Bank of India	Rs.2,81,705
Kotak Mahindra Bank Limited	Rs.2,61,730
ICICI Bank Limited	Rs.2,53,192

India's stock market is now the seventh biggest, up three spots, in the world as total

market capitalisation increased to \$2.7 trillion. The BSE Sensex crossed the 51,000, while the NSE benchmark Nifty crossed the 15,000 level for the first time on February 2021. The benchmark Nifty has gained 6.9% so far in 2021. India's stock market is now bigger than Canada, Germany and Saudi Arabia. India's stock market is the second-best performer among the top 15 countries in 2021 and soon it may overtake France to become the sixth biggest in the world.

### **3.3.1. MARKET CAPITALISATION OF NSE (NIFTY)**

NIFTY 50 is NSE's diversified index comprising stocks from top 50 Indian companies across 14 sectors. It tracks the market performance of the largest cap companies & hence, broadly reflects the Indian economy. The NIFTY 50 index is India's premier stock index. Launched on April 1, 1996, it's computed using the free float market capitalization method.

#### **Benefits of investing in NIFTY50 Index Funds:**

**Diversification** – It deploys the investment in multiple companies and sectors thereby reducing risk compared to investing in a single or small set of companies. Over time Nifty 50 replaces the underperforming companies at a market level with performing one.

**Wide market presence** – Nifty 50 Index funds are quite popular in India and have a substantial market presence.

**Low cost** - These funds have lower operating expenses as fund managers simply need to replicate the index.

**Inflation + returns** - Index funds have consistently generated inflation beating returns over the long term. Coupled with low costs it becomes excellent value for investors.

### **3.3.2 MARKET CAPITALISATION OF BSE (SENSEX)**

The sum of the market value of BSE-listed companies crossed Rs 200 trillion for the first time, on February 2021. The Sensex, ended at 50,614.29, up 358.54 points. In dollar terms, the market cap figure of BSE-listed firms is \$2.75 trillion -- the seventh highest globally. The country's market cap-to-GDP ratio is now more than 100 per cent. Its nominal GDP (revised estimate for FY21) at current prices is around Rs 195 trillion.

The combined market cap of BSE-listed companies had topped the Rs 100 trillion-mark in December 2014. Back then, the market cap-to-GDP ratio was at 80 per cent. In September 2007, when the market cap crossed Rs 50 trillion, the ratio was similar to the current level. The markets had come off more than 50 per cent in the following year due to the global financial crisis. In less the one year, India's market cap (based on BSE-listed companies) has nearly doubled. At the peak of the coronavirus-induced sell-off in March 2020, the market cap had plunged to Rs 102 trillion.

BSE MD and CEO, Ashishkumar Chauhan said, "It is heartening to note BSE continues to remain the primary wealth creator of the nation. It is also good to note that no other developing country at the stage of India's development has a thriving capital market as compared to India. BSE has also become the world's 9th largest exchange in terms of listed companies market capitalization, as on date." The four recently listed companies which include Antony Waste Handling, Indian Railway Financing Corporation, Indigo Paints, and Home First Finance Company, added ₹52562.21 crore in total m-cap. The table below is an important data on BSE 30 Companies Share prices, 52-week High and Low, PE ratio etc.

### **Benefits of investing in SENSEX top 30 companies include:**

- 1. Better returns** – A historical back test on the top indices in India viz. the Nifty 50 and BSE Sensex, reveals that investing in the Sensex can return slightly higher returns than the Nifty 50. Keep in mind to choose a Sensex based index fund with high liquidity.
- 2. Diversification** – Investing in an index fund automatically extends you the benefit of portfolio diversification, thereby reducing portfolio risk.
- 3. Less expensive** - Being a passively managed fund you are required to pay minimal fees. This essentially means lesser expenses to eat into your returns.

### **3.4 RISK AND RETURN OF INDIA STOCK MARKETS (2000-2020)**

One of the major objectives of investment is to earn and maximize the return. Return on investment may be because of income, capital appreciation or a positive hedge against inflation. The expected return may differ from realized return. In security analysis, we are primarily concerned with returns from the investor perspective. Our main concern is to compute or estimate the returns for an investor on a particular investment.

According to the dictionary, Risk means existence of volatility in the occurrence of an expected incident. Higher the unpredictability greater is the risk. According to this definition risk may or may not involve money. All investments involve risk of one type or the other. Risk and return are of two sides of the investment coin. Risk is associated with the possibility of not realizing return or realizing less return than expected. The degree of risk varies on the basis of features of the assets, investment instruments, the mode of investment, the issuer of the securities etc. Thus, risk of an investment is the variance associated with its returns. The chance that an investment's actual return will be different than expected. Risk includes the possibility of losing some or all of the original investment. Different versions of risk are usually measured by calculating the standard deviation of the historical returns or average returns of a specific investment. A high standard deviation indicates a high degree of risk. We can distinguish between expected return and realized return from an investment. The expected return is uncertain future return that an investor expects to get from his

investment. The realized return, on contrary, is the certain return that an investor makes the investment decision based on expected returns from the investment. The actual return realized from an investment may not correspond to expected return. This possibility of variation of the actual return from the expected return is termed as risk. Where realization corresponds to expectations exactly, there would be no risk.

The empirical evidence against the CAPM by Fama and French (1992) has generated a lot of debate in the west and has called for major re-examination of the CAPM model. While many studies have been conducted on CAPM in the capital markets of the western countries, there are few studies in the Indian context. Studies by Varma (1988), Yalwar (1988), Srinivasan (1988) have generally supported the CAPM theory. Studies by Basu (1977), Gupta and Sehgal (1993), Vaidyanathan (1995), Madhusudhan (1997), Sehgal (1997), Ansari (2000), Rao (2004), Manjunatha and Mallikarjunappa (2006,2007) have questioned the validity of CAPM in Indian markets. But Ansari (2000) has opined that the studies of CAPM on the Indian markets are scanty and no robust conclusions exist on this model.

### **3.4.1 RISK AND RETURN OF NSE**

Nifty50 is a broader index compared to Sensex, consisting of 50 large companies listed on National Stock Exchange of India (NSE). Over the years, Nifty50 has become the most widely used benchmark for exchange traded products in Indian equity market. Growth rate of India's GDP is fairly captured in the growth story of Nifty50. Over the years, India has been one of the fastest growing large economies of the world which is also reflected in the rise of Nifty50 Index.

#### **Nifty 50 returns and Nifty 50 total returns index**

The dividends of the stocks in the Nifty 50 are assumed to be reinvested in the index after the close of the ex-date. Such an index is called the Total Returns index. The Nifty 50 has a TRI version also available and the same is used as a benchmark for several mutual funds. The total returns index therefore has a higher return than the Nifty 50 when considered for any period of time.

## Annual Returns of Nifty

Year	Annual return
2000	-14.65%
2001	-16.18%
2002	3.25%
2003	71.90%
2004	10.68%
2005	36.34%
2006	39.83%
2007	54.77%
2008	-51.79%
2009	75.76%
2010	17.95%
2011	-24.62%
2012	27.70%
2013	6.76%
2014	31.39%
2015	-4.06%
2016	3.01%
2017	28.65%
2018	3.15%
2019	12.02%
2020	14.17%

Nifty has a CAGR of 11.1% in the last 20 years (since 1999) and 8.87% in the last 10 years (since 2009 – this is an aberration as it came on back of monster recovery from the lows of March 2009 to Dec 2009 and thereby depressing the returns from Dec 2009 to Dec 2019 period). s at 1205 on February 27, 2002, just before a lacklustre budget dashed investors’ hope. The annual low came in late October with Nifty at 920. With an average value of 1056 for Nifty and a standard deviation of 68 points, this is a very narrow range. But the returns were a lot better than in calendar year



2001 (minus 20 per cent) and 2000 (minus 23 per cent). That's too bad years, followed by a marginal recovery. The market pulled above it.

The annual high of Nifty was own 200 DMA in the last quarter and has stayed above that benchmark. This is a reliable signal of a new bull market. The moving average signal is reinforced by the breach of a falling minus 40-degree trend line that connected successively lower tops between February and November. The recovery has come on decent volumes, which suggests that it's based on rising demand and, hence, sustainable.

"Oil is a big question mark -- there will be volatility here but we don't know the direction. The Iraq situation will affect global prices and the speed of divestment of public sector units will affect domestic sentiments. If India's economy does show strong overall recovery, there will be turnarounds in many other sectors". Devangshu Datta, independent analyst.

Nifty has shed over 29 per cent since May 11, 2006. The mid-cap and small-cap stocks continue to be the worst affected in this market. The CNX mid-cap index is lighter by 35 per cent since May. The market saw the beginning of a bullish formation, an Ascending Triangle, on the monthly chart at the beginning 2007. This formation took seven years to complete. In 2014, the Nifty50 achieved a positive breakout. This Ascending Triangle formation was between 3,818 on the lower side and 6,350 on the higher side.

### **3.4.2 RISK AND RETURN OF BSE**

The 2+ decades-long journey has been a volatile one. In the last 20 years, we have had:

- 15 years with positive returns
- 5 years with negative returns

In 2002-2003, the annual index returns after that have been 3.5%, 72.9%, 13.1%, 42.3%, 46.7%, 47.1%. And this is not normal. This was unprecedented and chances are high that such a sequence of high positive returns, might not get repeated again for many years if not decades. So do not have such expectations of multi-year high returns from stock markets. Infact, we should be ready to face ugly years like 2008-2009 – when index itself fell by more than 50% and individual stocks crashed by 80-90%. I have said countless times that one should invest more in market crashes or when everyone else is giving your reasons to not invest. But that is easier said than done. When a crisis like the one in 2008-2009 comes, it is not easy to combine your cash with courage.

Intense selling today brought the BSE Sensex to its lowest closing of 2006. Weak global markets and worries over inflation and higher interest rates continued to drag stock prices down to sharply lower levels on the major Indian bourses. During the financial crisis of 2007–2008, the stock markets in India fell on several occasions in 2007 as well as 2008. In 2007, there were five sharp falls in the stock markets. On 2 April 2007, The Sensex fell by 617 points to 12,455 though during the

course of the day, it fell further. As per the analysts at rediff, "The Sensex opened with a huge negative gap of 260 points at 12,812 following the Reserve Bank of India [Get Quote] decision to hike the cash reserve ratio and repo rate. Unabated selling, mainly in auto and banking stocks, saw the index drift to lower levels as the day progressed. The index tumbled to a low of 12,426 before finally settling with a hefty loss of 617 points (4.7%) at 12,455.

On 21 November 2007, trying to explain the fall, rediff recounted that "Mirroring weakness in other Asian markets, the Sensex saw relentless selling." The index tumbled to a new low of 18,515 - down 766 points from the previous day's close. It finally ended with a loss of 678 points at 18,603. "On 21 Jan 2008, the BSE fell by 1408 points to 17,605 leading to one of the largest erosions in investor wealth. The BSE stopped trading for a while at 2:30 pm due to a technical snag although its circuit filter allows swings of up to 15% before stopping trading for an hour. Referred to in the media as "Black Monday", the fall was blamed by analysts at HSBC mutual fund and JP Morgan on a large variety of reasons including change in the global investment climate, fears of United States' economy going into a recession, FIIs and foreign hedge funds selling in order to reallocate their funds from risky emerging markets to stable developed markets, a cut in US interest rates, global bourses (often referred to as event related volatility), volatility in commodities markets, a combination of global and local factors ("...other emerging markets were down nearly 20% so India is playing catch-up..."), huge build-ups in derivatives positions leading to margin calls and that many IPOs had sucked out liquidity from the primary market into the secondary market. HSBC mutual funds analysts predicted further falls in the stock market, and the analysts at JP Morgan were of the opinion that market would fall a further 10-15%.

On the next day on 22 January 2008, the Sensex again fell by 875 points to 16,729. Jan 22, 2008: The Sensex saw its biggest intra-day fall on Tuesday when it hit a low of 15,332, down 2,273 points. However, it recovered losses and closed at a loss of 875 points at 16,730. The Nifty closed at 4,899 at a loss of 310 points. Trading was suspended for one hour at the Bombay Stock Exchange after the benchmark Sensex crashed to a low of 15,576.30 within minutes of opening, crossing the circuit limit of 10 per cent.

On 24 August 2015, the BSE Sensex crashed by 1,624 points. Finally, the indices closed at 25,741 points and the Nifty to 7,809 points. The reason given for this crash was given as a ripple effect due to fears over a slowdown in China, as the Yuan had been devalued two weeks ago leading to a fall in the currency rates of other currencies and the rapid selling of stocks in China and India. The Shanghai stock exchange too fell by 8.5%. A variety of other reasons too were given for this fall by analysts including disappointing earnings in the first quarter for many Indian companies, somber commentaries by their management leading to doubts regarding their recovery and a below average monsoon for that year.

### Annual Returns of SENSEX

Year	Annual return
2000	-20.6%
2001	-17.9%
2002	3.5%
2003	72.9%
2004	13.1%
2005	42.3%
2006	46.7%
2007	47.1%
2008	-52.4%
2009	81.0%
2010	17.4%
2011	-24.6%
2012	25.7%
2013	9.0%
2014	29.6%
2015	-5.0%
2016	1.9%
2017	27.9%
2018	5.9%
2019	14.38%
2020	15.75%

The stock markets in India continued to fall in 2016. By 16 February 2016, the BSE had seen a fall of 26% over the past eleven months, losing 1607 points in four consecutive days of February. The reasons given for this included NPAs of Indian banks, "global weaknesses" and "global factors". In the four months from November 2015 to February 2016, FIIs were reported to have sold equities worth Rs 17,318 crore as, in the opinion of analysts, concerns grew over growth in China and as crude oil prices tumbled below \$30 per barrel.

On 9 November 2016, crashed by 1689 points, believed by analysts to be due to the crack down on black money by the Indian government, resulting in frantic selling. The Sensex nosedived by 6% to 26,902 and the Nifty dropped by 541 points to 8002. These were said to be due to the demonetization drive by the Modi government. The Hindu was of the opinion that the weakening rupee and the US presidential election too had some bearing on the behavior of investors. The S&P had also fallen by 4.45%. Although not classified as a crash, the BSE and NSE fell sharply on 2 and 5 February 2018, sparked by the comments of the Finance minister's proposal in the budget speech to introduce a 10% long term capital gains tax (LTCG) on equity shares sold after 12 months. The BSE Sensex fell by 600 points in two days, and the Nifty 50 fell by about 400 points to 10,676 on 5th. Earlier, the BSE Sensex had fallen by 570 points to 35,328 on 2 February and the NSE Nifty by 190 points to a low of 10,826.

On 1 February 2020, as the FY 2020-21 Union budget was presented in the lower house of the Indian parliament, Nifty fell by over 3% (373.95 points) while Sensex fell by more than 2% (987.96 points). The fall was also weighed by the global breakdown amid coronavirus pandemic centered in China. On 28 February 2020, Sensex lost 1448 points and Nifty fell by 432 points due to growing global tension caused by coronavirus, which W.H.O said has a pandemic potential. Both BSE and NSE fell for the entire five days of the week ending with the worst weekly fall since 2009.

On March 4 and 6, markets fell by around 1000 points and several crores of wealth was wiped out. On 6 March 2020, Yes Bank was taken over by RBI under its management for reconstruction and will be merged with SBI. This was done to ensure smooth functioning of the bank as it was struggling for couple of years to cope up with heavy pressure due to cleaning of bad loans.

On 9 March 2020, the Sensex fell by 1,941.67 points, while Nifty-50 broke down by 538 points. The fear of COVID-19 outbreak has created havoc all over the globe and India is no exception. Further, the recent Yes Bank crisis also made the markets fell. The markets ended in red with Sensex closing on 35,634.95 and Nifty-50 on 10,451.45.

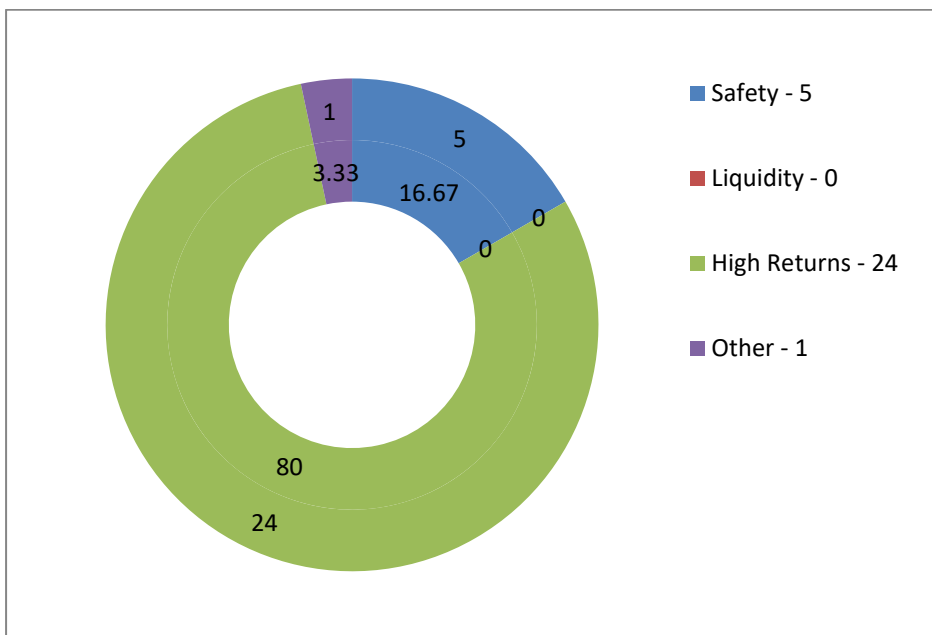
On 12 March 2020, the Sensex fell by 2919.26 points (-8.18%), the worst continuation of the week in the history while Nifty-50 broke down by 868.25 points (-8.30%) amid World Health Organization (WHO) declaring Coronavirus outbreak as "pandemic". Sensex ended to 33-month low of 32778.14. On 16 March 2020, Sensex plunged by 2,713.41 points (around 8%), the second worst fall in its history. On the other hand, Nifty ended below 9200—mark at 9,197.40 due to global economic recession. However, the Sensex continued to fall straight for 4—continuous days till 19 March 2020, losing 5815 points during the period.

On 23 March 2020, Sensex lost 3,934.72 points (13.15%) and Nifty plunges 1,135 points (12.98%) at 7610.25 as coronavirus-led lockdowns across the world triggered fears of a recession. These are now the lowest levels since 2016. It's witnessing the biggest weekly loss since October 2008, as the increasing number of coronavirus cases in India as well as globally.

### 3.5 ANALYSIS OF INVESTMENT PATTERN OF STOCK HOLDERS

#### 3.5.1 Reason for investing in stock market

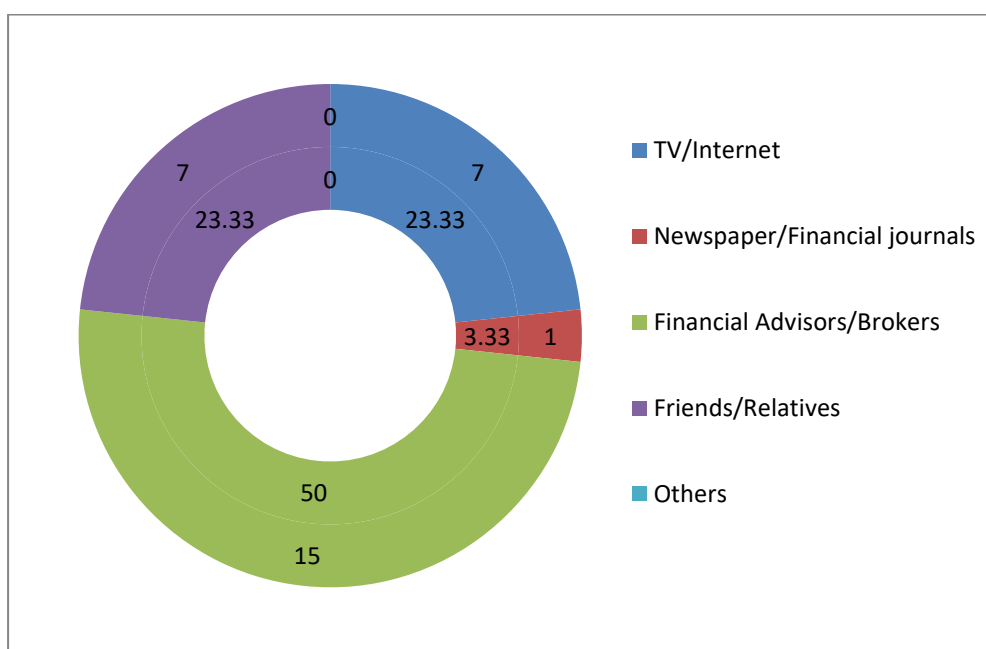
Options	%	Count
Safety	16.67	5
Liquidity	0	0
High Returns	80	24
Other	3.33	1



According to the above diagram, the major reason for trading in stock market is mainly due to Higher returns( 80%). Another main reason behind stock market trading is for safety( 16.7%). None of the respondent has selected liquidity as the reason for stock market trading.

### 3.5.2 source/medium of information on stock market

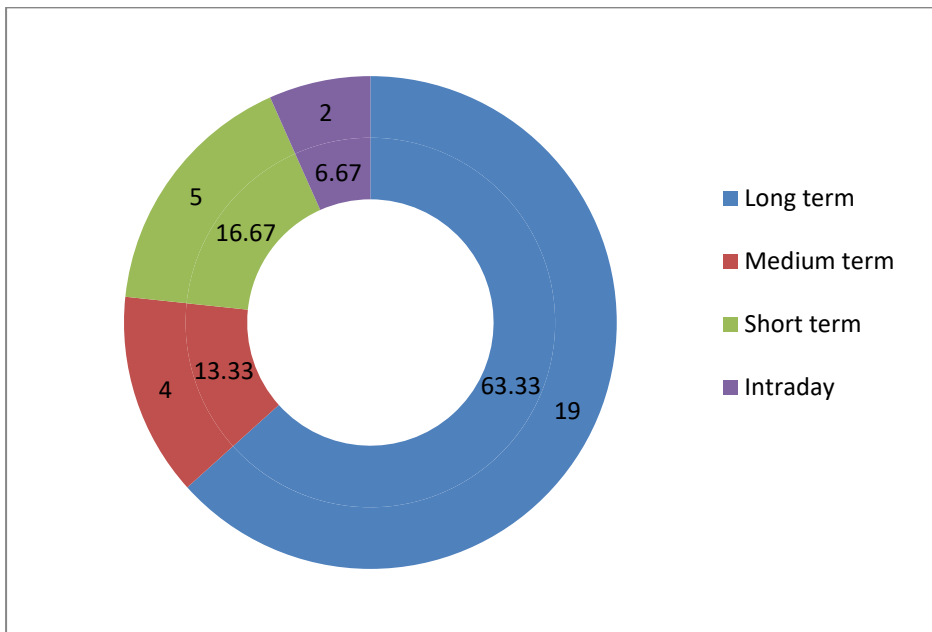
Options	%	Count
TV/Internet	23.33	7
Newspaper/Financial journals	3.33	1
Financial Advisors/Brokers	50	15
Friends/Relatives	23.33	7
Others	0	0



The above diagram give us an idea about the source of information about the source of information about the stock market investment. About 50% respondents gave the credit to their financial advisors or brokers who introduced them or gave them monthly information. 3% respondents got their information from Newspaper and financial journals. The rest of the respondents got their information from TV/Internet and from friends/relatives.

### 3.5.3 Time horizon preferred for trading

Options	%	Count
Long term	63.33	19
Medium term	13.33	4
Short term	16.67	5
Intraday	6.67	2

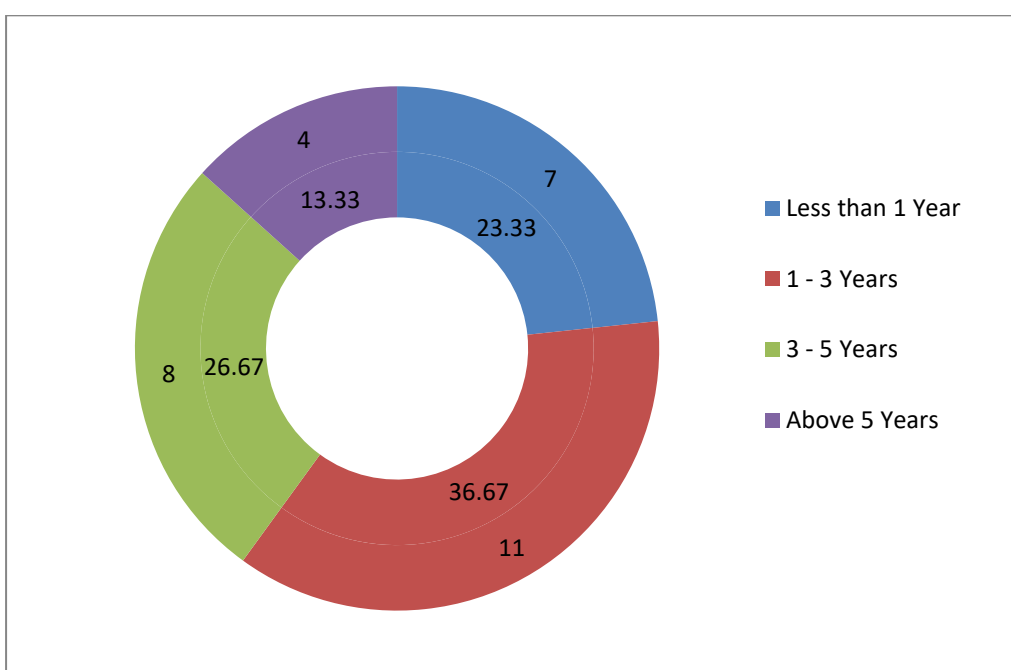


The above figure shows that 63% of the respondents prefer to have a long term trading as long term trading is considered as safer and it involves lower risk. Another 17% prefer small term trading. 13% prefer medium term trading. Only 7% of the respondents prefer intraday trading and it involves huge risk.



### 3.5.4 Year of experience in trading

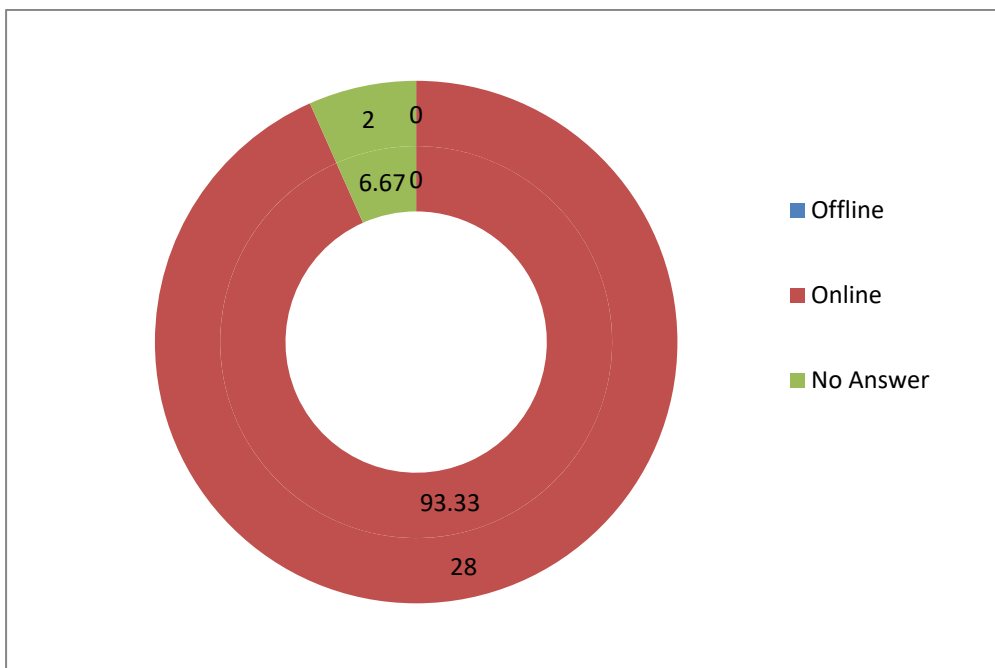
Options	%	Count
Less than 1 Year	23.33	7
1 - 3 Years	36.67	11
3 - 5 Years	26.67	8
Above 5 Years	13.33	4



From the above chart it is clear that 37% of the respondents have 1 to 3 years of experience. 27% of respondents have 3 to 5 years of experience. 23% of the respondents have less than 1 year of experience. And only 13% of the respondents are having experience above 5 years in stock market trading.

### 3.5.5 Mode of trading

Options	%	Count
Offline	0	0
Online	93.33	28
No Answer	6.67	2



From the above table it is clear that 100% of the respondents are prefer online trading. With the advancement of technology, most of the stock market are working under online mode.

## **CHAPTER- 4**

### **FINDINGS AND SUGGESTIONS**

The stock market is an existing physical entity where stock market securities such as stocks, bonds, bonds, securities are sold. The stock market makes the stock market available to buyers and sellers and the revenue comes in stock. In this case the value of investing in the stock market is increasing. The number of investors and the number of stock markets most of which are online markets, are growing day by day. Currently investing in the stock market and having intraday trading is considered the best way to earn money. Considering its importance the current study focuses on 'Indian Stock Market Research: NSE and BSE'. The objectives of this study are to study emerging stock markets in India such as the NSE and BSE, to study the annual results of the Indian stock market (BSE and NSE) from 2000 to 2020, to assess market capitalization. Indian stock market (NSE and BSE) from 2000 to 2020, to review the risk and return trend of the Indian stock market (NSE and BSE) from 2000 to 2020 and to learn about the preferred trading type. investors in the stock market. For objective testing both baseline and secondary data were used. Key data was collected from 30 respondents from the Thrichur region using Google form. The second data was collected in various journals, articles, publications and online websites.

#### **4.1 Findings of the study**

- Due to covid-19 pandemic, Sensex lost 3,934.72 points (13.15%) to 25,981.24 and Nifty lost 1,135 points (12.98%) to 7610.25.
- The biggest stock market crashes in India were caused mainly due to covid19 pandemic, 2008 financial crisis, Harshad Mehta scam.
- Nifty has less risk and higher liquidity than Sensex. Nifty suffer lower market impact cost than Sensex.
- Covid-19, strong correlation with the trends and indices of the global market as BSE Sensex and Nifty 50 fell by 38%. The total market cap lost a staggering 27.3% from the start of the year.
- Pre covid-19, market capitalisation on each major exchange in India was about \$2.6 trillion. The Sensex returned around 14% for the year 2019 prominently featured blue chip companies such as HDTV bank, TCS, Infosys, Reliance, ICICI, without which Sensex return would have been negative.
- Despite a population of over 1.2 billion, there exist only 20 million active trading accounts in India.
- The banking sector have maximum risk and return of 1.9 and 10 respectively ICICI in automobile sector Eicher motor have maximum return of 35.9 Ashok Leyland have maximum risk of 1.9 IT sectors have maximum return of 17.7 and maximum risk of Oracle of 6.6 and in fast moving consumer goods sector,

Godrej have maximum return of 14.8 and highest risk in ITC of 0.5.

- The stock of bank of India, HDTV bank, Mahindra bank are less volatile in nature. The stock of federal bank, Indus land bank, Canara bank, ICICI bank, PNB, SEBI are moderately volatile in nature. The stock of yes bank and axis Bank have high volatile in nature.
- Among all the investment avenues in the stock market banking is considered as the most sensitive investment avenue the fine stocks of banking sectors shows Arch effect which means period of high vitality is followed by similar high volatility and low is followed by low volatility.
- The S&P 500 experienced it's fastest ever bear market, clocking in at just 33 days before it's third fastest recovery to a break-even level in about 5 months.
- 80% of the stockholders invest/trade in stock market for higher return rather than safety and liquidity.
- 50% of the stockholders got information regarding stock market from financial advisors or brokers.
- 63% of the stockholders prefer to have long term trading as it involves less risk. Intraday trading has higher risk thus only 7% preferred intraday trading.
- All the stockholders prefer to have online mode of trading. As the advancement of technology and the pandemic scenario have made stock market into an online mode of trading.

## **4.2 CONCLUSION**

The Indian stock market has now grown into an excellent product with a lot of quality input and an emphasis on investor protection and disclosure procedures. The market has become automated, transparent and self-driving. It is integrated with global markets, with Indian companies seeking to be listed on foreign exchange markets, offshore investments coming to India and foreign exchange floating in their systems and thus bringing technology to our markets. India has found the difference in having a large number of investors near the U.K., perhaps our country will have a large number of listed companies with several channels to manage equity fund and National Treasury managers most of them self-employed. India now has a world-class regulatory system in place. Thus, at the beginning of the new millennium, the equity financial market boosted the wealth of Indian companies and investors. There is no doubt that strong economic stability, demand growth, market structure development, and other factors have been the driving force behind it. Although the Covid epidemic has subsided in the Indian stock market, it has also recovered with the sharp rise and stability of the country's economy.

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- ✓ [www.bseindia.com](http://www.bseindia.com)
- ✓ [www.businessinsider.in](http://www.businessinsider.in)

## **QUESTIONNAIRE**

- 1. Name**
- 2. Address**
- 3. Age**
- 4. Gender**
- 5. Occupation**
- 6. Monthly income**
- 7. Name of the stock**
- 8. Why do you invest in stock market?**
  - Safety
  - Liquidity
  - High returns
  - Other
  
- 9. How do you get information on stock market?**
  - TV/ Internet
  - Newspaper/ Financial Journal
  - Financial advisor/ Brokers
  - Friend/ Relative
  - Other
  
- 10. Name the type of trading**
  - Long term
  - Medium term
  - Short term
  - Intraday
  
- 11. Year of experience in trading**
  - Less than 1 year
  - 1 – 3 years

- 3 – 5 years
- Above 5 years

## **12. Mode of trading**

- Offline
- Online