#### **Introduction**

With the ever increasing and expanding economy, Indian economy is considered as a growth engine of the world's economy. And stock market of such robust economy is the face of the growing market and companies in it. India has one of the oldest and the fastest stock market platform i:e Bombay Stock Exchange (BSE). Stock market basically is an electronic platform where the share of the companies are listed and traded. Because of this advanced platform it is possible for companies to raise capital from public efficiently and effectively. With the economic reforms in the country, stock exchanges have grown exponentially in terms of foreign institutional investment and transaction turnover. This increase is mainly due liberalized and supportive along with regulative role of government. The share prices of the listed companies fluctuate on the basis of various factors which affect and build the sentiments of markets and investor. In India, we have a very low level of economic literacy and if we quantify it then in a population of more than 125 Crore, less than 2% of population actually invests in stock market. Such low participation is because of the above mentioned low level of economic literacy plus huge fluctuations in the market due to several factors. India is pioneer in Information Technology industry and IT companies of India are one of the greatest contributors in total export as well as fame for the country. Being a pioneer industry, shares of IT companies are always remain in the limelight of stock market. Further return on this is again fluctuative due to industry and market factors. Since so many fluctuations exist in the stock market, it creates an urge to study about those factors which are responsible for the ups and downs in the market.

# STOCK EXCHANGES IN INDIA

Stock Exchange (also known as stock market or share market) is one of the main integral part of capital market in India. It plays a vital role in growing industries and commerce of a country which eventually affect the economy. It is well organized market for purchase and sale of corporate and other securities which facilitates companies to raise capital by pooling funds from different investors as well as act as an investment intermediary for investors. Moreover, it ensures that securities should be traded according to some pre defined rules and regulations.

London Stock Exchange is the oldest stock exchange in the world whereas Bombay Stock Exchange is the oldest one in India.

In India, there are 7 Stock Exchanges out of which NSE and BSE are the two main indices. Most of the trading in Indian Stock Market takes place on these two stock exchanges. Both the exchanges follow the same trading hours, trading mechanism, settlement process etc. At the last count, BSE comprises of 5800 listed firms whereas on the other hand its rival NSE consists of 1659 listed firms. Interestingly, out of all the firms listed on BSE, only around 500 firms constitutes more than 90 % of its market capitalization.

**Bombay Stock Exchange (BSE)** is the leading and fastest stock exchange in India as well as in South Asia established in 1875. Bombay stock exchange is the world's 11th largest stock market by market capitalization at \$1.7 trillion as of 31 January 2015 (Monthly Reports, World Federation of Exchanges). More than 5,000 companies are listed on BSE. The main index of Bombay stock exchange is Sensex which comprises of 30 stocks.

**National Stock Exchange** was incorporated in 1992 as a tax paying company and was recognized as a stock exchange in 1993 under the Securities Contracts (Regulation) Act 1956. NSE is the 12<sup>th</sup> largest stock exchange in the world with a market capitalization of more than US\$ 1.65 trillion as on 31 January 2015 (Monthly Reports, World Federation of Exchanges). Moreover, it was the first exchange to provide fully automated screen based electronic trading system. Nifty is the indices to measure overall performance of the National Stock Exchange which comprises of 50 stock index.

# **Functions of Stock Exchange**

The Stock Exchange serves two critical functions:

- It provides a critical link between companies that need funds to set up new business or to expand their current operations and interested investors.
- Stock Exchange also acts as a guide for the investors that have excess funds to invest in such companies.

The main aim of this study is to determine the impact of various economic variables on the performance of stock market of selected listed IT companies on NSE.

### **SECTOR INDICATORS**

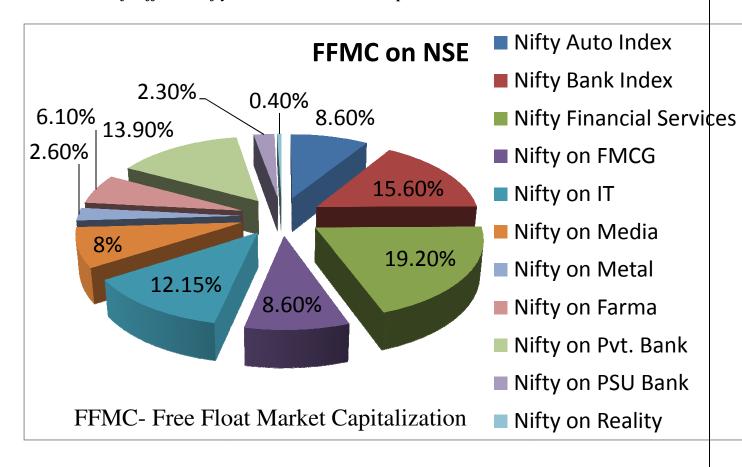
There are number of sectors or industries which are listed on National Stock Exchange and Bombay Stock Exchange. In addition to this, an individual sector comprises of number of companies. There are around 73 sectors listed on NSE and BSE separately. Some of the important sectors present on both the exchanges are as follows:-

- ✓ BANKING SECTOR
- ✓ AUTOMOBILE SECTOR
- ✓ INFORMATION TECHNOLOGY SECTOR
- ✓ METAL SECTOR
- ✓ REAL ESTATE SECTOR
- ✓ FMCG SECTOR
- ✓ MEDIA & ENTERTAINMENT SECTOR
- ✓ PHARMACEUTICALS SECTOR
- ✓ POWER SECTOR
- ✓ PSU BANK SECTOR

#### INFORMATION TECHNOLOGY SECTOR

India's service sector contributes a greatest part in the GDP of Indian economy accounting for 57 % in 2012 as compare to 15% in 1950. The service sector also generates employment to 27% of the work force. Information technology is among the fastest growing sector. A short overview of Indian Information Technology industry is presented here for better understanding of the uniqueness that this industry possesses. Information technology industry has played a vital role in the Indian economy during the last few years. A number of large, profitable Indian companies today belong to the IT sector and a great deal of investment interest is now focused on the IT sector. India's IT services industry was born in Mumbai 1967 with the establishment of TATA group in partnership with Burroughs. Majorly it consists of two main components: IT services and BPO (Business Process Outsourcing). According to NASSCOM, in 2015 Information Technology sector has contributed aggregated revenue of US\$ 147 billion as well as the contribution of IT industry in the country's GDP has been raised from 1.2% in 1998 to 7.5% in 2012. Moreover, IT sector is currently generating around 2.5 million direct employments in India which will further enhance and also it provides a large reservoir of highly skilled, low cost and educated workers to meet the increased demand of foreign consumers. Besides, to enhance this sector the Government has also come up with Digital India initiative, which highlights three main components: creation of digital infrastructure, delivering services digitally and to increase the digital literacy. At the last count, IT sector has been selected as it majorly contributes in the free float market capitalization of stocks listed on BSE and NSE.

#### Contribution Of Different Nifty In Free Float Market Capitalization on NSE



# FACTORS AFFECTING STOCK MARKET

Determining stock returns is a complex and conflicting task. There are number of forces which influence the share returns of stock market. Although, there is no pre-planned system which can trace the exact movement in the stock returns of the stock market. However, fundamental factors, external factors and market behavior can cause increase and decrease in the demand and supply of individual stock.

Major factors working on this case consist of indicators of firm's performance, investor's perception, market efficiency, and some macro economic variables such as Inflation, GDP, FDI, Interest Rate, Oil Prices etc. Majorly, there are two thoughts related to this concept, first is the **technical analysis** and second one is **fundamental analysis**. Former is a technique which is actually a statistical tool used to predict share price by the use of past share prices data whereas

the later one is the method of stock valuation by using financial information with the help of a specific model.

**Fundamental Analysis** is further classified in two categories one is **company specific variables** and other is **macro economic variables**.

Company specific variables include Earning Per Share, Dividend Per Share, Price/Earning Ratio, Book Value Per Share, Return On Equity, Net Asset Value etc and macro economic variables include Gross domestic product, Inflation, Foreign Direct Investment, Interest Rate, Oil Prices.

# **Review of Selected Literature**

#### Year wise division of reviewed research paper:

Year	No. of Research Paper
2008-2009	01
2009-2010	01
2010-2011	04
2011- 2012	04
2012-2013	04
2013-2014	05
2014-2015	03
2015-2016	08

#### **Geographical Area Covered in the Review:**

National	International
14	16

The Review of literature plays a vital role in carrying out further research work. Various sources have been used here for research work reviewed such as journals, internet sites, etc. The review of literature has been divided on the basis of various fundamental factors affecting the stock market.

#### **➤** Macro economic Variables:

- Guru, U. Idris I (2009) have done a number of studies to evaluate the relationship between stock market returns and various macro economic variables. The present research has been undertaken to examine the macroeconomic variable that are responsible for fluctuations in the stock prices of Nigeria Stock Market. Findings of the study reveal that stock prices moves in the same direction with Gross Domestic Product, Money Supply, Total Deficits, and Interest Rate while Inflation Rate and Index of Industrial Production moves in opposite direction.
- Nasif AL, F.Shubiri (2010) empirically examines the effect of micro and macro economic factors on the movement of the stock prices of 14 commercial banks of Amman Stock Exchange for the period 2005 -2008. and the results portrays that Net Asset Value Per Share, Dividend Percentage and Gross Domestic Product have highly positive significant relationship with Market Price of Stock whereas there is a negative significant relationship between Inflation and Lending Interest Rate with Market Price of Stock.
- Girard, EC (2010) investigates the connection between investability and return dynamics of stocks traded in emerging markets. The results depict that investable premium also act as an important fundamental factor which influence the stock market. Girard, EC (2010)
- Shen, CH. & Lin, KL (2010) investigates whether corporate governance affects the impact of the relationship between fundamental signals and stock returns using Taiwanese data in which they observed that in a strong governance regime, the responses of stock returns to the fundamental signals are found to be greater than those in weak governance regimes.

- Butt, B.Z. Rehman, K.Khan, M. Safwan, N. (2010) attempt to reveal the connection between specific economic variables and return variations of stocks traded in Karachi Stock Exchange. However, they finds out that market index, consumer price index, risk free rate of return, exchange rate, industrial production index, money and individual industrial production are the economic variables which influence the stock prices of banking and textile industry. Moreover, it has also been identified that economic exposure is higher at industry level as compare to firm level stock returns.
- Olweny, T. Omondi, K. (2011) aims at describing the influence of three macroeconomic variables on the stock return volatility in the Nairobi Stock Exchange, Kenya i.e. NSE 20 share index. As a result, it can be concluded that selected macroeconomic variables i.e Foreign Exchange Rate, Interest Rate and Inflation Rate have significant impact on the prices of stocks listed in Nairobi Stock Exchange.
- Moreover, <u>Le, TH. Chang, Y. (2011)</u> evaluated the impact of oil prices on the stock prices of Japan, Malaysia, Singapore & South Korea. The main finding of the study is that oil and stock prices have highest correlation in South Korea followed by Singapore, Malaysia and Japan.
- <u>Bayezid Ali (2011)</u> tried to analyze the influence of micro and macro economic variables on the all share price index of Dhaka stock Exchange and reached to a conclusion that inflation and foreign remittance have negative influence whereas industrial production index, market P/E & MKTPE have positive influence on stock returns.
- Naik & Padhi (2012) studied the relationship between Indian stock Market Index (BSE Sensex) and five macro economic variables and results reveal that there exists co integration between BSE Index & macro economic variables which proves that there is a long term relationship between them.
- **Dr. Aurangzeb** (2012) made an attempt to make out the factors influencing the performance of stock market in South Asia and the study indicate that Exchange Rate and FDI have positive impact on Stock Market and Interest Rate has negative but significant while Inflation has negative as well as insignificant impact on the performance of Stock Market of South Asian countries.
- This paper analyze the influence of Money Supply, consumer Price Index, Gold Prices, crude Oil Prices, Foreign Exchange Reserves, FDI, FII, Balance Of Trade, Foreign

Exchange Rate, Call Money Rate, Repo Rate, Industrial Growth Rate on the market of National Stock Exchange. In connection to this, the findings of the study suggests that industrial performance significantly influence the stock market as well as market also rely on macroeconomic environment to maintain macro stability.

- <u>Joshi (2013)</u> indentified the major factors held responsible to create movement in stock market. He found from the study that the factors like growth of Gross Domestic Product, flow of FIIs, Inflation, Political Stability, Liquidity and Different interest rate are the major factors accountable for up and down movement in Indian stock market.
- The main motive of <u>Sapna & Dani (2014)</u> behind the study of this paper is to critically examine the factors which affect the trading volume of BSE index. Findings of the study reflect that there exist a significant relationship between price and trading volume and it is affected by stock prices.
- Moreover <u>Shah (2014)</u> examined the trend and pattern of Foreign Institutional Investments flow in India and also describes the relationship between between FII and Nifty. From the research evidence, it has been observed that there is a moderate positive correlation between Foreign Institutional Investment and CNX Nifty stock market.
- A study of interquantile behavior of stock returns of selected 19 companies listed at BSE has been conducted by **Kothari & Kothari (2015)** which reveals that stock betas are not symmetric they differ significantly over the bullish & bearish market state.
- Rajesh & Bhaskar (2015) try to explore the variation in share prices of selected Indian manufacturing firms listed at Bombay Stock Exchange and it is concluded that Market Return, Growth in market & Industrial Production positively influences the stock returns at firm and industry level whereas rising inflation adversely affect the stock returns and GDP is insignificant but positively related to stock returns of the firm.
- <u>Ismail, Mustafa, Nijam. (2015)</u> applied the correlation and multiple regression tool to investigates the relationship between macro economic variables and performance of stock market of Sri Lanka with the study period from 1980 to 2012. Findings of the study confirm that macro economic factors continue to affect stock prices of Colombo Stock Exchange.
- Ray & Vani unravel the relationship between macro economic variables and performance of capital market in Indian context (BSE). After the analysis they found out

that Interest Rate, Output, Money Supply, Inflation Rate and Exchange Rate has considerable influence on the stock market while other variables have very negligible impact.

#### > Company Specific Variables:

Other wave of research is related to company specific variables.

- Sharma (2011) studied the impact of certain selected explanatory variables on the equity prices of Indian companies which truly helped to identify that Dividend per Share & Earning Per Share are considered to be the strongest determinants of share price. Further, higher Book Value Per share depicts a sound financial position of a company which leads to positive impact on share price.
- As mentioned previously, Malik, Qureshi & Azeem (2012) also studied the impact of Book Value and Earning Per Share on the share price of selected fifty two companies taken from Karachi Stock Exchange by using Ohlson model. The study reveals that there is a high determination power according to Ohlson model of valuation while there is a minor improvement after adopting the cross product term.
- (Allahawiah, S. & Amro, SA.(2012) determine, analyze and evaluate the impact of internal factors responsible for the fluctuations in the share prices of listed stocks in Amman Stock Exchange. The result of the study shows that many factors have relationships, both positive and negative with share market out of which dividend policy has major impact on the stock prices while least one was the nature of firm's business.
- Das & Pattanayak (2013) talks about the effect of corporate fundamental factors on the stock prices including the Sensex and Nifty. Conclusion reveals that share prices of companies registered at NSE and BSE are greatly influenced by the corporate fundamental factors.
- Tandon, K. & Malhotra, N. (2013) investigated the firm's specific variables which affect the share prices in the context of National Stock Exchange (NSE) 100 companies. They found a significant positive association of firms book value, EPS & P/E Ratio with firm's stock price whereas Dividend Yield is having significant inverse association with market price of firm's stock.

- Conducting research in Dhaka Stock Exchange <u>Haque & Faruquee</u>. (2013) concluded that stock prices at Dhaka Stock Exchange is more influenced by other factors as compare to company specific factors.
- Sindhu, Bukhari & Hussain (2014) tried to identify the factors responsible for the ups and downs in the share price of some listed companies in Karachi Stock Exchange and it has been observed that 65 percent of the variation in stock price is due to the internal factors which includes cash flows, leverage, profitability, growth, market capitalization, and dividend.
- Geetha & Swaaminathan (2015) did a study of four automobile and IT industry listed at NSE and BSE and concluded that there is a significant effect of Earning per Share, Price/Earning Ratio and Book Value per Share on the movement of stock prices whereas dividend per share doesn't have any effect on the market price.
- Sharif, Purohit & Pillai (2015) explored Bahrain Stock Exchange to study the impact of company specific variables on the stock prices of companies listed in Bahrain Stock Exchange. Moreover, the results indicates that ROE, Book Value per share, Dividend per share, Dividend Yield, Price Earning ratio, Firm's Size are significant determinants of share price in the Bahrain stock Market.

# **Table No. 1: Reviewed Articles**

S. No	Author Name	Title	Study Objective/Stu dy Description	Country/ Geographica I Area covered	Source of Data Collection/ Data Analysis Method	Findings
1.	Ahmed, S (2008)	Aggregate Economic Variables and Stock Markets in India.	This paper studies the casual relationship between stock prices and the key macroeconomi c variables representing real and financial sector of the econoy.	India	Website of NSE and BSE  Johansen's approach of co integration & Toda & Yamanoto Granger Casuality Test, BVR Modelling	Movement of stock prices is not only affected by key macro economic variables but also influenced by other macro dimensions in the economy.
2.	Guru, U. Idris I. (2009)	Environment al factors Influencing Fluctuation of Share prices on Nigeria Stock Exchange Market.	Examination of macro – economic variables that are responsible for fluctuations in Nigeria Stock Market.	Nigeria	Issues of Central Bank of Nigeria Multiple Regression	Stock prices moves in the same direction with GDP, money supply, total deficit & interest rate while inflation rate & index of industrial moves in opposite direction.

3.	Nasif AL, F.Shubiri (2010)	Analysis the Determinants of Market Stock Price Movements: An Empirical Study of Jordanian Commercial Banks	To find out the impact of various micro and macro economic factors affecting stock market of Jordan.	Jordan	Amman Stock Exchange and banks' annual reports/ Simple and multiple regression analysis	Highly positive relation between Market Price of Stock & NAVPS, Dividend percentage, & Gross Domestic Product.  Negative relationship on inflation and lending interest rate.
4.	Girard, EC. (2010)	Empirical Evidence of the Existence of Investable Premiums in Emerging Market Investable Stocks	To investigate the connection between investability and return dynamics of stocks traded in emerging market.	US	(SP/IFC) EMDB Reports) Factor Analysis	The average return and volatilityof more investable stocks is greater than the average return of less investable stocks.

5.	Shen, CH. & Lin, KL (2010)	The Impact of Corporate Governance on the	This study investigates whether corporate	Taiwan	Endogenous Switching Model (ESM) of Hu and	It has been observed that in a strong governance regime, the
	(2010)	Relationship Between Fundamental Information Analysis and Stock Returns	governance affects the impact of the relationship between fundamental signals and stock returns using Taiwanese data.		Schiantarelli (1998),	responses of stock returns to the fundamental signals are found to be greater than those in weak governance regimes.
6.	Butt, B.Z. Rehman, K.Khan, M. Safwan,N. (2010)	Do economic factors influence stock returns? A firm and industry level analysis.	To examine the stock return variation to specific economic variables by multi- factor model.	Pakistan (KSE)	Website of KSE & Business records, State Bank of Pakistan, Economic survey of Pakistan.  GARACH Model	It is founded that economic exposure is higher at industry level than firm level stock returns.

7.	Ali, MB.	Impact of	To examine	Bangladesh	Monthly	Inflation and
	(2011)	Micro and	the impact of		Review	Foreign
	(2011)	Macroecono	three macro		Publication	Remittance have
		mic	and two		issued by	negative influence
		Variables on	company		DSE &	and IPI, Market
		Emerging	specific		monthly	P/E & MKTPE
		Stock Market	variables on		economic	have positive
		Return :A	the all share		trend issued	influence on stock
		Case Study	price index of		by	returns.
		on Dhaka	DSE.		Bangladesh	
		Stock			bank	
		Exchange			Multivariate	
		(DSE)			Regression	
					Model	
					Wiodei	
8.	Sharma,	Determinants	To examine	India	CMIE	All these
	Dr S.	Of Equity	the empirical		Monthly	variables affect
	(2011)	Share Prices	relationship		reviews, SEBI	market price of
	(2011)	In India	between equity		annual	share in positive
			share		reports, BSE	direction & helps
			price &		annual	the investors to
			explanatory		reports,	forecast future
			variables.		Financil	stock prices.
					Journal	
					Correlation &	
					Linear	
					Multiple	
					Regression	

9.	Olweny, T. Omondi, K. (2011)	The effect of macro- economic factors on stock return volatility in the Nairobi Stock Exchange, Kenya	To investigate the effect of macro economic factors on the stock return volatility in the Nairobi Securities Exchange, Kenya.	Kenya	NSE, Central Bank of Kenya & Kenya National bureau of Statistics.  Econometric Model & GARCH Model	Stock returns are affected by Foreign Exchange Rate, Interest Rate, Inflation Rate.
10.	Le, TH. Chang, Y. (2011)	The impact of oil price fluctuations on stock markets in developed and emerging economies.	To evaluate the impact of oil prices on the stock prices of Japan, Malaysia, Singapore & South Korea	Japan, Malaysia, Singapore & South Korea	Website Regression	Oil & stock prices have the highest correlation in South Korea followed by Singapore, Malaysia and Japan.
11.	Naik, P. Padhi, P. (2012)	The Impact of Macroecono mic Fundamental s on Stock Prices Revisited: Evidence from Indian Data.	Investigates the relationship between Indian Stock Market Index (BSE Sensex) & five macroeconomi c variables.	India	Website of NSE and BSE.  Johansen's co integration & Vector Error Correction Model	Reveals that BSE Index and Macroeconomic variables are co integrated and hence there exist a long term relationship between them.

12	Dr. Aurangze b (2012)	Factors Affecting Performance of Stock Market: Evidence from South Asian Countries	To identify the macro economic factors affecting the performance of stock market in South Asia.	South Asian Countries including Pakistan, India, Sri Lanka	Official database of World Bank, stock market and official website of yahoo finance	It indicates that FDI and Exchange Rate have positive impact and Interest Rate & Inflation have negative impact on performance of stock market in South Asian countries
13.	Malik, MF. Qureshi, MU. & Azeem, M. (2012)	Determination of Share Price: Evidence from Karachi Stock Exchange	Is share price significantly determinable by the Book Value Per Share and Earning Per Share using Ohlson model?	Pakistan	Balance Sheet Analysis of PLC at KSE, Annual reports of companies, Website of ICAP & SECP. / Regression Analysis, Fixed Effects Model	The study reveals that there is a high determination power by using Ohlson while there is a minor improvement after adopting the cross product term.

14.	Allahawia h,S. Amro, SA (2012)	Factors affecting Stock Market prices in Amman Stock Exchange: A Survey Study	To determine, analyze & evaluate the impact of internal factors on prices of listed stocks in Amman Stock Exchange.	Jordan	Website of Amman Stock Exchange Anova, Factor Analysis, Correlation and Regression	Among are mentioned factors dividend policy has major impact on the stock prices while least one was the nature of firm business.
15.	Kumar, R. (2013)	The effective Macroecono mic factors on Indian Stock Market Performance: A factor Analysis Approach.	To analyze the influence of macro economic variables on the market of National Stock Exchange.	India	Website of NSE Factor Analysis	All the variables are divided as Macro Environmental, Industrial Performance & Policy Rates. It has been identified that industrial performance significantly influence the stock market. Market also rely on macroeconomic environment to maintain macro stability.

16.	Das, N. & Pattanaya k, J K . (2013).	The Effect of Fundamental Factors on Indian Stock Market: A Case Study of Sensex and Nifty	To study the effect of corporate fundamental factors on Indian stock market including NSE and BSE	India	Secondary data collected from the website of NSE and BSE / Correlation & Regression	Corporate fundamental factors have a great impact on the share prices of companies registered at NSE and BSE.
17.	Joshi, M. (2013)	Factors affecting Indian Stock Market	To identify major factors affecting Indian stock market.	India	Multiple Regression Analysis Various stock brokers & their employees listed at NSE and BSE, and having their branch at Surat City. Factor Analysis	The major factors that affect the Indian Stock Market are Flow of Foreign Institutional Investors, Political Stability, Growth of Gross Domestic Product, Inflation, Liquidity and different interest rate, Global level factors

18.	Tandon, K. & Malhotra, N. (2013)	Determinants of Stock Prices: Empirical Evidence from NSE 100 Companies	To examine the relationship between stock prices and company specific factors such as book value per share, dividend per share, earning per share, price earnings ratio,	India	Correlation & Linear Multiple Regression	Firms Book Value, EPS, P/E Ratio are having a positive association with firm.
19.	Haque, S. Faruquee, M. (2013)	Impact of Fundamental Factors on Stock Price: A Case Based Approach on Pharmaceutic al Companies Listed With Dhaka Stock Exchange	To examine the influence of various fundamental factors in determining the market price of Dhaka Stock Exchange.	Bangladesh	Annual Reports of Companies Multiple Regression Analysis	It has been observed that there is no significant corelation between stock price and companies fundamental variables.

20.	Sindhu, MI. Bukhari, SMH. & Hussain, A. .(2014)	Macroecono mic Factors do influencing Stock Price: A Case Study on Karachi Stock Exchange	To analyze the factors responsible in identifying the share price of some listed companies in Karachi Stock Exchange.	Pakistan	Library of KSE and Annual Reports of companies Regression Analysis	Various selected factors influence the stock prices of KSE.
21.	Sapna. Dani, Dr V. (2014)	Stock Market and Factors Affecting Trading Volume	To understand the relationship between price and trading volumeof BSE Index.  & To determine the factors affecting trading volume.	India (BSE Index)	Convenience sampling was used to select 30 respondents (relationship managers) and a questionnaire was used to take their responses.  Factor Analysis, Cross Tabulation, Chi square	There is a significant relationship between price and trading volume of BSE Index.  Majorly trading volume is affected by stock prices, liquidity, news and media reports.

22.	Shah, M. (2014)	Flows of FIIs and Indian Stock Market	Examines the trend & pattern of FII flow in India & also examines the relationship between FII & Nifty.	India	Bulletins of RBI, SEBI handbook, NSE website, Publication from ministry of commerce. Correlation & Regression	CNX nifty has increased over a period of 13 years from 2001 to 2013.  There is a moderate positive correlation between FII & CNX nifty stock market.
23.	Suriani,S. Kumar, M. Farhan, Jamil. Muneet, Saqib. (2015)	Impact of Exchange Rate on Stock Market.	Evaluates the relationship between stock market & exchange rate of Pakistan (KSE – 100)	Pakistan	KSE 100 Index, State Bank of Pakistan and Forex. Regression Analysis Test	There is no relationship exist between exchange rate and stock price and both the variables are independent of each other.
24.	Kothari, R . & Kothari, R (2015)	Asymmetric Stock Beta Behavior : A Quantile Regression Analysis	Study the effect of the change in market portfolio returns on selected 19 companies listed at BSE in lower, medium & higher return range during the up and	India	Prowess database of CMIE / Quantile Regression	The stock betas are not symmetric they differ significantly over the bullish & bearish market state.

			down state.			
			down state.			
25.	Geetha, E. & Swaamina than, Ti. M. (2015)	A Study on the factors influencing share prices: A Comparative Study of Automobile and Information Technology Industries Stocks in India	To analyze and compare the affect of fundamental factors influencing the movement of stock prices of selected companies of automobile and IT industry.	India	Website of NSE and BSE/ Ratio Analysis	It has been observed that fundamental factors have great impact on the share prices movement of selected companies.
26.	Rajesh, M. & Bhaskar, K. (2015)	Impact of Fundamental Factors on Share Price Movements - A Study on Select Listed Companies of Indian manufacturin g industries in Bombay Stock	To study the factors like Change in MPS, PPP,GDP, Inflation (INFL), Money Supply (M2) and Industrial Production (INP) that affects the select listed	India	World Development Indicators / Pearson's Correlationan alysis and Regression analysis	Growth in market return, Industrial Production & GDP positively influences the stock returns of most of the firms and industries whereas Inflation is not.

		Exchange	companies in BSE of Indian manufacturing industries.			
27.	Ismail, SMM. Musthafa , AMM. Nijam, HM. (2015)	The Impact of Macro-Economic Variables on Stock Market Performance; Evidence From Sri Lanka.	Investigates the relationship between macro economic variables and performance of stock market of Sri Lanka	Sri Lanka	Central Bank Annual Reports 1977- 2012, Economic & social Statistics in Sri Lanka 1990- 2012 Correlation and Multiple regression	The study confirms that macro economic factors continue to affect stock prices of Colombo Stock Exchange
28.	Ray, P. Vani, V.	What Moves Indian Stock Market: A study on the linkage with Real Economy in the Post- Reform Era.	To unravel the relationship between the economic variables and the capital market in Indian context (BSE).	India	Handbook on Statistics (RBI) & Economic Survey (Govt. of India).  VAR & Artificial Neaural Network (ANN).	It reveals that IR, output, M2, inflation rate & ER has considerable influence on the stock market while other variables have negligible impact.

29	Sharif, T.	Analysis of	To determine	Bahrain	Website of the	Results indicates
	Purohit,	factors	the effect of		Bahrian Stock	that ROE, BVPS,
	H. Pillai,	Affecting	company		Exchange.	DPS, Dividend
	R.	Share Prices: The case of Bahrian Stock Exchange.	specific variables on the shares of companies listed in Bahrian Stock Exchange.		Regression and Correlation	Yield, P/E Ratio, firms size are significant determinants of share prices in the Bahrain Market.
30.	Sharma,	Impact of	To explore and	India	Federal	Reveals that
30.	G.	Macroecono	study the effect	India	Reserve	exchange rate and
	Mahendru , M.	mic Variables on Stock Prices in India	of macroeconomi c variables on stock prices (BSE Index) & also the correlation between them.		Statistical, RBI, NASDAQ, BSE website &Money Control. Mutiple Regression Model	gold price have significant relationship with stock prices as compare to inflation and FER.

## **Research Gap:**

A number of fundamental factors affect the stock market which has been proved by various researchers but the lacking areas that was found in the above given research papers are

- Most of the researchers have focused on either macro-economic variables or company specific variables. Very few have worked on **both the variables**.
- Majority of the research work has been conducted on the top players of stock exchange.
   Very few researchers have worked on specific industry.
- Not more than 6-7 variables have been studied in the research papers reviewed.

•	As per the reviewed papers the study on factors affecting stock market has been mainly
·	conducted at <b>International level</b> .

# **Relevance of the Study:**

The undertaken research will be helpful in the following areas:

- Facilitates professionals, investors and various other people in their investment decision making process.
- Many researches have been done by different researchers using either company specific
  or macroeconomic variable. But present research will emphasize in establishing an
  important linkage between stock returns & both company specific and macro economic
  variables.
- Assists the interested group to take managerial, operational decision efficiently.

# Research Framework

Explore company specific & macroeconomic variables



Association of company specific variables and stock returns



Association of macroeconomic variables and stock returns

### **Theoretical Framework**

Independent Variable	Dependent Variable
Macroeconomic Variables	Stock Returns
&	
Company Specific Variables	

**Independent Variable:** Macroeconomic Variables & Company Specific Variables.

**Dependent Variable:** Stock Returns

#### **Variable Selection**

Data used in the study has been categorized into three parts.

- 1. **Stock Returns** It includes the data related to the stock returns of selected IT companies listed on NSE.
- 2. **Company Specific Variables** It comprises of the data related to company specific variables such as Earning per Share, Book Value, Dividend per Share, Return on Equity, Price Earnings Ratio.
- 3. **Macroeconomic Variables** It consists of the information related to macroeconomic variables such as Exchange Rate, Foreign Exchange Reserve, Industrial Growth Rate, Inflation, Repo Rate, Gold Prices, Foreign Direct Investment, Crude Oil Prices.

These factors have been selected on the basis of review of literature and availability of data for past years starting from 1 April 2006 to 31 March 2016.

# **Research Objectives**

The research will be undertaken with the aim of the following objectives:

- To study the **impact of selected company specific variables on the stock returns** of selected IT companies.
- To study the impact of selected macro economic variables on the stock returns of selected IT companies.

### **Hypotheses of the Study**

### **Hypothesis 1:**

H<sub>01</sub>: There is no significant impact of Macroeconomic variables on stock returns.

H<sub>al</sub>: There is a significant impact of Macroeconomic variables on stock returns.

#### **Hypothesis 2:**

 $H_{02}$ : There is no significant impact of Company specific variables on stock returns.

H<sub>a2</sub>: There is a significant impact of Company specific variables on stock return.

### **Research Methodology**

## **Research Design:**

The proposed study will be based on the following Research Design:

Exploratory	Descriptive	Empirical
Review of Literature	Representation of data as it is	Testing the Hypotheses.
has been undertaken	collected.	
and will also be		
referred to in future.		
• Various variables to be		
used in study have		
been explored.		

#### Universe of the study

For the purpose of the study, universe comprises of all the **IT companies** listed on National Stock Exchange (NSE).

# **Sample Details**

Sample selection has been done by using following methodology:

- 1. From different stock exchanges **National Stock Exchange** has been selected as it is the first demutualized electronic exchange in the country as well as the largest stock exchange in India by market capitalization \$1.65 trillion as on 23 Jan 2015 and trade value \$ 442 billion as on June 2014 (NSE Site).
- 2. Thereafter, **top 30 IT Companies** has been selected out of all the listed IT companies present on NSE on the basis of market capitalization and also by keeping in view its major contribution which is more than 60% of total market capitalization of IT sector.

	Sampling Process Undertaken				
1.	Identifying the Target population	All listed IT companies on NSE			
2.	Specifying the sampling frame	Top 30 IT Companies			
3.	Determination of the sample Size	30 Companies			

### **Period of Study:**

The time frame for the purpose of research covers the study period of 10 years starting from **1** April 2006 to 31 March 2016. Basis for selection of this period are as follows:

- This duration faced both boom as well as recession phases which may help to measure the performance of micro economic along with macro economic variables in the movement of Indian stock market.
- This time frame witnessed so many structural as well as substantial policy changes.

## **Sources of Data Collection:**

This study is primarily based on secondary data that were extracted from various sources mentioned below:

#### **Macroeconomic Variables**

S.No	Variables	Symbol	Source	Unit of Measurement
1.	Exchange Rate	ER	Dbie.rbi.org.in	Rs vs \$
2.	Foreign Exchange Reserve	FER	Dbie.rbi.org.in	Rs. Billions
3.	Industrial Growth Rate	IGR	Dbie.rbi.org.in	%
4.	Inflation	Inf	Dbie.rbi.org.in	Decimal
5.	Repo Rate	Repo	Dbie.rbi.org.in	Rs crore

6.	Gold Prices	GP	www.mcxindia.com	Rs/Barrel
7.	Foreign Direct Investment	FDI	Dipp.nic.in	US\$ million
8.	Crude Oil Prices	COP	www.mcxindia.com	Rs / Barrel

# **Company Specific Variables**

S.No	Variables	Symbol	Source	<b>Unit of Measurement</b>
1.	Earning Per Share	EPS	Financial Statements of the companies under study.	Rs
2.	Book Value	BV	Financial Statements of the companies under study.	Rs.
3.	Dividend Per Share	DPS	Financial Statements of the companies under study.	Rs
4.	Return On Equity	ROE	Financial Statements of the companies under study.	Rs
5.	Price Earning Ratio	P/E Ratio	Financial Statements of the companies under study.	Rs

> Stock Returns: IT Nifty has been selected as the stock return index and monthly average data will be collected from the National Stock Exchange (NSE) website.

### **Tools & Techniques:**

The below mentioned techniques and tools will be used in order to derive the results of the proposed study. The techniques used will be:

- For Descriptive Statistics: Arithmetic Mean & Standard Deviation and Graphical Presentation.
- **To check the stationarity of data :** Unit Root Testing.(ADF Augmented Dickey Fuller Test) (PP Phillips Perron Test)
- To find out the relationship: Multiple Correlation and Multiple Regression.
- Software Metlab and E-Views will be used to analyze the data.

#### **Scheme of Chapterization**

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3.1	3.1 Research Gap			
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	·	
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#### -THANK YOU-