# **Major Research Project on**

# EFFECT OF NARRATIVE FALLACY BIAS IN INVESTMENT BEHAVIOUR

Submitted By

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### CERTIFICATE

This is to certify that SIDDHARTH RAI 2K21/DMBA/124 have completed the project titled EFFECT OF NARRATIVE FALLACY BIAS IN INVESTMENT BEHAVIOUR under the guidance of DR. SHIKHA N KHERA as a part of Master of Business Administration (MBA) curriculum of Delhi School of Management, New Delhi. This is an original piece of work and has not been submitted elsewhere.

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### DECLARATION

I, SIDDHARTH RAI student of Delhi School of Management, Delhi Technological University hereby declare that the project titled EFFECT OF NARRATIVE FALLACY BIAS IN INVESTMENT BEHAVIOUR as a part of Master of Business Administration (MBA) curriculum is the original work conducted by me. I also confirm that neither I nor any other person has submitted this project report to any other institution or university for any other degree or diploma. I further declare that the information collected from various sources has been duly acknowledged in this project.

SIDDHARTH RAI

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### ACKNOWLEDGEMENT

It gives me great pleasure to acknowledge the assistance and constant support I received throughout my Summer Internship Report. I express my utmost gratitude to my faculty advisor, **Dr. Shikha N Khera**, who guided and mentored me throughout my Summer Internship on the topic "EFFECT OF NARRATIVE FALLACY BIAS IN INVESTMENT BEHAVIOUR" and helped me complete the project properly. Working on the project provided me with an invaluable opportunity to explore the area of Fintech and its applications.

I would also like to express my heartfelt gratitude to the faculties of Delhi School of Management, Delhi Technological University for providing me the opportunity and assisting me with their expertise on this project. It has been an enriching experience for me to interact with them over the course of this research and will undoubtedly contribute to my professional growth.

It has been my constant endeavor to ensure that the project is completed in the best possible manner and ensure that it is error-free.

#### SIDDHARTH RAI

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#### **EXECUTIVE SUMMARY**

Nassim Nicholas Taleb, a well-known scholar and financial trader, coined the term "the narrative fallacy" to describe this obsessive behaviour of making connections between seemingly unrelated events in order to excessively simplify reality. Taleb stated: "The narrative fallacy addresses our limited ability to look at sequences of facts without weaving an explanation into them" in his 2007 best-seller "The Black Swan". When it heightens our sense of understanding, this tendency has the potential to be problematic.

It deserves to go without saying that the narrative fallacy can increase the likelihood that both professional and ordinary investors get too wedded to a specific tale about the market. Investors swarm into high-priced investments like well-known companies, touted coins, or glitzy funds based on glossy magazine stories about their rags-toriches founders, developers, or asset managers, which makes this point very evident.

In a perfect world, while making an investment choice, investors would only consider the cold, hard facts. But as of right now, we are aware that none of these choices are entirely sensible. Even the most logical investors' decisions always contain a tiny bit of emotion.

This dissertation looks into the world of investing in an effort to demonstrate and explain how humans have a propensity to see patterns everywhere and to construct tales out of them. Without a thorough investigation for causes, we would be walking around with blinkers on and things would just keep happening.

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# CHAPTER 1 INTRODUCTION

#### **1.1 About Behavioral Finance**

Behavioural finance, or finance through the lens of psychology and sociology, as one renowned economist called it, was born from the desire to explain the erratic conduct of markets and investors. Behavioural finance, a subfield of behavioural economics, holds that psychological biases and other factors influence how investors form financial decisions. A variety of market abnormalities, such as abrupt price surges or dips in the stock market, can also be explained by effects and biases.

Behavioural finance may be examined in a variety of ways. Returns in the stock market are a particular field of finance wherein psychological factors are commonly associated with affecting market outcomes and returns, regardless of the fact that there are multiple ways to look at it. Behavioural finance category was created in order to comprehend why people make particular finance decisions and how those actions affect markets. Financial players are anticipated to be psychologically persuasive with some natural and self-controlling urges in behavioural finance as opposed to being entirely rational and self-controlling. Traditional finance theory holds that markets and investors behave rationally. Investors are immune to cognitive or information processing flaws and have complete self-control.

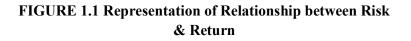
The Corporate Finance Institute asserts that because humans have limitations on their ability to exercise self-control, become influenced by their own biases, and make cognitive errors that might lead to poor assessments, behavioural finance now holds that investors are "normal," not "rational," investors. To understand behavioural finance, we must glance over Traditional Finance Theory. Three key principles serve as the foundation of conventional financial theory:

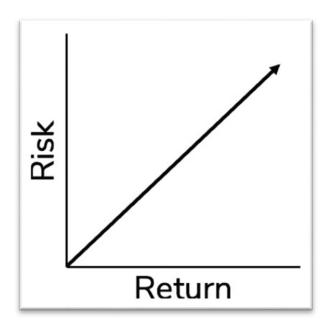
- People have total control over their behaviour.
- Before making judgements, people are fully informed of all essential facts.
- Decisions are consistently made by people.

In a nutshell, traditional finance theory says that individuals consistently make rational decisions based solely on the available objective knowledge. On the other hand, people aren't always sane.

- We don't always have self-control in the real world.
- We don't always have ample amounts the time to consider all available data prior to making a choice.
- We don't always act on the choices we make.

As a result of which, behavioural finance is distinct from traditional finance as it places a strong emphasis on the role that psychology plays in how people make decisions. Therefore, behavioural finance is the theory that a variety of psychological elements that include emotion into our decision-making make humans more likely to make bad judgements. Or to put it another way, people are capable of making illogical financial decisions.





**Source: Google images** 

#### **1.2. Behavioural Finance in Stock Market**

The efficient market hypothesis (EMH) contends that stock prices in a market with high liquidity are optimally priced to reflect all available information at any given time. Chronic historical events in markets for securities that are still not completely explained by theories based on flawless investor rationality provide a challenge to the efficient market hypothesis, as evidenced by a number of studies.

The EMH makes the assumption that while evaluating stock prices, market players take into account all inherent and external factors from the past, present, and future. When analysing the stock market, behavioural finance holds the view that markets are not entirely efficient. This enables researchers to examine the potential effects of psychological and social variables on stock sales and purchases.

The daily fluctuations of the stock market and other trading markets may be examined using behavioural finance biases. The behavioural finance theory has typically provided a clearer explanation for significant market abnormalities such as bubbles and extended recessions. Traders and investment professionals have a stake in advancements in behavioural finance even if they don't consider themselves a part of EMH. These patterns can be used to study market price levels and fluctuations for exploratory and decision-making purposes.

#### **1.3 Behavioral Finance Biases**

#### **1.3.1 Loss Aversion Bias**

The idea that benefits outweigh losses in terms of their emotional impact is known as loss aversion. In other words, given the choice, individuals will choose to prevent losses above making money. For illustration, let's say we bought a certain stock. According to the concept of loss aversion, we would be more inclined to sell a stock if it declined in value by 20% than if it rose by 20%. This is true even when buying more stock after it has lost value reduces our average acquisition cost.

#### 1.3.2 Overconfidence Bias

Overconfidence refers to assumption fueled by ego that people overestimate their knowledge on a subject and think they have an advantage over others. Taking an example of stock trade, once someone hits a hot streak, they overestimate their ability and think they have outmaneuvered the market .

#### **1.3.3 Representative Bias**

Representative bias is the propensity for people to base judgements on their past experiences. As a result, psychological effects will be influenced more by parallels to prior experiences than by the actual possibility that the event will recur. Let's imagine that we were one of the fortunate few who made an early investment in Amazon. We could have made some incredible money.

As a result, we could believe that the only way to generate those types of riches is to invest in technological companies. Let's also imagine that we have the choice of making an investment in a construction firm with excellent growth or a technology company with middling growth. Representative bias would increase our inclination for investing in a technological business because of our prior investment gains related to the industry.

#### **1.3.4 Confirmation Bias**

People who suffer from confirmation bias look for evidence that supports their own opinions while ignoring information that contradicts them. Limiting the quantity of information utilised to make a decision and impeding our capacity to appraise the situation objectively are two effects of confirmation bias.

For instance, if we previously believed Tesla was a wise investment, reading a piece like "Tesla's boom made 2020 the year the US car industry went electric" may confirm our ideas and reinforce our decision to purchase Tesla shares. However, publications like "Tesla's Profits Aren't from Selling Cars" can deter us from reading them. If we just deliberately select to read material that focuses on the benefits of that business, we miss the chance to assess the risks associated with that investment. While it could be difficult, we can avoid prejudice by placing a high priority on knowing an investment's good, terrible, and ugly in order to make an unbiased choice - what are the facts?

#### 1.3.5 Anchoring Bias

The idea behind anchoring bias is that people tend to become fixated on particular bits of information and use them as the foundation for their judgements. Thus, it is believed that these psychological characteristics have a strong connection to a person's ability to make decisions. For instance, a current investment of ours sets a new high. Because we are "buying at the top," we might not want to invest at this time. As a result of our attachment to the current all-time high price, we have acquired a fear of losing money (loss aversion) when we invest at that price. The fact that time in the market performs better than market timing is still true, according to the statistics.

#### **1.3.6 Herding Mentality**

Herding mentality is the idea that people in a group would usually follow the actions of others rather than making their own choices. Herding attitude is evident in the most recent Game Stop short squeeze on r/Wall Streeters. Despite no changes to GameStop's fundamentals, its stock price skyrocketed from \$2.57 to \$483.00 in less than a year. Instead, it was the outcome of a Reddit community working together to send Game Stop "to the moon!

#### 1.3.7 Framing Bias

According to the idea of framing, people are impacted by the context around the alternatives presented. Or, to put it another way, how something is presented, whether favourably or unfavourably, can significantly influence a person's choice. If you were presented the price history of an unidentified stock, what would happen? It seems like a smart investment, doesn't it? The time frame, however, was deliberately chosen to emphasise the Game Stop quick squeeze that we previously covered.

#### **1.3.8 Hindsight Bias**

Hindsight bias is often referred to as the "Knew it all along Syndrome". The underlying presumption is that those who successfully anticipated an event now believe they can correctly predict similar events after they have already happened. The emergence of overconfidence bias may precede the emergence of hindsight bias. Let's revisit the prior case of overconfidence bias. When it comes to stock trading, we've been having a great time. Now that we believe we have figured out how to outwit the market, we feel in total control. Prior accomplishment, however, does not ensure future achievement. It's really improbable that we'll ever be able to exactly recreate an event that has previously happened because there are practically infinite factors that affect the stock market.

#### 1.3.9 Self-Attribution Bias

According to the Self Attribution Bias idea, people tend to credit positive outcomes to their own talents while negative outcomes are attributed to outside forces. Those who are subject to this prejudice are less willing to admit their mistakes or grow from them. As a result, individuals have a higher propensity to make the same errors again and to lose more money. Think about a person who suffered a significant financial loss on a certain investment. They could place the blame elsewhere rather than come to terms with and learn from their loss. When it comes to investment, the only thing we really have influence over is what we purchase and sell.

#### **1.3.10 The Narrative Fallacy**

The Narrative Fallacy is when someone tries to explain a situation by connecting unrelated or insufficient data together. Psychologically speaking, our minds are programmed to identify a cause-and-effect relationship. News stories with titles like "The S&P 500 hit a new all-time high because of X" are an illustration of this. The S&P 500 might reach a record high for a plethora of reasons, in actuality. To say that one thing is the only reason for the S&P 500's record high would be incredibly naïve. On the other hand, such type of headline satisfies our brain's need to quickly find a cause-and-effect link in order to grasp the scenario—oversimplifying the circumstance.

# CHAPTER 2 LITERATURE REVIEW

Every element of the economy has been impacted by the covid 19 pandemic. The market meltdown and the extreme stock market volatility may both be attributed to the pandemic's catastrophic economic impact. We looked at research publications from the perspective of behavioural finance and spoke about certain cognitive biases and mistakes that were significant before and during the COVID crisis. The Overconfidence bias, Representativeness bias, Risk Aversion, Herding Behaviour, and ,Availability biases and Narrative Fallacy biases are a few mistakes and biases that are explored.

According to research, when faced with a crisis, we tend to concentrate on what is immediately available and take information at face value, therefore it is important to take into account our ingrained prejudices and carefully examine the actions that will be taken in the future. Beyond behavioural finance, there are numerous more cognitive mistakes we make every day (Vollan, 2010). According to Sonsino, et al. (2020), the primary goal of the study was to learn about potential changes. The Tuesday effect on index return was significant and positive for all indices during the crisis, and there was strong evidence that Mondays had a negative return during the Covid 19 health crisis period.

A story used to convey information is referred to as a narrative. In the realm of investing, a story is deemed successful if it aligns with the investors' core values. A story is a means to convey information, to put it simply. This approach depends on mixing facts and feelings into the communication process. Stories aid in information simplification and focus on the essentials for investors. In this world full of chance, it also aids them in determining the underlying causes of occurrences.

The issue is that narratives have become ingrained in us as humans since we were young children. When investors choose to make investments in the market, this trend persists. It is common for people to attempt to connect together and identify a causeand-effect relationship between a set of three or four data about a corporation. For instance, if we learn that a firm's price has decreased and then learn that the chairman of the company is selling stocks, we are likely to connect the two facts and create a narrative. The most plausible conclusion in this situation would be that the firm is failing and that the chairman is leaving as a result.

According to a number of theoretical perspectives, risk assessments are based on two different representations or processes. These theories distinguish between verbatim and gist representations, as well as between cognitive and affective risk assessments, belief in objective probability and intuitive risk perception. The reasoning process moves along a continuum between the two components, but the two are understood to be distinct from one another (Reference Loewenstein, Weber, Hsee, and WelchLoewenstein et al., 2001; Reyna, 2008, 2012; Reference Slovic, Finucane, Peters, and MacGregorSlovic et al., 2004; Reference van Gelder and de Vriesvan Gelder, de Vries, & van der Plig(2002) Windschitl, Martin, and Flugstad.

This story thinking benefits us a lot of the time. It is not particularly helpful in several other situations, though. For instance, it's feasible that the chairman is selling shares in order to raise money for the company's expansion. Additionally, the decline in stock prices may simply be the result of outside factors like changes in interest rates, etc. The two facts in this instance are purely random and unrelated. Therefore, connecting them with a causal arrow is false!

The narrative fallacy is characterised by a propensity to strongly connect certain facts and fabricate a narrative that could be false. The subprime mortgage crisis of 2008 is exactly when the narrative fallacy first appeared in popular literature. Nicholas Naseem Taleb brought it to public attention when he addressed it in his book "Fooled by Randomness." Since then, it has developed into a crucial area of research for behavioural finance.

Random things are tough for humans to remember. However, they can recall a lot of information when items are organised logically or connected by cause and consequence. This explains the propensity for making up stories. The investing markets are still showing this tendency. People do not feel comfortable investing in stocks unless they perceive the equities as a collection of numbers. However, they feel considerably more at ease with the investment after they learn the company's origin story and witness the entrepreneurial spirit. This is why brokers and intermediaries have traditionally utilised the narrative fallacy to missell investments to unknowing investors.

If the investor does not exercise caution regarding the tale being sold to them, the narrative fallacy might result in poor judgements. For instance, salesmen frequently employ facts in a way that introduces implicit assumptions into them. These presumptions can subsequently prove to be incorrect, which would have a detrimental effect on the portfolio. For instance, investment bankers effectively sold the narrative of American real estate when they sold mortgage-backed securities. They were describing to investors the rapid expansion of real estate. Additionally, the securities were structured in a way that protected investors who bought highly rated securities from prepayments and defaults.

The underlying presumption that the price of real estate would constantly rise in the future is what the bankers in this case chose not to mention. Investors were given discretion over this. The investors would unavoidably believe this assumption because the current pattern would show only real estate price increases. Investors who purchased this story faced enormous losses when the real estate market fell down because this underlying premise was false.

Investors can't really stand market unpredictability. They attempt to find a rationale for each decline in the market, even one as modest as 5%. Well, there's frequently no explanation at all! Investors with common sense accept chance. Other investors attempt to forcibly construct a story using the information at hand.

By challenging the underpinning assumptions used while making investments, the narrative fallacy may only be avoided. Investors frequently think about possible investments in the form of stories. The narrative is based on certain assumptions and some facts, though. Before making a selection, wise investors attempt to distinguish between the two and consider the veracity of the underlying assumptions.

# CHAPTER 3 RESEARCH METHODOLOGY

#### 3.1 Specific Objective of the Study

- To comprehend the Narrative Fallacy bias's contribution towards particular financial decisions by individuals.
- To understand the role of Financial Decisions by Individuals on price patterns in the Financial Market.

#### 3.2. Research Design

This study employs partly descriptive and partly Conclusive/Causal research. This study generalizes the findings to investors in India, and includes both qualitative and quantitative data.

#### 3.3. Population

For this study, the population that was considered was Investors in INDIA, with emphasis on investors based in Delhi.

#### 3.4. Sample

A blend of convenience sampling and random sampling was intended for the study. By asking the first responder to suggest a colleague who is an investor, and so on, until the appropriate sample was obtained, the respondents were chosen using the snow-ball sampling approach. The study also involved the examination of secondary data. 140 respondents' replies to the survey were obtained for the study's purposes.

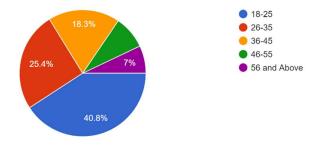
#### 3.5 Data Collection

The study is based on an examination of behavioural finance theories that may be used to explain price changes, with emphasis on the narrative fallacy bias. The study includes both primary and secondary data. Secondary sources include data in Journals, periodicals, and research reports, while primary sources included a questionnaire.

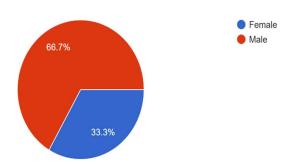
### **CHAPTER 4**

## **DATA ANALYSIS**

#### **GRAPH 4.1 AGE**



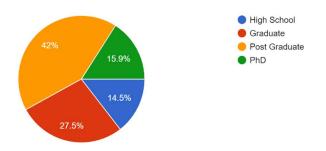
From the data collected, It is evident that the age variation through the survey has been described through this pie chart. It is evident that majority of the investors (40.8%), belong to the age group of 18-25 years, and the minority belongs to the age group of 56 and above (7%).



#### **GRAPH 4.2 GENDER**

From the data collected, It is evident that the gender variation through the survey has been described through this pie chart. It is evident that majority of the investors (66.7%), are Male, and the minority investors are female (33.3%).

#### **GRAPH 4.3 EDUCATIONAL BACKGROUND**



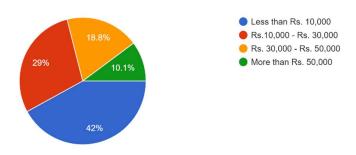
From the data collected, It is evident that the educational background variation through the survey has been described through this pie chart. It is evident that majority of the investors (42%), are Post Graduates, and the minority investors are High Schoolers (33.3%).

# 33.3% 27.5% 21.7% 17.4%

#### **GRAPH 4.4 FREQUENCY OF INVESTMENTS**

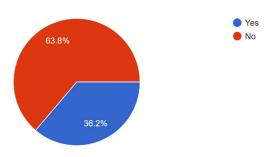
From the data collected, It is evident that the frequency of investments variation through the survey has been described through this pie chart. It is evident that majority of the investors (33.3%), invest occasionally, and the minority investors invest weekly (17.4%).

#### **GRAPH 4.5 SIZE OF INVESTMENTS**



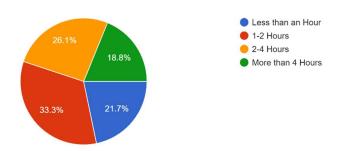
From the data collected, It is evident that the monetary size of investments variation through the survey has been described through this pie chart. It is evident that majority of the investors invest less than Rs. 10,000 (42%), and the minority of investors invest more than Rs. 50,000 (10.1%).

#### **GRAPH 4.6 INVESTOR EXPERIENCE**

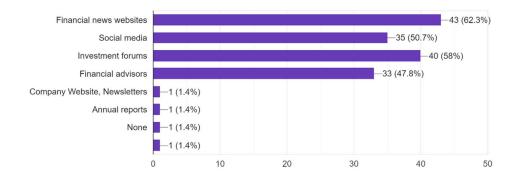


From the data collected, It is evident that the Experience of investors' variation through the survey has been described through this pie chart. It is evident that majority of the investors consider themselves inexperienced (63.8%), and the minority of investors consider themselves experienced (36.2%).

#### GRAPH 4.7 RESEARCH BEFORE INVESTING



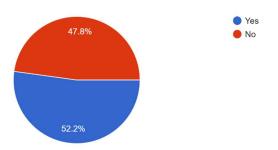
From the data collected, It is evident that the amount of time spent by investors researching a particular investment variation through the survey has been described through this pie chart. It is evident that majority of the investors spend 1-2 hours (33.3%) before investing, and the minority of investors spend more than 4 hours before investing (18.8%)



#### GRAPH 4.8 SOURCE OF INFORMATION

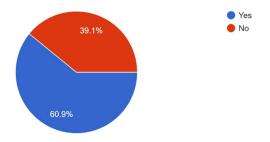
From the data collected, It is evident that the amount of time spent by investors researching a particular variation through the survey has been described through this horizontal bar graph. It is evident that financial news websites (62.3%) and Investment forums (58%) are considered the most by investors before investing, followed by Social Media(50.7%) and Financial Advisors(47.8%).

#### GRAPH 4.9 NARRATIVE FALLACY AWARENESS



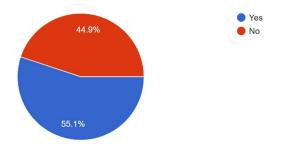
From the data collected, It is evident that awareness of the term Narrative Fallacy variation through the survey has been described through this pie chart. It is evident that more than half of the investors (52.2%) are aware of the term, while 47.8% are unaware about narrative fallacy bias.

**GRAPH 4.10** A Well-Known and Successful Investor, Publicly Announces That They Have Made a Large Investment in A Particular Company. This Announcement Leads Public to Believe That the Company Is a Good Investment and They Invest in The Company. Would You Invest in The Company's Stock?



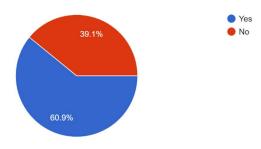
From the data collected, it can be seen majority of the investors (60.9%) would invest in a particular company if a renowned and successful investor makes a large investment in a particular company. This depicts that majority of investors will fall victim to the Narrative Fallacy, and not consider other factors surrounding the investment, like financial health of the company, economic conditions etc.

**GRAPH 4.11** A Company Releases A New Product That Generates A Lot Of Buzz And Media Attention. People Become Excited About The Potential Success Of The Product And Begin To Invest Heavily In The Company's Stock, Believing That The New Product Will Lead To Increased Profits And A Rising Stock Price. Would You Invest In The Company's Stock?



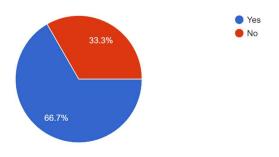
From the data collected, it can be seen majority of the investors (55.1%) would invest in a particular company following the Media buzz and attention. This depicts that majority of investors will fall victim to the Narrative Fallacy, and not consider other factors surrounding the investment, like financial health of the company, economic conditions etc.

**GRAPH 4.12** A Company Is Known For Being A Market Leader In A Particular Industry, With A Long History Of Success And Strong Brand Recognition. People Are Convinced That The Company Is "Too Big To Fail" And Invest Heavily In Its Stock, Believing That Its Reputation And Past Success Will Continue To Drive Growth And Profits. Would You Invest In The Company's Stock?



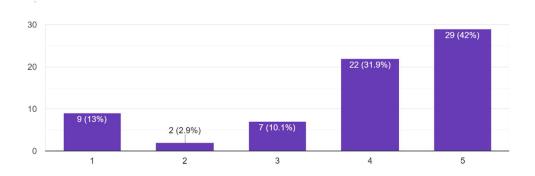
From the data collected, it can be seen majority of the investors (60.9%) would invest in a particular company believing that the company is "Too Big to Fail". This depicts that majority of investors will fall victim to the Narrative Fallacy, and not consider other factors surrounding the investment, like financial health of the company, economic conditions etc.

**GRAPH 4.13** A Company Announces A New CEO Who Is Charismatic And Has A Great Track Record In The Industry. People Are Excited About The Potential For The New CEO To Turn The Company Around And Begin To Invest Heavily In The Company's Stock, Believing That The New Leadership Will Lead To Increased Profits And A Rising Stock Price. Would You Invest In The Company's Stock?



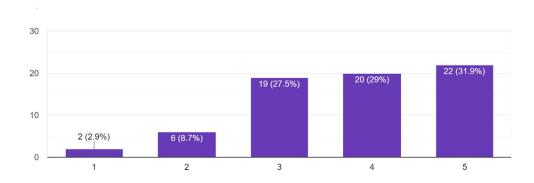
From the data collected, it can be seen majority of the investors (66.7%) would invest in a particular company following the appointment of the new CEO. This depicts that majority of investors will fall victim to the Narrative Fallacy, and not consider other factors surrounding the investment, like financial health of the company, economic conditions etc.

# **GRAPH 4.14** How Important Do You Believe The Financial Health Of The Company Is Before Investing?

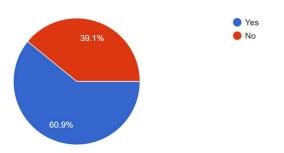


From the data collected on a likert scale of 1 to 5, where 1 being least important and 5 being most important, it can be seen majority of the investors (42%) believe that financial health of the company is most important to consider before investing, as depicted by the bar chart.

**GRAPH 4.15** How Important Do You Think It Is To Consider Market Competition, Changing Consumer Preferences, Or Economic Conditions Before Investing?

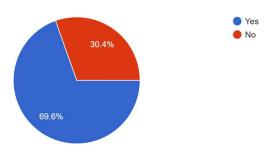


From the data collected on a likert scale of 1 to 5, where 1 being least important and 5 being most important, It is evident that most of the investors believe that considering consumer preferences or economic conditions are important factors before investing. **GRAPH 4.16** Do you believe that awareness of Narrative Fallacy bias can improve investment decision making?



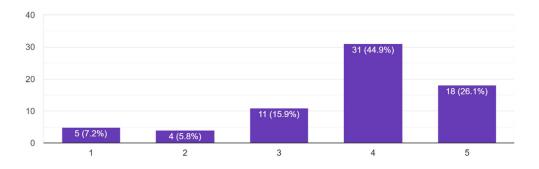
From the data collected, It is evident that awareness of narrative fallacy bias variation through the survey has been described through this pie chart. It is evident that majority of the investors (60.9%) believe that awareness of Narrative Fallacy bias can improve decision making.

# **GRAPH 4.17** Do you believe that investment firms should provide education and training on Narrative Fallacy bias to their clients?



From the data collected, It is evident that preference of investors for investment firms to provide training on narrative fallacy bias through the survey has been described through this pie chart. It is evident that majority of the investors (69.6%) investment firms to provide training on narrative fallacy bias to their clients.

**GRAPH 4.18** How likely are you to change your investment decision-making process based on awareness and education of Narrative Fallacy bias?



From the data collected, It is evident that the likeliness of investors to change their decision-making process after awareness on Narrative fallacy bias through the survey has been described through this pie chart. It is evident that majority of the investors (44.9%) are likely to change their decision making process after awareness of narrative fallacy bias.

Correlations			
		A well-known and successful investor, publicly an0unces that they have made a large investment in a particular company. This an0uncement leads public to believe that the company is a good investment and they invest in the company. Would you invest in the company's stock?	How likely are you to change your investment decision-making process based on awareness and education of Narrative Fallacy bias?
A well-k0wn and successful investor, publicly an0unces that	Pearson Correlation	1	.020
they have made a large investment in a particular company. This an0uncement	Sig. (2- tailed)		.873
leads public to believe that the company is a good investment and they invest in the company. Would you invest in the company's stock?	Ν	69	69
How likely are you to change your investment decision-	Pearson Correlation	.020	1
making process based on awareness and education of Narrative Fallacy bias?	Sig. (2- tailed)	.873	
	Ν	69	69

For the given 2 statements, Pearson correlation coefficient's is 0.02. Pearson correlation coefficient at level 0.01 is considered to be significant. Here, it is closer to 0.01. So, we can derive that an announcement of large investment by a company leads to creation of narrative fallacy. Sometimes, this news is made to come out to trap the retailers. As, we know generally price discounts every news in advance.

		Correlations	
		A company releases a new product that generates a lot of buzz and media attention. People become excited about the potential success of the product and begin to invest heavily in the company's stock, believing that the new product will lead to increased profits and a rising stock price. Would you invest in the company's stock?	How likely are you to change your investment decision-making process based on awareness and education of Narrative Fallacy bias?
A company releases a new product that generates a lot of buzz and media attention.	Pearson Correlation	1	.047
People become excited about	Sig. (2-tailed)		.700
the potential success of the product and begin to invest heavily in the company's stock, believing that the new product will lead to increased profits and a rising stock price. Would you invest in the company's stock?	N	69	69
How likely are you to change your investment decision-making	Pearson Correlation	.047	1
process based on awareness and education of Narrative	Sig. (2-tailed)	.700	
Fallacy bias?	N	69	69

For the given 2 statements, Pearson correlation coefficient's is 0.047. Pearson correlation coefficient at level 0.01 is considered to be significant. Here, it is closer to 0.01. So, we can derive that a buzz launching new product leads to creation of narrative fallacy. Sometimes, investors buy out the stock in an expectation that this product will lead to increment increase in sales number , but it actually get fail to match the consumers expectation.

Correlations			
		A company is known for being a market leader in a particular industry, with a long history of success and strong brand recognition. People are convinced that the company is "too big to fail" and invest heavily in its stock, believing that its reputation and past success will continue to drive growth and profits. Would you invest in the company's stock?	How likely are you to change your investment decision-making process based on awareness and education of Narrative Fallacy bias?
A company is k0wn for being a market leader in a particular	Pearson Correlation	1	.152
industry, with a long history of success and strong brand	Sig. (2-tailed)		.211
recognition. People are convinced that the company is "too big to fail" and invest heavily in its stock, believing that its reputation and past success will continue to drive growth and profits. Would you invest in the company's stock?	N	69	69
How likely are you to change your investment decision-	Pearson Correlation	.152	1
making process based on awareness and education of	Sig. (2-tailed)	.211	
Narrative Fallacy bias?	Ν	69	69

For the given 2 statements, Pearson correlation coefficient's is 0.152. Pearson correlation coefficient at level 0.01 is considered to be significant. Here, it is closer to 0.01. So, we can derive that "too big to fail" leads to creation of narrative fallacy. A well-established company can also take some steps or do investments which sometimes proved to be catastrophic for them. Latest example of this is Credit Suisse. So, one needs to continuously monitor what steps company is taking.

Correlations			
		A company an0unces a new CEO who is charismatic and has a great track record in the industry. People are excited about the potential for the new CEO to turn the company around and begin to invest heavily in the company's stock, believing that the new leadership will lead to increased profits and a rising stock price. Would you invest in the company's stock?	How likely are you to change your investment decision-making process based on awareness and education of Narrative Fallacy bias?
A company an0unces a new CEO who is charismatic and has	Pearson Correlation	1	.211
a great track record in the industry. People are excited	Sig. (2-tailed)		.082
about the potential for the new CEO to turn the company around and begin to invest heavily in the company's stock, believing that the new leadership will lead to increased profits and a rising stock price. Would you invest in the company's stock?	N	69	69
How likely are you to change your investment decision-making	Pearson Correlation	.211	1
process based on awareness and education of Narrative	Sig. (2-tailed)	.082	
Fallacy bias?	Ν	69	69

For the given 2 statements, Pearson correlation coefficient's is 0.211. Pearson correlation coefficient at level 0.01 is considered to be significant. Here, it is closer to 0.01. So, we can derive that an announcement of new CEO does not leads to creation of narrative fallacy. CEO has potential to take tough decisions depending on its capabilities. But it is not necessary that every time he proves to be right. Market and internal conditions also matters .

Correlations			
		How important do you think it is to consider the financial health and performance of a company before investing?	How important do you think it is to consider market competition, changing consumer preferences, or eco0mic conditions before investing?
How important do you think it is to consider the	Pearson Correlation	1	.463**
financial health and	Sig. (2-tailed)		.000
performance of a company before investing?	Ν	69	69
How important do you	Pearson Correlation	.463**	1
think it is to consider market competition,	Sig. (2-tailed)	.000	
changing consumer preferences, or eco0mic conditions before investing?	Ν	69	69
**. Correlation is significant at the 0.01 level (2-tailed).			

For the given 2 statements, Pearson correlation coefficient's is 0.463. Pearson correlation coefficient at level 0.01 is considered to be significant. Here, it is not closer to 0.01. So, we can derive that financial health is not much impacted by changing consumer preference. It also matters how the management tries to bring down the expenses. They also have to keep in mind how they should allocate their resources so that they can survive in their tough times.

#### **CHAPTER 5**

#### **CONCLUSION AND RECOMMENDATIONS**

Financial decision-making psychology is examined by behavioural finance. Majority of the population seems to be aware that feelings and their emotions have an influence on their financial decisions. Industry professionals discuss how greed and fear influence the stock market. To put it another way, behavioural finance uses psychological research insights to inform financial decision-making. Most of the irregularities in the stock market are unable to be accounted for by using conventional and traditional models. It is simple to understand why people have made a certain decision thanks to behavioural finance, but it is more challenging to understand how people will make decisions in the future. Efficiency is regarded as the cornerstone of classical finance. Because the stock price reality is efficient and accurately reflects what we know about investing, even if everyone had access to the same knowledge, the assumption market could not alter the market's position. a market in which prices are consistently "full" reflect "effectively qualified available information.

The efficient market hypothesis is predicated on the idea that capital markets are information-efficient. Market efficiency "survives challenge literature on long-term productivity anomalies," according to Eugene Fame, the inventor of the efficient market theory. An evident overreaction to information is in terms of popularity as in reaction and after the occurrence, which is ideal for efficient market hypothesis that errors are random consequence. The pursuit of enormous profits is sometimes thought of as a post-event reversal. Most importantly, in line with predictions of market efficiency, the obvious difference can be attributed to the methodology; most forward yield anomalies typically vanish with justifiable technological advancements. Finance presupposes that, in some situations, the market is an inefficient ally of information. This study's goal is to provide a general overview of how psychological factors might affect investor behaviour and account for flaws in the capital market, with emphasis on the narrative fallacy bias. Human Nature is great, but it is not ideal for mankind. Investors are those who frequently act in an unreasonable manner and exhibit a great deal of deviant conduct. The fundamental importance of psychological variables in investing decision-making is currently obvious from a global financial viewpoint.

The method employed to measure the biassing effect of a small sample of singlecase narratives is important. The least impacted scales are those that measure an uncertain prospect's probability dimension. The largest impact of narratives is on measures of a more comprehensive risk representation, which may include a value dimension in addition to other elements, such as an emotive evaluation of the uncertain occurrence. In terms of influencing choices and behaviour, this broader conception of risk seems to be more significant than a rigid chance representation. However, assessments of perceived risk and subjective probability appear to be ad hoc creations and are thus sensitive to language and framing effects.

Therefore, attempts to anticipate preferences and behaviour should be approached with caution since a change in context might cause a change in risk perception between the time of evaluation and the time of action. Furthermore, systematic review or overview papers should take into consideration concurrent evaluations of related constructs in addition to describing the precise wording and scale format of the instruments employed in the original research. From single-case exemplars, individuals do in fact derive a representation of likelihood. The narrative bias is driven by this portrayal. However, compared to a measurement of a broader and more intuitive understanding of risk, the effect is far less pronounced on scales that solely evaluate the perceived possibility.

The essential conceptual contrast between assessments of subjective probability and perceived risk is highlighted by these findings when taken collectively. People estimate a risk by taking into consideration a variety of factors other than only the likelihood that it will occur. The voluntariness of the risk, understanding of the danger, and control over the risk are factors that influence risk perception in addition to its seriousness. Additional potentially pertinent variables include affective responses, individual vulnerability, and the source of a danger. These various notions are reflected in varying degrees by the measurements we looked into. For instance, percent estimates of likelihood, a verbal probability measure, and a measure of risk were all unaffected by the perceived severity of VAE.

The story bias we found, however, cannot be attributable to any of these extra risk

factors because they were either adjusted for by randomization or remained constant among individuals, such as the emotionality of tales. Furthermore, it is quite evident that a depiction of relative frequency, or probability, was what caused the bias. Measures of probability, i.e., instruments made specifically to evaluate this representation, were hardly affected by this representation. On the other hand, it had significant effects on a risk measure that was already multidimensional. As a result, we draw the conclusion that more research is needed to completely understand the connection between subjective probability representations and perceived risk. Future studies should focus on figuring out how probability representations affect how people perceive danger.

The study indicated that the influence of Narrative Fallacy bias was shown to be statistically significant when the link of each bias on the investor's choice is analysed independently. However, the analysis reveals that only the effects of the Representativeness bias and Self-Attribution bias were shown to be statistically significant when the regression is performed for all of the biases combined. This is also seen as a study restriction that can call for a bigger sample size in order to obtain reliable results.

Finding out how an investor's personality and emotions influence their decision to invest is the goal of behavioural finance. The study illustrates how cognitive biases and emotional factors affect investors' decision-making. Despite the fact that this study only showed 3 behavioural biases to be statistically significant for influencing investment decisions, additional behavioural biases (apart from self-attribution bias) exhibited favourable correlations and may be crucial in influencing investment decisions.

The study suggests that investors should get education about various types of biases and how they affect investing choices. To reduce behavioural biases, which may affect different investors differently, they may heed the counsel of specialists.

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## ANNEXURE QUESTIONNAIRE

Q1) Age

- 0 18-25
- 0 26-35
- 0 36-45
- 0 46-55
- $\circ~~56$  and Above

Q2) Gender

- 0 Female
- 0 Male
- Other:

Q3) Educational Background

- High School
- 0 Graduate
- O Post Graduate
- 0 PhD

Q4) How frequently do you invest in the Stock Market?

- 0 Daily
- 0 Weekly
- 0 Monthly
- Occasionally

Q5) How much amount do you typically invest in a single transaction?

- Less than Rs. 10,000
- O Rs.10,000 Rs. 30,000
- O Rs. 30,000 Rs. 50,000
- More than Rs. 50,000

Q6) Would you consider yourself to be an experienced investor?

- 0 Yes
- O No

Q7) How much time do you typically spend researching a potential investment before making a decision?

- Less than an Hour
- 0 1-2 Hours
- O 2-4 Hours
- More than 4 Hours

Q8) How do you typically gather information to inform your investment decisions?

- O Financial news websites
- Social media
- Investment forums
- Financial advisors
- Other:

Q9) Have you ever heard of the term "Narrative Fallacy bias" before?

- 0 Yes
- O No

Q10) A well-known and successful investor, publicly announces that they have made a large investment in a particular company. This announcement leads public to believe that the company is a good investment and they invest in the company. Would you invest in the company's stock?

YesNo

Q11) A company releases a new product that generates a lot of buzz and media attention. People become excited about the potential success of the product and begin to invest heavily in the company's stock, believing that the new product will lead to increased profits and a rising stock price. Would you invest in the company's stock?

0 Yes

0 No

Q12) A company is known for being a market leader in a particular industry, with a long history of success and strong brand recognition. People are convinced that the company is "too big to fail" and invest heavily in its stock, believing that its reputation and past success will continue to drive growth and profits. Would you invest in the company's stock?

- 0 Yes
- O No

Q13) A company announces a new CEO who is charismatic and has a great track record in the industry. People are excited about the potential for the new CEO to turn the company around and begin to invest heavily in the company's stock, believing that the new leadership will lead to increased profits and a rising stock price. Would you invest in the company's stock?

YesNo

Q14) How important do you think it is to consider the financial health and performance of a company before investing?

- 1. Least Important
- 2. Somewhat Important
- 3. Neutral
- 4. Highly Important
- 5. Most Important

Q15) How important do you think it is to consider market competition, changing consumer preferences, or economic conditions before investing?

- 1. Least Important
- 2. Somewhat Important
- 3. Neutral
- 4. Highly Important
- 5. Most Important

Q16) Do you believe that awareness of Narrative Fallacy bias can improve investment decision making?

O YesO No

Q17) Do you believe that investment firms should provide education and training on Narrative Fallacy bias to their clients?

O YesO No

Q18) How likely are you to change your investment decision-making process based on awareness and education of Narrative Fallacy bias?

- 1. Very Unlikely
- 2. Somewhat Unlikely
- 3. Neutral
- 4. Somewhat Likely
- 5. Very Likely