

## “Behavioural Finance”

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### ABSTRACT

Behavioral finance involves the practice of observing and studying the behavior of an investor or a group of investors while making economic decisions. It helps in making understand the rationale behind economic decisions of investors and is a nexus between the psychological theories and the conventional theory on economics and finance. Understanding behavioral finance through adaptation of different models and theories will help in modifying the behavior of investors and enable them to achieve improved economic decisions.

The Research paper is done with the aim of making understand the concept of behavioral finance and its importance by comparing it with traditional finance. The objective is also to highlight the pillars and theories of behavioral finance along with the behavioral biases and to substantiate the theories, appropriate research and analysis is also carried out in this regard to observe how the behavior and emotions of investors drive their economic decisions.

### RESEARCH METHODOLOGY

1. The tools used to derive at the research work are as follows –

a. **Ratio Analysis:** For comparison of Behavioral Finance Vs Efficient Market Hypothesis, Data has been collected from the official website of NSE, BSE and selected company’s financial reports. Since the comparison revolves around Capital Markets, listed companies from different sectors have been chosen randomly.

b. **Sources of data:** The secondary data has been collected from various sources such as data through relevant websites, Annual reports of the Listed Entities, Government sites, e-Journals and Magazines.

c. **Statistical Tools:** Tools like bar graphs, tabulation, and line & pie diagrams have been used.

### 2. Limitations

The topic is about understanding human behavior, attributes and their reaction towards economic decisions. Because of the subjective nature of humans, the prediction and analysis on their behavior can never be accurate. The theories, research and analysis made in the paper tries to achieve maximum accuracy, however due to no certain laws on human behavior which can accurately interpret human ways and conduct, the research paper is done with much caution and skepticism.

### 3. Research Questions

a. What is the difference between traditional finance and behavioral finance?

- b. How does the behavioral bias affect investors' economic decisions?
- c. What are the circumstances under which the theories under efficient market hypothesis does not hold good and contradicts the concept of behavioral finance?

## INTRODUCTION

One of the notional concepts under economics and finance is that people behave rationally to achieve their objective of wealth maximization, giving no place to softer aspects of human nature such as emotions, habits and behavior while making finance decisions. This concept however was analyzed and tested with times to know that the assumption did not hold good in its entirety when applied in the real world. For instance, we take the example of betting, gambling, lotteries, where the winning probability is negligible (approx. 1 in 146 million), still people tend to try their fate on such activities.

The presence of such instances, led the researchers to delve into the area of understanding the irrational behavior of individuals which modern finance has overlooked. Behavioral finance thus has become a new area of study and development to find out the underlying forces for an investor while making investment concerning their cognitive ability and behavior<sup>1</sup>.

There are evidences back from the past where academicians, scholars have coined the term behavioral finance and germinated its recognition in the field of economics and finance. John Keynes, in his book in the year 1963<sup>2</sup> stated that, “many of our long-term investments reflect “animal spirits”—intuitions and emotions—not cool-headed calculation”. Herbet Simon and Hayek, in 1969<sup>3</sup> mentioned in their book that, “human beings can process only so much information at once and are not capable of carefully weighing the costs and benefits of every possible outcome of their decisions”. Contemporarily, The World Development Report<sup>4</sup>, in 2015 described the concept as, “Even apart from the instability due to speculation, there is the instability due to the characteristic of human nature that a large proportion of our positive activities depend on spontaneous optimism rather than mathematical expectations, whether moral or hedonistic or economic. Most, probably, of our decisions to do something positive, the full consequences of which will be drawn out over many days to come, can only be taken as the result of animal spirits—a spontaneous urge to action rather than inaction, and not as the outcome of a weighted average of quantitative benefits multiplied by quantitative probabilities.”

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<sup>1</sup> Martin Sewell, Behavioral Finance, University of Cambridge (First Published in February 2007, Revised in April 2010), available at <<http://www.behaviouralfinance.net/behavioural-finance.pdf>> (last visited on 30-05-2020)

<sup>2</sup> John Maynard Keynes, The General Theory of Employment, Interest and Money (First Published in 1936), available at <<http://www.hetwebsite.net/het/texts/keynes/gt/gtcont.htm>> (last visited on 31-05-2020)

<sup>3</sup> Herbert Simon and F.A. Hayek, The Sciences of the Artificial ( First Published in 1969), available at <[https://monoskop.org/images/9/9c/Simon\\_Herbert\\_A\\_The\\_Sciences\\_of\\_the\\_Artificial\\_3rd\\_ed.pdf](https://monoskop.org/images/9/9c/Simon_Herbert_A_The_Sciences_of_the_Artificial_3rd_ed.pdf)> (last visited on 30-05-2020)

<sup>4</sup> World Development Report,2015: Mind, Society, and Behavior, available at <<https://www.worldbank.org/en/publication/wdr2015>> (last visited on 31-05-2020)

Few notable research works in the field of Management of Working Capital are of “Daniel Kahneman” and “Annes Tversky”, who are considered as the “Fathers of Behavioral Finance”. They have contributed in the field by their publication, counting to approximately 200 on various theories, models on behavioral finance, cognitive and emotional biases that result in unanticipated behavior of individuals. Kahneman, in the year 2012 was also the recipient of Nobel Prize for his work in the area of ‘rationality’ in economics. Their theories were further developed and evolved by Richard Thaler, who worked on the shortcomings and gaps left by the former researchers. He gave a new dimension to the research by elaborating on concepts like prospect theory, endowment theory and other biases.

Understanding behavioral finance will help the Companies to create a management plan to deal with the bad assumptions of investors and will also help them to provide for ways to tackle foolishness and irrationality of humans.

## **CONCEPT AND FRAMEWORK**

### **1. Traditional Finance v/s Behavioral Finance**

As rightly said by Meir Statman, “Traditional finance models people as rational, wherein behavioral finance models people as normal”. Traditional finance discusses the behavior, investment decisions made by individuals in theory, while behavioral finance focuses on the real life pattern behind investment decisions<sup>5</sup>. It is not correct to assume that the investors always act rational, and therefore, a need arises to differentiate between these concepts. Following are certain differentiating factors –

- a.) Traditional finance can be grouped under normative analysis which is concerned with deriving rational solutions to problems in hand. Behavioral finance is grouped under descriptive analysis that concerns the manner in which people actually behave while making decisions.
- b.) The basis of traditional finance is from neo-classical economics which holds on to the concepts of rational investors who are risk averse and efficient market, where the price reflects all available information and to that effect, market behaves accordingly<sup>6</sup>. Behavioral finance finds its place from psychology i.e. applying the theories of psychology in finance. It deals with the myriad investor behavior patterns and approaches towards a situation and examining it.
- c.) The concept on which the traditional finance works is “Perfect Rationality” which states that a “Rational Economic Man” has the ability to work optimally towards the solution for any complexity and to choose the best alternative for best outcome. However, such a perfect combination is hard to exist and hence comes the concept of behavioral finance which adopts

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<sup>5</sup> Ms. Kavita Shah, Study of Behavioral Finance With Reference to Investor Behavior, available at <<https://www.ijaiem.org/Volume3Issue9/IJAIEM-2014-09-28-67.pdf>> (last visited on 31-05-2020)

<sup>6</sup> Nicholas Barberis and Richard Thaler, A Study of Behavioral Finance (First Published in September 2002) available at <[https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=332266](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=332266)> (last visited on 31-05-2020)

the “bounded rationality” theory that throws light upon human emotions than human intellect and explains how a person’s anger, fear, hatred, love and pleasure can affect its decisions.

## 2. Pillars of Behavioral Finance

The Pillars of behavioral finance refers to the theories, concepts developed in response to the field of the study of behavioral finance. Few of which are discussed as follows –

a.) **Risk Aversion:** Broadly speaking, there are three kinds of risks namely, ‘risk seeker’ who prefers uncertainty in investments, ‘risk neutral’, who is indifferent between investments and ‘risk averse’, who avoids taking risk. Traditional finance assumes that people are risk averse. Risk can be measured by the curvature of marginal utility of wealth<sup>7</sup>. A risk seeker has convex marginal utility which means that marginal utility is increasing at an increasing rate with the increase in wealth. A risk neutral person will have a linear utility curvature which states that marginal utility increases at constant rate with increase in wealth. A risk averse has a concave marginal utility which suggests that marginal utility increases at a decreasing rate with increase in wealth.

b.) **Neuro-Economics:** It is an emerging field of study with respect to behavioral finance concerning how people react, behave while making economic decisions. As the name suggests, it maps the brain activity of investors coupled with observation and experiments to study the basis of economic decision made by investments before, during or after the task of investment decisions.

c.) **Prospect theory and Bounded Rationality:** It is considered as an alternative to the expected utility theory under normative analysis. The theories fall under descriptive analysis by describing how people actually behave unlike normative analysis which describes how people should behave. Prospect theory works by assigning values in the form of weights to gain and losses rather than to final wealth<sup>8</sup>. For instance, the value functions assigned is normally steeper for loss aversion, concave for gains (i.e. risk aversion) and convex for loss (i.e. risk seeker).

## IDENTIFYING BEHAVIORAL BIASES

Literal meaning of bias is a preference; partial judgment; prejudice in favor of a viewpoint. In the context of the paper, biases refer to the irrationality in making financial decisions which are driven by feelings. Irrationality can be due to cognitive errors i.e. statistical or calculative errors, or can be due to emotional biases i.e. through intuition, impulses, etc. Cognitive errors are rectifiable as they arise from faulty reasoning and therefore, by improving the reasoning, clarity and education, it can be corrected. Emotional biases, on the other hand are hard to rectify as they stem from a person’s emotions, habits that are not objective in nature. The perceptions, beliefs of individuals cannot be controlled which therefore leads to irrational decisions. Few of the biases that rule investors behavior is discussed as under –

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<sup>7</sup> Victor Ricciardi, The Psychology of Risk: The Behavioral Finance Perspective (First Published in July 2008), available at < [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=1155822](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=1155822)> (last visited on 31-05-2020)

<sup>8</sup> Kahneman and Tversky, Prospect Theory: An analysis of decision under risk (Econometrica, First Published in 1979, Vol.47. No. 2) pp. 263-292

1. **Mental accounting:** According to this concept, people have an inclination for assigning special functions to each asset group, while ignoring the debt payment obligations it has in the present<sup>9</sup>. The theory can be better explained with an example. An individual creating a specific head and assigning funds for a family vacation, while it has credit card debt for payment becomes illogical as the person is saving funds bearing little or no interest value while upholding a 25% interest on a credit card debt payment.

In matters of investment, this theory comes in place where investors diversify their portfolio between safe and speculative portfolios to counter the negative returns ignoring the fact that the net wealth will remain unaffected than in the case if he had held larger portfolio. Although such behavior seems illogical, people tend to do it as they have certain value attached to assets which they feel “too important” to relinquish.

To mitigate the mental accounting bias, it is to be understood that the money is the same which is saved for a purpose bearing negligible interest and can be used to save high interest payments. The fungible nature of money, if recognized can help avoid the irrational behavior of individuals.

2. **Gambler’s fallacy:** The theory is based on determining the probability of event or series of events. A lack of understanding can result in wrongful assumptions about a particular event. In gambler’s fallacy, an individual bases the probability of the happening or non-happening of event on the criteria of the result of past series of events ignoring the fact that the probability of each event is independent of its occurrence in the past<sup>10</sup>. For instance, where a series of 10 coin flips shows “tails” side up each time, an individual may predict that the next flip will most likely have “heads” although each coin flip is independent and no past flips have any bearing on future flips.

In investments people fall prey to this bias. For example, investors decide to liquidate a stock where it has witnessed growth for a considerable period assuming that it is unlikely for the stock to continue growing. Similarly, investors might hold up to a stock even after its continuous downfall assuming that further downfall is improbable and the situation will change.

The gambler’s fallacy can lead to wrong assumptions and predictions. Investors should hence decide on the basis of fundamentals and technical analysis and must educate themselves before investing.

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<sup>9</sup> Richard Thaler, Mental Accounting Matters (First Published in July 1999) available at < [https://doi.org/10.1002/\(SICI\)1099-0771\(199909\)12:3%3C183::AID-BDM318%3E3.0.CO;2-F](https://doi.org/10.1002/(SICI)1099-0771(199909)12:3%3C183::AID-BDM318%3E3.0.CO;2-F)> ( last visited on 31-05-2020)

<sup>10</sup> Dek Terrell, A test of the Gambler’s Fallacy: Evidence from pari-mutuel games ( First Published in May 1994) available at < <https://doi.org/10.1007/BF01064047>> (last visited on 31-05-2020)

3. **Overreaction bias:** The changes in the stock market due to the new information provided in the market often leads to overreaction by the investors<sup>11</sup>. For instance, when there is some good news, it is assumed that the news should raise the price of the stock and shall remain rising until any further information is provided.

Overreacting over such actions in the market, investors tend to create larger than appropriate effect in the market often overlooking that the price change is sudden and temporary. Basing their investment decisions on such temporary factors can lead to irrationality in their behavior and therefore instead of a hasty decision, investors should spend time on watching the market and the stock movements and then arrive at a decision.

4. **Availability bias:** According to this theory, investors act on the basis of recent trend and newer information in their decision making than considering old information and data for investments. For instance, if one sees a car accident on the road which the person takes regularly to drive to office, the person will become extra cautious for a week or so while driving along the same road although the road has not become more dangerous than it has ever been, but the accident made the person skeptical, but the person will adopt his old driving habit by the following week.

To overcome the availability bias, retention of perspective is important. A thorough research on the investment portfolios will give better understanding on how to react on recent developments and will help in acting accordingly to achieve long term goal.

5. **Overconfidence:** Confidence means trusting one's abilities pragmatically, while overconfidence is exaggerating one's ability and having an over optimistic approach to perform a task. In investment decisions, overconfidence can prove detrimental in the long run. Overconfident investors trade more frequently in the market as they believe that they are better in choosing the winning portfolios<sup>12</sup>. However, on an average, these traders gain significantly low yields in the market.

On avoiding overconfidence bias, it needs to be understood that the volatility of the stock market and the new set of challenges associated with it needs proper study and research. Refining the investment techniques can also be adopted as one of the ways to avoid overconfidence.

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<sup>11</sup> Srinivasan Rangarajan, Behavioral Finance: Overreaction and Availability Bias (Published in May,2014), available at < <https://getricher.in/2014/behavioural-finance-overreaction-and-availability-bias/>> (last visited on 31-05-2020)

<sup>12</sup> John Doukas and Dimitris Petmezas, Acquisitions, Overconfident Managers and Self-attribution Bias (First Published in May 2007) available at <<https://doi.org/10.1111/j.1468-036X.2007.00371.x>> (last visited on 31-05-2020)

## RESEARCH AND DATA ANALYSIS

The research is broadly carried out on 3 aspects of Efficient Market hypothesis to break the ideal assumptions and conventional theories of the hypothesis. The objective is to show how the theories under the efficient market hypothesis do not hold good at all times and situations wherein there has been a contradiction is discussed through the aid of research. The aspects are discussed as under –

### 1. Valuations not justified by fundamentals

One of the assumptions under Efficient Market Hypothesis is that prices fully reflect the available information as it is backed by large number of rational investors. To prove that there are circumstances been occurred in the past where the theory could not upheld itself, a research is done to pick up the financial information for a particular year (“2018” in our case) of a four companies in a particular industry (“Tea Industry” in our case). The Price Earnings ratio (P/E ratio) was compared with respect to fundamental ratios of each company under the industry and it was found that in the industry there was one such company whose valuation was not supported by its fundamentals. The following table shows the P/E ratios and fundamental ratios of each company and the observations are made below –

Name of company	Current Market Price	P/E	D/E	Interest Coverage	Average Profit Growth (5yrs)	Average Sales Growth (5yrs)	Average ROE (5yrs)	Growth Rate
Tata Global	260.60	42.24	0.12	8.17	1.43	0.29	6.52	3.56%
Bombay Burmah	1187.60	19.15	0.42	30.52	21.10	9.64	17.89	12.09%
Tata Coffee	118.65	14.67	0.72	9.66	20.19	0.03	14.62	11.53%
Dhunseri Tea	283.45	120.62	0.75	5.62	(1.30)	4.13	10.74	-

Source: NSE, BSE, Companies’ Annual Reports

### Observations<sup>13</sup>

1. On the basis of Debt/Equity Ratio (D/E ratio), Dhunseri Tea is the riskiest company out of the 4 companies.

<sup>13</sup> The observations are solely on the basis of the information extracted from the box above and no additional inputs have been referred.

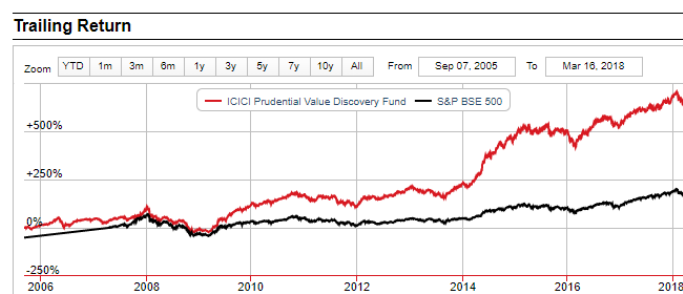
2. On the basis of Interest Coverage Ratio, Dhunseri Tea is the riskiest company out of the five companies.
3. The average sales growth of Dhunseri Tea for last five years has been 4.13%. During the same time, the profit has decreased by 1.30%. This shows that the cost per unit of production has increased during the period.
4. The Growth rates for the Companies were also calculated to evaluate the future prospects of the Companies. The growth rate has been calculated using the formula ( Retention Ratio \* Return On Equity )
5. Due to 100% Dividend Payout and no Retention in the last year, there is no growth rate for Dhunseri Tea.

Following the observations, it can be said that if the EMH assumptions are implemented then Dhunseri Tea should have traded at a lower P/E Ratio as compared to the peers however, the investors are willing to pay 5-6 times more than what they are willing to pay to its peers despite the weak fundamentals of Dhunseri Tea. It therefore shows how the decisions of investors are not always rational and that the price doesn't reflect all available information.

## 2. Mutual Funds that have consistently outperformed the market

Another assumption under EMH is that information is freely available to all the participants. The total effect of the information comes from the competition prevailing in the market amongst all the participants. Thus, at any point of time, the price of a security will match the intrinsic value of the security<sup>14</sup>. The research is carried out in this regard and for this purpose three mutual funds were selected to showcase their performance over the years and it is observed that these Mutual Funds have regularly outperformed the corresponding indexes. The results have been summarized below:

### 2.1. ICICI Prudential Value Discovery Fund



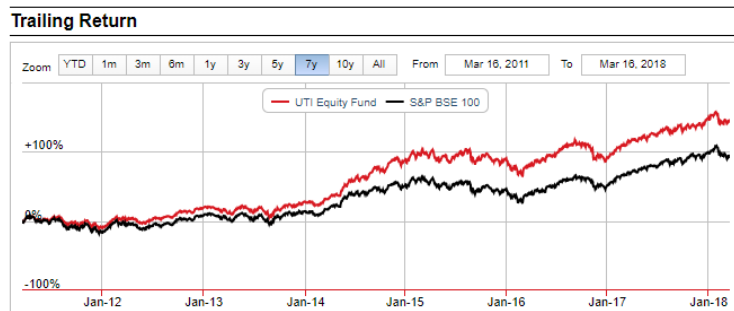
Source: Valueresearchonline.com

**Observations:** ICICI Prudential Value Discovery Fund has been regularly out-performing the corresponding Index from 2009 onwards.

<sup>14</sup> Michael Jensen, The Performance of Mutual Funds in the period 1945-1964 (First Published in May 1968), available at < <https://doi.org/10.1111/j.1540-6261.1968.tb00815.x> > (last visited on 31-05-2020)



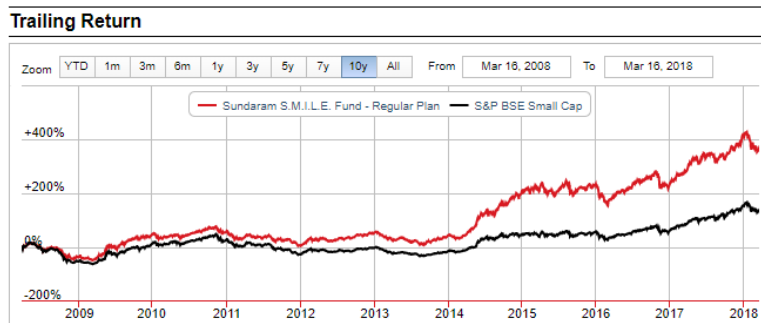
## 2.2 UTI Equity Fund



Source: Valueresearchonline.com

**Observations:** UTI Equity Fund has been regularly out-performing the corresponding Index from 2009 onwards.

## 2.3. Sundaram S.M.I.L.E. Fund - Regular Plan



Source: Valueresearchonline.com

**Observations:** Sundaram S.M.I.L.E. Fund - Regular Plan has been regularly out-performing the corresponding Index.

## 3. Cases where individual stock has outperformed the mutual funds in the market

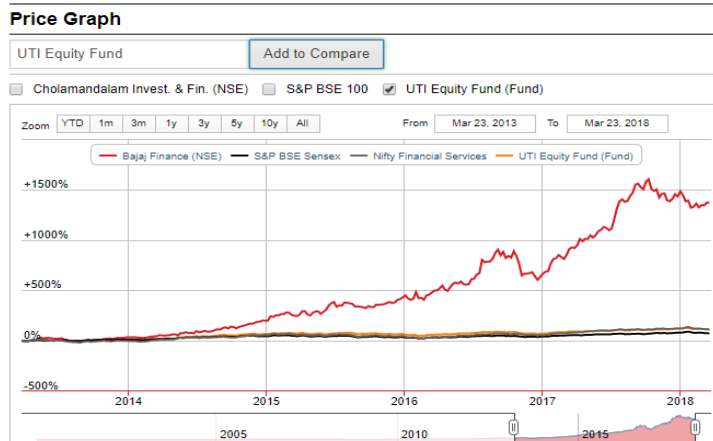
In contrary to above observations, there are cases where the individual stocks of the entity has performed better and the investor has gained higher return after investing in the individual stocks through thorough study and analysis of fundamentals as compared to return from Mutual Funds.

For analyzing the same, the top 3 companies in UTI Equity Fund portfolio were taken on the basis of percentage holding of assets and the return from Mutual Funds were compared with the return from individual stocks and the results were as follows –

Company	Sector	% Assets
Bajaj Finance	Financial	6.29
IndusInd Bank	Financial	5.51
HDFC Bank	Financial	4.97

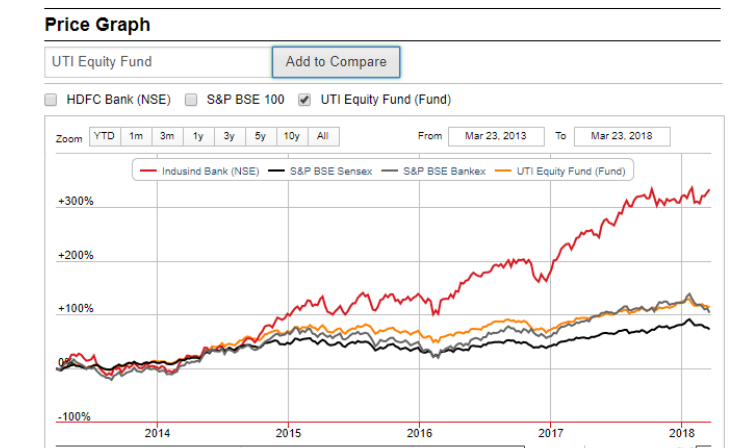
The below graphs have been shown to explain the observation:-

### 3.1. Bajaj Finance Ltd.



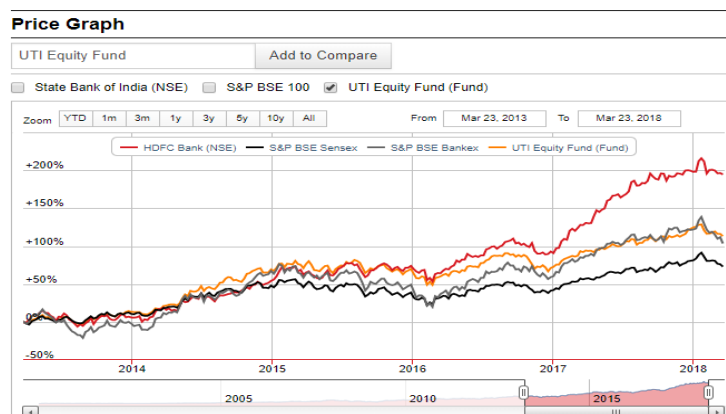
Source: Valueresearchonline.com

### 3.2. IndusInd Bank



Source: Valueresearchonline.com

### 3.3 HDFC Bank



Source: Valueresearchonline.com

**Observations:** Thus it is evident that although Investment Managers tend to outperform the market by taking benefit of the opportunities and having strong fundamentals, it may so happen that individual investors through their research on market behavior as well as their findings may earn higher return on individual stocks than what they could have earned through investing in Mutual Funds.

### 3. Evidence of Herd Behavior in the Stock Market

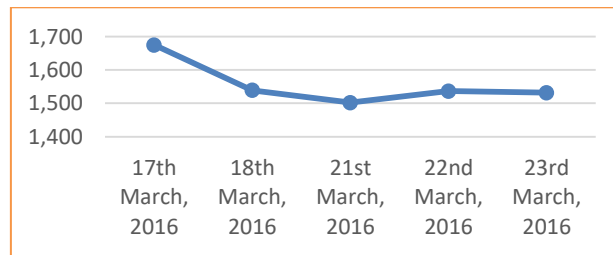
There have been incidents in the stock market where investors have just followed the market trend and ignored judging the stocks on the basis of fundamentals and its future prospects resulting in the failure of the assumption under EMH which states that an investor acts rational to maximize their utilities. This trend is known as the herd behavior and to find out about the behavior, analysis was made on the effect of prices of stocks that followed on the actions of the renowned investor, “Rakesh Jhunjhunwala”. The observations made are as under -

#### News No. 1: Lupin hits over one-year low on speculation of Rakesh Jhunjhunwala selling some of his stake. (Business Line, 18<sup>th</sup> March, 2016)

The Business Line reported on March 18, 2016 that the ace investor Rakesh Jhunjhunwala is expected to sell some of his stake soon<sup>15</sup>. In no time, after the news was broadcasted, Lupin Limited fell as much as 8.32% to its lowest since February 3, 2015 in intra-day trade. The stock continued to fall post March 18, 2016 which evidently displays the herd behavior.

<sup>15</sup> The Hindu Business Line, Lupin shares partly recover after hitting 52 - week low, available at <<https://www.thehindubusinessline.com/markets/stock-markets/lupin-shares-partly-recover-after-hitting-52week-low/article8409172.ece>> (last visited on 31-05-2020)

DATE	OPENING	HIGH	LOW	CLOSING
18 <sup>th</sup> March, 2016	1,673	1,673	1,539	1,558.90
21 <sup>st</sup> March, 2016	1,570	1,570	1,502.20	1535.35
22 <sup>nd</sup> March, 2016	1,541	1,564.40	1,536.80	1,549.75
23 <sup>rd</sup> March, 2016	1,562	1,562	1,531.92	1,524.50



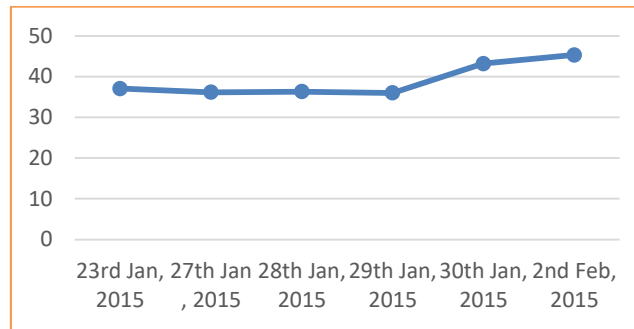
**News No. 2: Rakesh Jhunjunwala buys 3 million shares of Man Infra (Live Mint, 29<sup>th</sup> Jan, 2015)**

The Live Mint reported on January 29, 2015 that Mr. Jhunjunwala buys 1.21% stake i.e. 3 million shares in Man Infra Constructions Limited at Rs. 36 per share<sup>16</sup>. Soon after the report, the stock price witnessed a hike with closing at 20% higher i.e. Rs. 43.2 per share on Bombay Stock Exchange.

DATE	PREV CLOSE	HIGH	LOW	CLOSING
23 <sup>rd</sup> Jan, 2015	37.05	37.70	35.50	36.15
27 <sup>th</sup> Jan, 2015	36.15	36.95	36	36.30
28 <sup>th</sup> Jan, 2015	36.30	37.70	35.55	36
29 <sup>th</sup> Jan, 2015	36	43.20	35.80	43.20
30 <sup>th</sup> Jan, 2015	43.20	47.80	43.20	45.30
2 <sup>nd</sup> Feb, 2015	45.30	48.40	45.30	46.80

Source: NSE and BSE

<sup>16</sup> The Live Mint, Rakesh Jhunjunwala buys 3 million shares of Man Infra, available at <<https://www.livemint.com/Money/ZzKJAghlfSnozlJrOxK5BP/Rakesh-Jhunjunwala-buys-3-million-shares-of-Man-Infra.html>> (last visited on 31-05-2020)



As clearly understood from the graph, the stock was on a deteriorating trend until the news of Mr. Jhunjhunwala buying the shares resulted in an upward movement in the price of stock up to Rs. 43.2 from Rs. 36 in a single day and kept on increasing for the next 2-3 days. Thus, it can be wrong to say that investors are always rational in their approach and instances such as the herd behavior where the investors follow the renowned investors show that they are normal rather than rational.

### ANALYSIS

Behavioral finance involves the study of rationale behind investors’ decisions. The gaps in the theories of conventional finance which explains investors as rational and market as efficient are filled by behavioral finance. The pillars of behavioral finance, namely, risk aversion, neuro-economics, prospect theory and bounded rationality are the foundations of behavioral finance that has evolved over a period of time. Also, the behavioral biases mentioned in the research paper are the prejudices which lead to the irrationality of investors while making investment as it ignores the market behavior and future prospects and putting focus only on investors’ emotions, intuitions which are not backed by any fundamentals or research. The famous prospect theory propounded by Kahneman and Tversky determines that people tend to be more loss sensitive i.e. they feel more pain in receiving a loss as compared to the joy which the person receives from an equal amount of gain.

The research section of the research paper hits the underlying assumptions in efficient market hypothesis. The data analysis on “Valuation not justified by fundamentals” contradicts the assumption that market participants are rational beings, making optimal decisions by trading off costs and weighing the benefits statistically. There are number of examples of companies where the valuation is not justified by fundamentals and is not just limited to one or two industries, rather they are pervasive.

The research catering to the mutual funds outperforming the market brings down another assumption of market efficiency that relevant information is freely available to all the investors and the competition among the market participants result in a market where prices of individual investor always reflect the total effect of all information which includes

information about events that have already happened and that are expected to happen in future.

The herd behavior of investors shown in the research portion of the paper puts down the efficient market assumption that investors study the market and theories on investment before investing. It shows that they just follow the movement of ace investors in the market without putting heed on the stock performance, its fundamentals and future prospects. Thus, the fact that investors do not take rational decisions provides opportunities to the investment managers to outperform the market.

### **THE IMPACT OF COVID-19 ON INVESTMENT DECISIONS**

Greed and fear have always been a dominating trait in investment decisions. The unprecedented situation caused due to the Corona Virus has made people to more likely take wrong decisions and the uncertainty has made it difficult to respond to the market with accuracy. In this regard, it is important to mention the role of narratives. Narratives or public sentiment is an essential factor in making decisions even in this pandemic with respect to the savings and investment plans. The investors' behavior are although changing as they are willing to ride out the storm and even add more money during the bad phase of the market, however it is important for them to not panic or overreact. The investors should hold back to their stocks and act at the appropriate time rather than taking decisions in a haste and getting followed by the behavioral biases ending up in irrational decision making. Thus, it is better to be calm before taking big and long term investment decisions looking at the prevailing situation.

Certain contemporary events such as the outbreak of Corona Virus, hike in the crude oil prices and the YES Bank case where it was put under moratorium have impacted the market and caused deterioration in the stock performances, however it can also be seen as an opportunity in disguise as the Government and the RBI have been constantly handling the situation to prevent negative fallout of the situation.

Thus, it needs to be understood that what is being experienced now is volatility and not absolute loss. The markets have always revived through the doom and gloom as evident from the past where in 2008, Nifty collapsed to a low of 2,600 level from highs of 6,200 level in January 2008. At that time it was predicted that the market might take a decade to recover, however, the market was back to 6,100 level by October 2010 i.e. in just eighteen months. History has shown with time the continued progress of mankind and has assessed that there is no reason that the trend will not reverse this time. Staying on course is what is expected from the investor.

### **CONCLUSION**

Behavioral finance strikes a balance between traditional finance and modern finance as traditional finance safely does away with considering psychological factors of investors in making decisions which ultimately changes the market prediction and outcomes. Modern

finance, on the other hand, recognizes an investor's emotions, intuitions and thought process behind any investment decision. Understanding behavior is as difficult as predicting weather and in fact more difficult as the economy, unlike weather is not made up of molecules for which the law of physics can provide any conclusion. There are no concrete laws on human behavior and conduct unlike the law of physics. However, this limitation cannot become the reason to overlook behavioral finance, but the approach should be to study and understand it in a broader sense so that it can be complimented along with the traditional finance so as to improve the economic decision of investors.

Thus, in the volatile market situations, it is important to keep in mind both the fundamentals of the stock and the market as well as the behavior, attitude of investors and their investment patterns so as to achieve improved economic decisions by the investors which will provide an efficient market system and increase in investment base resulting in an upliftment of the economy.

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