CHAPTER 3

BEHAVIOURAL APPROACH TO STOCK MARKET


3.1 Introduction:

This chapter briefs about the history of stock market, after examining study on behavioural finance and psychological literature with an aim to depict how individual investors react in the stock markets. The main objective of this chapter is to show case the text approaches like fundamental and technical analysis are useful in the long run and marked are moved by moods and sentiments. In this direction of study an overview of Indian securities market with a detailed exposition on the BSE and Nifty Fifty is discussed vividly. Stock markets are with complex systems to understand hence models are needed to study their dynamics. Securities exchanges are with complex frameworks to understand and subsequently models are required to learn about their progression and changes. Contemplating conduct of market investors is similarly essential in view of its potential effect on asset prices. The historical backdrop of securities exchange independent is loaded with striking occasions to acquire its name and fame. Stock markets are always highly volatile and full of dynamic changes. The significant occasion in the realm of securities exchange, for example, the colossal crash of 1929, the tonics blast of the 1960s, the go a long time of the late 1960s, the clever fifty rise of mid 1970s, the Black Monday crash of 1987, the web rise of the 1990s, and late financial turmoil in 2008, caused a sensational change in securities exchange market and in the prices of the stocks. The standard finance model, in which “unemotional investors always force capital market prices to equal the rational present value of expected future cash flows,” does not appear to offer ideal knowledge into asset pricing anomalies (Baker and Wurgler 2007, p. 74.
129). It also questioned the explanations given by all the neo classic financial models. The asset pricing and the behaviour of investors in behavioural finance has contradicted the neo classical finance. In fact there is a paradigm shift in financial decision have taken place because of the behaviour of the investors. There has been a constant research to enlarge the standard model with an option display based on the fundamental assumptions. The assumptions are as follows. The primary assumption according to Delong, Shleifer, Summers and Waldmann (1990) is that investors are irrational and subject to sentiments. That investors’ sentiment speak about the belief in cash flows which is calculated by taking into considerations about the investors’ risk. Investors risk is not justified by the fact which is not in hand.

After the financial danger and emergency of 2008, the saw movement of securities market human sentiment function is characterised in a stochastic discount facto model (SDF). Post to it, researchers have suggested and proposed some behavioural hypotheses to the present financial model in anticipation of the stock price. These studies are based on behavioural Finance and how the investor behaves in different occasion.

Behavioural Finance is that branch of finance which speaks about moods and sentiments with emotions in the financial market influencing the investors to buy sell or hold stock thus by affecting the price in the short run. It has a notion that psychological biases always play an upper hand in influencing the investors than efficiency of markets. The science of behavioural finance explains the fundamental reason why the market is inefficient? The different hypotheses and theories from different disciplines such as human psychology, social science and anthropology brief about the unreasonable conduct of financial market. The emphasis behind all these literature is to connect the dots between investor sentiments and asset prices. As indicated by Anderson, Ghysels and Juergens (2005), investor sentiment, is characterised as wrong convictions about future cash flows and risks, essentially influences
the prices of all assets. Their literary works give the important structure for understanding the
behavioural asset pricing model (which incorporates human sentiment) and the conventional
neoclassical evaluating model (which avoids human sentiment) to discover which model
better clarifies the pricing of an asset.

3.2 Psychological behaviour of investors in stock markets:
The aim is to understand how the individual investor is making decision. It throws light
particularly on the heuristics and biases element of the behavioural finance literature. From
the descriptive perspective, researcher wants to know under a real world setting how
investors make their investment decisions, against the rational/ideal behaviour recommended
by normative financial theories. On reviewing of existing studies, using various research
methodologies, the outcome of the research on investment decisions in the fields of
behavioural finance and cognitive psychology is explained. The various factors influencing
investor sentiments in the Indian stock market is analysed thoroughly

First of all investors are heuristics. Heuristics are the short cuts that brain takes when
processing the information. Because of this heuristics in nature price earnings ratio, price to
book value, price to sales is affected which in turn affect the cash flow and ratio analysis.
Indeed it becomes altogether important to consider it is important to consider the behavioural
aspects in foray. At last, the investors demand is mainly on dividend from the stock and
capital appreciation. However, both these sources rely on the value one pays while one
purchases the stock. In a bull market where the stock is positively trending and the cost of
the stock is also high, at this point one tolerates a hit on the dividend yield and capital
appreciation would take much longer as the base price is higher. On the other hand, it is
equally important for any investor that the buying price is lower to have a health stock
return. So while purchases stocks one needs to mull over the price as well as value.
Secondly in stock market **Contrarian Investing** takes place. A contrarian investing can be defined as one investors attempts in investing for profit just by betting against the convention wisdom but only when consensual opinion appear to be wrong. When Contrarian Investment is being followed it has some difficulties in following. It takes False Consensus effect which highlights a tendency of common amongst us to overestimate the percentage of people we think would agree with us.

Thirdly, it is **group thinking**. In group thinking though all may not think alike the fear gets reprimanded and the individual hide their true perspective. After this stage Buyer’s remorse where they feel that they have done something wrong and regret feeling after committing something mistake wrong with their money.

The fourth stage is **myopic aversion**: Warren Buffet says“ If you cannot stand 50% paper loss on your stock, then stay away from the markets”. Investors are more worried and concerned when they experience losses as compared to the satisfaction they receive from similar gain. “Investing is most intelligent when it is most businesslike”- Benjamin Graham. The basic idea is to calculate how much investors are getting for money’s worth as compared to other opportunities. Investors on the top of it end up with their crazy valuation too. One has to be wary of the stock market show. Rapid growth in a sector does not mean good investment returns for the sector. Sectors bubbles are a warning to investors to reduce their allocation to the sector. “**SUCCESSFUL INVESTING IS ALL ABOUT BUYING WHAT OTHERS ARE SELLING AND SELLING WHAT OTHERS ARE BUYING**".
3.3 Uncertainty creates subjectivity:

Markets have defined and specific cycles. Everyone in this world emotional when it towards the hard money they earned. Investors and dealers of stock market are emotional and enthusiastic – whether they choose to be or not. Everyone has the best of goals when putting their step forward any business whether a securities market or some other thing. All want to enjoy and make a ton of money without taking any pain.

But unfortunately some traders fail to recognise the predictable and repetitive stages intricacies inherent in it. The securities exchange does not only rely on organisation or industry specific information and profit. On and off, the stocks would trade precisely at their value and there would be no changes by any stretch.

Uncertainty Creates Subjective/Emotional Traders
Figure 2: Future Value Chart

Rather, every stock has a segment of “Future Value” which is totally and 100% subjective. One can easily compute the value of an organisation today – that’s pretty simple to estimate. It’s attempting to figure out what the organisation “might” be worth in the future that makes all the changes in the markets. In such capacity, investor’s feelings and emotions drive this variable.

Exercise control over your emotions, who knows- you may even control the market tomorrow.

Everyone ceaseless mission is to end up plainly an expert in stock trading. Everyone needs to figure out how to control one’s emotions and feelings at the same time that all how to perceive the herd mentality or group behaviour. Proceeding to tweak and perfect one’s trading system is a week after week process, yet definitely justified despite the exertion.

Coming to know about the traders have particular feelings which have fluctuating magnitude, is basic in figuring out how is it one or another investor might behave. Gratefully there is a cyclic procedure of psychology that explains the connection between our feelings and our judgments.
3.4 The 14 stages of trading psychology:

The figure below is a visual representation of the 14 stages …

**Figure 3 (14 stages of Psychology)**

1. **OPTIMISM** – It all commences with a positive note coupled with hope to purchase securities. It is state where the investors are of the opine that they are right always. Yhe are the masters and king of investments.

2. **EXCITEMENT** – Things begin proceeding on the right path favourable to the investor and gradually the investor becomes excited and energized and starts jazzed inside. One begins to trust feels great that a conceivable example of overcoming adversity is really taking shape.

3. **THRILL** – The stock exchange continue to be conducive to the investor one just can’t help it except but feeling somewhat “Smart”. At this juncture one gains trust of himself in trading system.”. At this crossroads one increases finish trust in exchanging framework.
4. **EUPHORIA** — "Maximum risk Maximum return" This concept is experienced here by utmost financial gain. Investments transform into snappy and simple benefits, start ignoring the basic concept of risk. Whatever goes ahead the way trading it to make a buck?

5. **ANXIETY** — Oh Alas!—upside down. The market commences to show its true colour. It shows its first sign of taking “hard earned” money back. But since this had not happened ever before. The investor remains greedy and thing for the long term growth.

6. **DENIAL** — The market is so whimsical and it behaved just in the other way what I expected. Investors' thoughts prove to be wrong. “Long-term” vision is always better than near-term hope of an improvement.

7. **FEAR** — Ground reality speaks volume what the investors thought is not that he got. Here utter stage of confusion starts and the investor starts losing the confidence. At this juncture one should get out of it with less profit but unfortunately for a silly reason the investors won't.

8. **DESPERATION** — All the pains which were turned into gains are lost at this point. Investors missed the chances of getting profit. Not knowing how to behave properly they end doing anything that will bring their positions again into the dark.

9. **PANIC** — This frenzy behaviour is the most emotional period by a wide margin. Investors are clueless and confused, helpless and hopeless, powerless and sad. At this particular stage the investors feel as though there at mercy of the stock market and have no influence over the external factors.

10. **CAPITULATION** — The investors reaching at this maximum point and sell all their positions at any given price just to keep themselves from the greater losses. At this point even, they are contended.
11. DESPONDENCY – Soon after coming out or exiting off the market the investors no more wants to buy stocks. In fact they assume that the market is not for them. They avoid it as though they are affected by plague. In spite of this also, there would a point or a ray hope which will point for greater financial chance.

12. DEPRESSION – Investors booze, drink, sob and pray. In fact he curses himself for being so dumb. Some started things where they have gone wrong by analysis it thoroughly. After burning their fingers they learnt it hard way from their past mistakes.

13. HOPE – Here again a spark in the dark room. A gut feeling I can still do. Eventually one realises that history repeat itself and stock market does have cycles. (Shocking) Again from square number one everything starts by seeking new challenges.

14. RELIEF – The markets are becoming to original condition of positive again and investors see their earlier investment is back again. Paradise regained and trust (although small) is doubled courage to invest money. The cycle starts all over again!

3.5 State of the Art:

Regarding the state of the art, there have been many attempts and approaches to determine market sentiment to predict fluctuations in the stock market. This section will review the state of art and analyse their strengths and weaknesses.
It is very clear from the picture that whenever there is gain the happiness we receive is less and for the same amount of loss the pain is more. This is what the prospect theory of Kahneman and Tversky (1974) states which received Nobel Prize.

It is the processes that determine market dynamics. It's hard not to think of the stock market as a person: it has moods that can turn from irritable to euphoric; it can also react hastily one day and make amends the next. But can psychology really help us understand financial markets? Does it provide us with hands-on stock picking strategies? Behavioural finance theorists suggest that it can.

3.6 BEHAVIOURAL FINANCE AND STOCK MARKET

Figure 5  FEAR AND GREED LEVEL
When others are greedy and insatiable be fearful and when others are fearful be greedy and covetous. It is dependably on the episode of avarice, greed and fearfulness among the investors make stock markets highly volatile. Rational and Successful investing is coupled with controlling and channelizing these emotions and understanding the behavioural finance. It is market sentiments and crowd behaviour by itself and not the organisation behaviour. In this nexus condition, behavioural finance comes as an counteract to investor anxiety and guide to logical, rational and safe investment decisions. Behavioural finance is an emerging field that consolidates and comprehends the behavioural and cognitive psychology and financial decision making processes.

The schools of thought have opinion that markets are not efficient in short run and individuals do not make right choices in influencing profits. Individuals are vulnerable to numerous behavioural anomalies, which become counterproductive in wealth maximization principle leading to irrational behaviour.

Insight and brightness carries the day, however it is astuteness that endures. This wisdom is a product of various factors like after burning the fingers, learning from mistakes and experience while using common sense. Learn from the past successful stories Benjamin Graham, Peter Lynch, and Warren Buffet to name a few for wisdom. Ability to control one’s emotions and understand the emotion of others, discipline and ability to stay is the course in spite of all the temptations. But investors all the time become victims of the situations and carried away by sentiment and emotions.
3.7 Investor sentiment and stock market volatility:

Figure 6

Investors’ sentiment wheel

Investor attitude towards investment is purely an illogical one. At the point of good time, investors have sanguine hopes and have optimistic view about the economy and the stock Exchange markets. At the time of crisis, investors are melancholic and with pensive sadness with good reason. An important query is whether the sentiment in a point of time is completely affected in asset prices, or whether the sentiment has taken the price too far in one way and away from the basic principal value. There surely are numerous cases in past where asset prices have either reached unreasonable levels or changed rapidly and dramatically without satisfactory rational explanation. One need to recollect back a few years to the
global financial crisis in 2008, or the dot-com bubble and the subsequent crash in 2000, or prior scenarios such the Black Monday in October 1987, the Nifty Fifty in the early 1970’s, or the Great Crash in 1929, to pick just a few cases. The classic treatment of frenzy moment, delusions and crashes is yet the work by Charles Kindleberger and Robert Aliber.

The hugeness of investor opinion has been for quite some time perceived by professionals and scholastics alike. A wide range of measures of investor opinion have been utilized either as a major aspect of the investment procedure or as crude information for scholastic investigation. What is basic to the greater part of the proposed measures is the way that they are generally intermediaries or proxies. Unfortunate as this is, there’s no strategies yet of specially estimating the sentiment or emotions of huge and topographically different groups of individuals. Episodically, classical economists like Francis Ysidro Edgeworth, Frank Ramsey and Irving Fisher unmistakeably observed therequirement for a gadget — a “hedonimeter” or a “psychogalvanometer” — that could quantify the even the extremely

...imagine an ideally perfect instrument, a psychophysical machine, continually registering the height of pleasure experienced by an individual... From moment to moment the hedonimeter varies; the delicate index now flickering with the flutter of the passions, now steadied by intellectual activity, low sunk whole hours in the neighbourhood of zero, or momentarily springing up towards infinity...

While a few researchers may allude to investor sentiment as an inclination towards noise instead of data, the similar term is utilised informally to refer to investor positive or negative feelings. Then again, Volatility is an indication of a highly liquid stock market. Value of stocks depends on instability of each asset. Pricing of stocks depends upon volatility of every advantage. Volatility is the difference in the asset price changes over a specific timeframe and it’s exceptionally hard to anticipate it consistently and correctly. In money related markets volatility presents an abnormal mystery to the market members, academicians and
policy makers. Without volatility predominant returns cannot be gained, compared to a risk free security gives less returns. However, in case it is high, it will pave way to misfortunes for the market participants and amount to costs to the overall economy. An upward movement in stock market volatility go with vast stock price fluctuations in advances or declines. Investors may translate an increase in securities exchange volatility, as an increase in the risk of equity investment and post which they move their funds to less risky assets.

3.8 Drivers of stock prices:

The market force for any product is demand and supply. They are the two plies of a scissors. Stock market price is no exception to it. The supply is based on the no of outstanding stock in a market. On the other hand, the demand is created by those people who wants to buy those shares from who already own them. The more the demand for a particular stock means, the more price one has to pay. However, the supply of any stock is limited. Investors can buy what is already owned by somebody. Suppose if some one does not want to sell the price will go up and vice versa.

1. Indexes:

Whenever one hears the news that the stock prices or the market is moving upwards, it refers to an index which is group of stocks and its value is moving up or down with the co price movement of the index.

2. Financial Health of a company:

Financial health of a company plays a vital role in deciding about the stock price. As soon as the company announces its earning, poor or rich, then the stock value is immediately affected by its performance. Generally, investors would like to play more for a company, which pays consistent dividends. The company’s past performance is undoubtedly important, but the future is more important. A company which was not doing well may turn around, perhaps
with new management, increased efficiency and new innovative ideas of new product etc., are a few to name. Likewise, the company doing good in the past may not do good in the present also.

A report that an individual or a company is trying to buy another business entity may also influence the stock price. Since the purchase should buy the major junk to have hold in the company.

3. Industry Information:

Once the company information is over the next important factor which gauges the price of stock is the industry as a whole. A company may be doing well financially, but the industry may be contracting, it makes the investor to think about investing. Because of this reason the stock price of the company may fall. So, the industry also plays a vital role in driving the stock prices. However, the industries which are cyclical, meaning they expand and contract in cycles. For example, home building declines when interest rate rise. Likewise, people purchase electronic items during festival seasons.

4. Economic Trends:

Economic trends primarily the events surrounding a specific industry or company, investors will have an eye on various economic indicator, general trends that signal changes in economy. If most of the companies are making money, the GDP is grown, low inflation, low interest rate, low unemployment etc is travelling in the upward direction.

Another measure of economic health, is Consumer Price Index (CPI) which calculates ‘the cost of living’ how much it costs to purchase goods and services that a household buys, such as food, clothing and fuel. With the increase in cost of living, people spend more, and they cannot save more which will decrease the stock price because of less demand.
5. **World and National events:**

Any news in local or glocal can affect the stock prices. When investors think, the news is good for the economy, the price will increase. For example, after budget effects, Repo rate and reverse repo rate announcement etc. will have the direct impact on the stock prices.

### 3.9 Investors Preference: Mid-Caps & Small Caps over Blue Chips:

While trying to know how to distribute the funds in equities, it is essential to comprehend both one’s expectation of return and also risk appetite (a function of your financial goals).

Once we are clear about these it will be quite easy for one to assign money to different classification of stock. After understanding the basics of investment in financial goal, the next step understands the three categories from where one must pick up portfolio.

In we understood the basic fact that investing is essential for achieving your financial goals. Now, let us step forward and understand the three categories one must pick from for one’s portfolio. While understanding the Market capitalisation, the three main categories which comes to stock-

1. Large Cap stocks
2. Midcap stocks
3. Small cap stocks

When we say ‘cap’ it means ‘market capitalisation’. Market capitalisation is the value of the stock which one get by multiplying the current stock price with company’s outstanding number of equity shares.

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\text{Market Capitalisation} = \text{Current Stock Price} \times \text{Number of Shares outstanding}
\]
1. Large cap stocks

The first division under market capitalisation is large cap stocks. If we look at BSE Sensex or BSE 100 index as a reference, it ranges from minimum 300 billion to 3,500 billion. The stock which are dealt here are usually top and well-established companies which have a strong market presents and these stocks are considered as safe investments. Large companies such as Wipro, TCS and Infosys usually categorised under this large cap stocks.

2. Mid-caps:

These types of stocks lie between large caps and small caps. They generally have the market capitalisation within the range of Rs.50 billion to Rs.200 Billion. These represent middle sized companies that are less risky than small caps and more risky than large cap. They rank between the two sides extremes on the parameters like size, client base, employees and revenues. Invariably these companies bring more returns in medium term of 3 to 5 years. There is always growth in these types of stocks.

3. Small caps:

These stocks lie at the bottom end of market capitalisation. Small cap stocks are wrongly called as ‘quick rich’ stocks or dangerous stock. However, both of these names given are not correct. They are called the start ups or companies in the early stage of development. They have smaller revenues, less client etc. Small cap stocks are generally big gainers as they are yet to be discovered within the sector and can show growth potential in large numbers once unfurled in the market. But now-a-days people prefer small caps and midcap compared to large cap because of the following reasons. Investors usually scramble towards blue-chips even when the business conditions are not favourable. But of late, this has been a reverse situation. Investors are prepared to pay the
same or better price earnings multiples for mid and small cap scrips. The PE multiples of small and mid-cap indices are traded at a premium, which were traded at a discount earlier.

Probably, ability to deliver a better growth in the future may a reason for this. When the SENSEX gives a return of nine per cent, the BSE Mid cap index was sixteen per cent and the BSE small cap index gained 14 per cent. Likewise, if you take the case of CNX Mid cap and small cap fared very well compared to Nifty by a very big margin. The facts why investors prefer mid cap over blue chips are listed under.

**a. Performing better:**

In the market correction since last 2 years Small and Midcap did not fall much compared to SENSEX. In fact, 7 out of 10 stocks in the BSE Midcap universe have improved the situation than the Sensex.

**b. Higher PEs:**

The BSE small cap and BSE Midcap indices trade at PEs of 21.3 times and 17.8 times respectively. Premium to Sensex is almost 17 times. Likewise, for CNX small cap index is 20 times whereas Nifty’s PE is just 17 times. This is the reason the investors are willing to pay premium. Another reason may be the superior growth than the large cap companies. When Sensex companies (large cap) is just 13 percent, and mid cap companies earned 20 percent. Small cap companies earned only half of it.

In spite of the lower profits of the large cap companies, market participants took mostly mid-caps because during the falling interest rates they tend perfect excellent. Whereas with the interest rate cycle going upside down, the investors began to bet on interest cost savings and better profitability for smaller companies. Successful emergence of micro stories as TTK prestige has made the mid cap stock to become into the limelight.
When we consider the large cap or blue-chip companies they do not have bureaucracy and red tapism as it is with large cap companies, so it can take quick decision. Mid cap companies shine because they nimble compared to behemoths though it has more financial resources. So, the mid-caps are considered as sweet pot of stock market.

c. Better time for investors:

For all the investors the behaviour has been different in different times. There is always been bad time or never been a good time to be a better behaviourist. Last four decades had been unassailable in the financial stock market. The stock value reflects the behaviour of investors. But of late the view that investors are that they can change the market through their irrational decision and behaviour. This is the present mainstream of the object of investment is the behaviour of investors which must be taken into major consideration.

Which drives the market most? Fundamental or emotions

With the exuberance of high tech stock bubbles and stock market crash of 1990s and 2008 which is still green in the minds of investors' leads to so many questions unanswered. Still the behaviour school adherents believe that market is less reactive in distilling the new information and investors are driven by emotion which indeed leads to market awry. Some investors and behaviours say stock markets leads its own life and it is detached from economic growth and business profitability. Experts and researcher not only viewed the stock markets as inefficient, but also not as economic fundamentals. According to this point of view, stock price of a company fluctuates significantly and there is some deviation in the share price valuations.

This argument is more in market than in academics. In 1980s the rise of stock market index funds, which now hold more than $1 trillion in assets, was caused in large part by the conviction among investors that efficient market theories were valuable. As far as India and
other emerging countries are concerned privatizing social security and other investment like retirement may hinder on the assumptions how investors handle their options. One should agree upon behavioural finance give some valuable insights – first and foremost among them is that the markets are not always right, since rational investors may not correct there is mispricing because of irrational behaviour of investors. But for the experts and manager of funds the next question is how frequent this deviation will come and if they are so frequent and significant that they affect the price of stock market and process of decision making. In fact, significant deviations from intrinsic values are very rare, and markets usually revert very fast to share prices starting with fundamentals. That is why the managers should use the tried and true analysis of a company’s discounted cash flow to make their valuation decisions. The next question is when the markets deviate?

3.10 When market deviate?

Behavioural finance theory holds that markets might fail to reflect economic fundamental under three conditions. Such as irrational behaviour, systematic pattern behaviour, limit to arbitrage a financial markets. When all the three apply the market the they predicts the differences in pricing which can be significant and persistent.

**Irrational behaviour:** Investors behave irrationally when correct processing not done with the information available. It leads to different level of company’s future performance. For example, some investors give more importance to recent events, results etc which in turn hikes the price of the company. But some investors are excessive conservative and they under-price the stock of the companies that have released positive news.

**Systematic behaviour pattern:** In this scenario though the individual investors decided to buy or sell without consulting economic fundamental, the impact of share price will be limited. Only when their irrational behaviour is systematic it leads to price deviation, hence
behaviour of large number of investors are responsible for mis pricing. This is the reason where the behavioural fiancé argues over confidence, overreaction are common among many investors and that group determines new stock price for a temporary period.

**Limits to arbitrage in financial markets:** When some investors assume that a company’s recent strong performance alone is an indication of future performance, they may start bidding for shares and drive up the price. Some investors might expect a company that surprise in one quarter to go on exceeding expectations. Some investors who are myopic do react for this and in turn it increases the prices of stock. This type of arbitrage does not occur in real life. In real time stock market, the cost complexity, and risk involved in setting up a short position can be too high for individual investors.

Other than the 3 types of behaviour the two patterns which create deviation in the stock price during the decades are long term reversals in stock price and short-term momentum. These two patterns received considerable attention in academic and profession. When we consider the scenario of reversal- high performing stocks of the past few years have become low performing stocks later. According to behaviour fiancé this sort of reaction is called overreaction on the part of investors. When too much of weight is put on company’s performance, the price is inflated. When additional information is available, again investors adjust their prices of expectations and reversal occurs. The same behaviour could explain low returns after initial public offering (IPO), seasoned offering, and new listing and so on. Probably those companies have had strong performance history earlier and the price of the stock went up high.

Momentum on the hand, occurs when positive returns for stock over the past few months again succeeded by again some more months. In behaviour finance it is suggested that this type of trend results from systematic under reaction of over conservative investors who
underestimate the real impact of earnings, divestitures and share price. This implies that stock price does not get changed because of good news or bad news of the market.

But academic people are still under the confusion whether the irrational investors are only reasons for the long term and short-term momentum patterns in returns. According the investors long term reversals are the outcome of incorrect measurements of a stock risk premium, as the investors does not take into account the risk associated a company’s size and market-to-capital ratio. The data collected may be a proxy for liquidity and distressed risk.

Likewise, irrational investors not responsible for the short-term momentum in share price returns. Profits from these patterns are relatively limited and here the transaction cost is also deducted. From this one can conclude that small momentum biases could exist even though investors are rational.

Furthermore, behavioural fiancé could not give answer to the question of why investors overreact under certain condition such as IPO and under react in some other situations like on dividend announcements. Since there is no reason can be found out on how to predict the market it is concluded that further investigation is needed for accuracy.

3.11 Factors affecting the stock price fluctuations:

Prices of stock in the securities market go up and comedown due to various factors. Some of the factors are briefly explained below:

1. Shares demand causes price inflation:

If the supply of a specific company’s share is more than the demand in the securities market, it will be sold at a lower price. The demand for a particular stock is computed by several factors; mostly it is connected to the yield from the share. If a company pays 12% on its equity, the general expectation about the return in the industry is only 8%, such a share will attract a large number of buyers.
2. **Bank Interest Rate causes fluctuation in share price:**

When the 'Bank Rate' is low, the nationalised banks provides loan to their customers at a lower rate of interest (Bank rate is the rate at which the Reserve Bank discounts the eligible bills in the possession of the banks). A lower rate of interest induces the customers to borrow more to buy more securities. This at the end rise the price of stock that are actively traded.

When the bank rate is high, the banks cannot provide credit on liberal terms. As a result, less money will be borrowed from the banks for speculative purposes. This results in the fall in the price of stocks.

3. **Underwriting affect the price fluctuation in shares:**

An underwriter is a person who promises for the minimum subscription of shares of a company. Sometimes the actions of the underwriters of the shares of a company, creates fluctuations in the price of the company. The underwriters, through their agent purchase shares in the public and create artificial demand for such shares, otherwise he has to purchase those share where the company do not attain minimum subscription. Because of this action, artificial demand the price of the stock may go up.

4. **Buying behaviour of Institutional Investors influences price fluctuations**

If the institutional buyers are showing more interest in any company's stock, then the public or the retail investors also show more interest in those stock because of which interest is created in the public stock is moving upward. The institutional investors are like LIC., IDBI., ICICI etc, when these companies wish to buy the change in the price happens and price of the stock goes up.

5. **Financial position of the company causes price fluctuation of shares;**

The financial position of any company plays crucial role in determining the prices of the stock. The financial position of a company indicates whether the company can pay dividend
or not can be learnt from the financial statement of a company. If the financial position is good then the price of the stock will move up and investors show interest on it. Foreseeing the prospects of higher dividend, the speculators also start buying it which may result in escalation of share price.

6. **Appointment / Resignation of directors causes price fluctuation in shares:**

The resignation of a renowned director of a company may create doubts in the minds of the investors about the financial positions of the company. This will have bad impact in the share price. Likewise, when a well-known director who has a gold sizable holding in a company dies, his shares will be distributed. In such case because if large scale selling the price of the stock may fall down.

7. **Speculators causes share price fluctuation**

During depression, which is features as fall in the price level, being the bearish market, speculators may have purchase to meet their commitment to sell. This may lead to a rise in the price of the security. The activities of the speculators are very important determinant of stock prices. In fact, when the bulls start buying in bulk in the expectation of making profit from the price rise and the price also rises, then the stock price will increase. Similarly, when the activities of bears lead to fall in the price also make fluctuation in the stock market.

8. **Listing in more than one stock exchange influences the price fluctuation:**

If the company lists in more than one stock market, the price may go up when that particular stock exchange does well, and the price may fall due to fall in the stock exchange. This may lead to fluctuations in the stock market.

9. **Political changes cause price fluctuations:**

Stock market is the weakest baby of the economy. So, it is price sensitive also. Because of this whatever change happen in the economy it will be affected the most. For example during
the outbreak of war, budget session, any change in the policy may cause changes in the stock price.

10. Miscellaneous problem causes price fluctuations:

Any problem relating to the company such as strike, lockouts, amalgamation, mergers, acquisitions, and even the bad weather, climatic conditions also cause the changes in the price of the stock. Apart from this terrorist attacks, world news etc affect the stock market price fluctuations.

**Figure: 7**

**Factors influencing Stock market**

3.12. Social media, Sentiments and stock market:

Social media and its relevance to quantitative investing is something that has occupied much of everybody’s time recently. The most important thing for one’s professional reputation is to write about something where hype is the norm rather than the exception. When one is a driver on a long and perilous journey along a narrow and winding road in a mountain country and the road is under a variable but heavy fog cover, and one’s headlights are of not much
use in seeing the next turn ahead. That time one’s come to a service station, and on the shelf one sees a device that uses infrared radiation to produce a live image of the road ahead. Being of a sceptical mind-set, one suspects that — despite shiny and beautiful packaging and far-reaching claims on the cover — the device may not be any good in practise. Perhaps it is worth taking it along for a test drive. After all, this is a road where one really wants any additional source of illumination one can get.

It is in this light the role of social media analytics in investing. Social media provide one more data source that can shed light on investor sentiment and can help identify the focus of market attention. It may well be the case that much of the data is pure noise and has no value on most days and for most assets, or it may capture only information that can be obtained from other existing sources. But then again, why not have a look at the new data to see if it adds anything? The potential rewards from improved prediction can be high, and — as long as one doesn’t rely on social media alone — not much is lost beyond the time spent on research and some expenses.

The emerging field of Neuro Economics may one day — at least in a research centre setting — give the methods for estimating opinion straightforwardly. For the time being, one must settle for a proxy in need of the genuine thing. There’s currently a decent and still growing body of research on media and the stock market. Rather than simply expecting that markets efficiently diffuse news into asset prices, various analysts have chosen to get their hands dirty and really observe the effect of news. This exploration has created some interesting outcomes. For example, it has been demonstrated that country-specific news on the front page of New York Times influence the closed-end country fund discount. It has also been found that there’s a distinction in price momentum and reversal patterns following huge moves with and without relevant news, media negativity predicts downward pressure in stock prices, and individual investors are net buyers of stocks which are conspicuous in the news.
In any case, it additionally gives the idea that stocks without media coverage gain higher returns than those with high coverage. Essentially, there is a causal connection between media reporting and investor action, given that it is the local media coverage which predicts local trading in the stock market. Intuition played a vital role in age old trading, but with the advent of computer especially Internet financial trading has under gone a major change. Internet is a wonderful thing, with efficient means of navigating it and finding the information one needs. In finance, the Twitter micro-blogging platform is the most popular, but blogging platforms — such as Tumblr and Word Press — have a wide following too. Finance has been slower in grasping social media than numerous professions, yet the circumstances has changed considerable in the recent years. Financial trading was supplemented with algorithmic trading.

The important of social media such as Face book which came into existence in the year 2004 followed by twitter in the year 2006 with 140 characters and after which followed by quora Google+ etc.. The information to be diffused was disseminated very fast to nook and corner of the word. The social signal revealed news such as chart birth, marriage etc.. I In fact revealed mind-set of people who are of alike mind and their emotions and feelings too. With this advancement in the social media, people expressions expectations, behaviour sentiments can be studied very easily. Stock market which is very sensitive based on bundle sentiments and emotions is too influenced by the people who are connected to it. Since all the system itself is inter connected with software, and internet in this global village one can easily read the mind-set of the entire world.

Today, Face book has over 1 billion users and Twitter has over 500 million users with 58 million tweets a day, and 1 billion every 5 days. These are a few of the many social signals available to determine market sentiment. These social signals describe how the general populace perceives companies which then influence the price of stock markets. However,
social signals are only largely available for companies that occupy large mindshare. This means that social signals can only be used to determine the market sentiment of stock that the users that create these social signals are aware of and inclined to post about. The sheer magnitude of the amount of social data available for analysis is what will allow for a wide breadth of companies and stock to analyse.

One can leverage the staggering amount of social data publicly available to provide powerful analysis, deep insight, and meaningful predictions for trading. There are two types of players in the stock exchange system: Smart Players and Dumb Players (some call them smart money and dumb money also). This is what Smart players are doing always. They make moves in an unpredictable manner to get Dumb players on the wrong foot so that they can achieve their goal of making profit in the securities exchange.

While Face book offers a data mining openings, Twitter is the genuine hotspot for social pointer investigation. Twitter is a bee sanctuary of web based social networking movement, with 745 million dynamic clients on the top of it, 235,000 brand new clients every day. Until 2012, the innovation didn’t exist to splice, dice and slice Twitter sustain to observe crisp exchanging data. When social sentiment indicator investigators and analysts started making sense on how to evaluate all that streaming web base social networking information - and offered the results to professional investors - they made good profits.

These sentiment scores demonstrate whether the pervasive chatter is good or bad news for a given stock. With that data close by, customers can act accordingly and trade the stock based on the sentiment score.

A bubble is a type of investing scenario that shows the fragility of a few aspects of human emotion. A bubble happens when investors show so much interest on a stock that they increase the price beyond any accurate or rational reflection of its real worth, which should be
calculated by the performance of the underlying company. Like the soap bubbles a kid likes to blow, investing bubbles often seem to look like they will rise continuously and permanently, but since they are not framed from anything substantial, they eventually pop. And when they do, the money that was invested into them disappears into the breeze.

A crash is a huge drop in the total value of a market, without any doubt inferable to the popping of a bubble, making a circumstance wherein the most of investors are trying to escape from the market in the meantime and subsequently facing great losses. Attempting to keep away from more losses, investors during a crash are panic selling, hoping to dump their declining stocks onto some different investors. This panic selling contributes to the declining market, which later crashes and affects everyone. Typically crashes in the securities exchange market have been trailed by a depression in the economy.

The connection between bubbles and crashes is like to the connection between clouds and rain. Since one can have clouds without rain but one can't have rain without clouds, bubbles are like clouds and market crashes are resemble the rain. Historically, a market crash has always precipitated from a bubble (pun intended), and the thicker the clouds or the bigger the bubble, the harder it downpours.

It is critical to note the distinction between a crash and a correction, which can be a sticky occasion at times. A correction is a remedy for the investors in the market's and the way of slapping some sense into excessive energetic investors. In general, a correction should not surpass a 20% loss of significant value in the market. Surprisingly, some crashes have been incorrectly marked as corrections, including the alarming crash of 1987. But a "correction," however, should not be named as such until the steep drop has halted within a reasonable period.
3.9. Bad news affect sentiments more than good news:

News is something that affects the stock market to a great extent. It affects the stock prices. Be it a short term or mid term or long-term investors it is very essential to review the news headline often. The news is basically divided into positive news and negative news. The news irrespective of its nature it may or may be reacted. One must be smart enough in the stock market to decode the news and quickly grasp the situation whether it will affect his stock, if so, to what extent and what can be remedial measures to it.

**Figure 8**

**GOOD NEWS VS BAD NEWS**

News which is positive in nature tends to spread positive vibes and it reflects positive in the stock market too. The immediate effect of positive news is rising of stock price soon. Positive news may merger with synergy, joint ventures, acquisitions, procurement of new orders for the organisation, good sales numbers, discovery of huge oil reserves in a country, excellent financial result of a company etc. The news makes the stock prices to go up.

When any positive news is declared in the stock market it slowly but steadily increases the price of the stock market.

One of the curious facts that are noted in stock exchange is whenever good news is disseminated in the investors circle; it does not always bring a jump in the stock price, rather most of the time it will bring a slight change in the stock price. Why? It is because of
'rumors' which is called unofficial news and has much influence on stock price as compared to official news. In stock market it is common phenomena and these types of stories always expected which will 'price in' the stock market. But when these expectation are confirmed with actual news the price may fall a little for a while. Likewise, the reverse applies too. If such rumours swirls around the stocks are proved to be right, the investors react in a bewildered way. It the surprise is a good one, stock prices as a result may be raise up. That is the reason, it is always essential to watch the news online all the time and see how the headlines affect the stock quotes. The next point to be noted is that good news at domestic level and bad news at international level will adversely push the stock prices down. The fact here is after globalisation the world is inter linked with each other country, so as the international stock market too. Sometimes all it takes a bit of bad news from overseas to have a down market day.

As far as the negative news is concerned it has a great reaching effect on stock price and investors sentiments too than positive news. Stock prices respond immediately to negative news that it may seriously stop general public from purchasing a wanting stock. Here sentiment plays a vital role. In a largely negative atmosphere, the small bit of worrisome news is enough to send a stock tumbling.

'Good' & 'Bad 'news:

There is some news which might seem to be negative from the beginning but it is not actually negative. For instance, firing of CEO or top officials. This may at first place sound negative, but it does not show that the company's board of directors was bold enough to take such a bold to help the company in the long run. The next example for this is lay-offs in a company. This is usually good for the company and because of it the price of stock should go up because expenses will be reduced to a great extent and it will be quickly. This should in fact help increase earning right away. It is not always a major warning sign; it can be one
of the easily and quickest ways a company can cut expenses if sales have not been meeting expectations.

3.14 Stock Blogs:

Blog is one another type of factor apart from the news that comes in media like television channels and newspaper which brings out the actual news that influences stock market investors. The primary difference between a blog and other Medias is that blog is taken care by the individual, but they comment at some frequent intervals. But many of them contains of opinions on a specific event along with the real news. For example, if the RBI increases the interest rate, what will happen to stock market will be known through blogs? Following some good blog, one will understand the economic impact better.

To conclude the news has a direct impact on the market. It will change a bad day into a good day and good day into a bad one. The relationship between news and the market is highly unpredictable by the best analysts. Any head line can be boom or bust. Though good news has a positive impact in stock market it has slow reaction compared to bad news which has a quicker reaction. If the good news affects the local market, the bad news affects global market. The length and bread of bad news is more vibrant than good news.

3.15 Concluding wish list:

Prediction of the future is always very difficult. Behavioural finance as it had gained its momentum a large number of young participants will be there. Young scholars are not burdened with large investment like the other set of people. It is always discussed that investment is attracted towards mid cap and small cap. But why the large cap is not attracted? That theory is to be studied. If this theory is also studied that the irrational investors will be reduced to some extent. It is believed that it depends on arbitrage arguments, but along with that the institutional barriers that does short selling also has some
behavioural expectation. Bringing those institutional investors directly into a model will though may be hard but worth doing. Secondly, doing research on Asset pricing is redundant and almost everyone does on it only. Instead if the research takes place in corporate finance as John Linter 1956 did a unusual study on how to set a dividend policy. He constructed a model which was simple where the companies move calibrates their dividends towards a desired pay-out ratio while being careful to avoid the necessary of ever cutting the dividend. Another research which can be done in the realm of behavioural corporate finance is Jeremy Stein’s (1996) article “Rational Capital Budgeting in an Irrational world”. In this work Stein ponders how companies should make investment decisions where the asset prices are not set rationally. Like this many other papers can also be written in this area. The internet big data analysis should also to be understood by each and every investor which the order of the day. For this already the companies come forward and share their data for the individual researchers. If every research takes all these subjects, then behavioural finance how it was controversial before 30 years. It will no more be like that. Now all the experts and other still believe and supports the role of human behaviour. After 15 years they may think why there was fuss? In their insight economist will incorporate these behaviours in their models.