



A Study On Behavioural Biases With Special Reference To Mental Accounting And Nudging As Behavioural Biases Amongst Investors In Ahmedabad City.

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ABSTRACT

Behavioural finance has been growing over the last twenty-five years specifically because investors rarely behave according to the financial and economic theories. According to financial theories, the investors' main aim is to maximize wealth. However, there are many occurrences where emotions and psychology impact the decisions, causing the investors to behave in an unpredictable or irrational way. Thus, it is interesting to study how investment instruments are affected by the behavioral biases of the investors. The main objectives of this research paper were to examine whether investors in Ahmedabad city were affected by Mental Accounting and Nudging as behavioural biases and secondly, to examine what are the preferred sources of information of investors before taking their investment decisions. Various parameters were covered and an attempt was made to know whether investors of Ahmedabad city had such behavioural biases while making their investment decision or they were rational enough. As this research was a descriptive research type, in this research as primary source of collection, questionnaire had been created and 100 investors in Ahmedabad city had been covered as the sample size. Statistical tests such as Chi square and Single Variable Analysis were used to get the results. The findings from the test applied proved that Ahmedabad city investors had behavioural biases. Thus, it can be concluded that "Behavioural biases is a two-edged sword, if it works in your favour, it can make you a king and on the contrary if can turn you in rags". So, refraining from any sort of behavioural biases is always better.

Key words: Behavioural biases, Mental Accounting, Nudging, Sources of information and Ahmedabad city.

INTRODUCTION

Behavioural finance has been growing over the last twenty years specifically because investors rarely behave according to the assumptions made in traditional financial and economic theory. Behavioural finance studies the psychology of financial decision-making. Most people know that emotions affect investment decisions. People in the industry commonly talk about the role greed and fear play in driving stock markets. Behavioural finance extends this analysis to the role of biases in decision making, such as the use of simple rules of thumb for making complex investment decisions. In other words, behavioural finance takes the insights of psychological research and applies them to financial decision making.

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Thus, it is interesting to study how investments instruments are affected by the financial behaviour of the investors.

LITERATURE REVIEWS

1. (AVANI SHAH, 2012) This paper aimed to study the investor's preference in selection of Mutual fund and measuring the fund sponsor quality. A mutual fund is a common pool of money into which investors place their contributions that are to be invested in accordance with a stated objective. Being a part of financial markets although mutual funds industry is responding very fast by analyse investor's perception and expectations. In this paper, research of 305 mutual fund investors was conducted in Ahmedabad using non-probability convenience sampling. After using One-Way ANOVA, researcher had come to a conclusion that Funds reputation, Withdrawal facilities, brand name, Sponsor's past performance in terms of risk and return varies among the investors of different age group and investor's different occupation group.
2. (Neha Ramnani Bhargava, 2018) This study analysed the gap by applying t test on investment behaviour with age and gender. Based on the result it was found that there existed significant differences in financial investment behaviour between investment behaviour and gender and there also existed significant differences between investment behaviour and age. Thus, gender and age seems to be important predictor which affects investment behaviour.
3. (Sah, 2017) This study examined the investment behaviour of women investors in different investment avenues. This research showcased that women were more concerned about meeting their immediate expenses like medical expenses. Therefore women investors preferred short term investments rather than making provisions for long term benefits. Though there has been an increase in the number of educated working women, they were still mostly dependent on their family members, friends and relatives for investment related information and for taking investment decisions. Women do not want to take much risk while making financial investments and therefore opt for safer investments like bank deposits and gold rather than investing in shares and bonds. As

women investors want to create more wealth to meet short term expenses, they want funds to be easily available whenever required.

4. (Krunal Soni, The Effect of Demographic Factors on the Behavior of Investors: Evidence from the Ahmedabad City, Gujarat, 2019) The main aim of this paper was to study the effect of demographic factors on investor's risk tolerance behaviour especially for the choice of investment. 111 investors sample from Ahmedabad city of Gujarat were selected, Frequency distribution, Descriptive analysis, Factor analysis, Test of Normality, Non Parametric test (Kruskal Wallis Test) were conducted to decide the impact of demographic factors on investor's level of risk tolerance regarding the choice of investment. The outcome of this paper showed very important measurement to show that demographic factors of investors such as academic education, income level of investor's, knowledge of investor's, and investor's experience effect the investors level of risk tolerance, while investors gender, marital status, occupation, and family size showed no effect on investors level of risk tolerance. These results were important for market professional to suggest their investors for suggesting healthier for the investors by taking into the count of level of risk involved in the particular set of portfolio selection.
5. (Devrshi Upadhyay, 2019) This paper intended to find out the major influence of certain behavioural finance concepts such as overconfidence, perception, Representative, anchoring cognitive Dissonance, Regret Aversion, narrow framing and mental accounting on the decision-making process of individual investors in stock market. It conducted a primary research by framing a structured questionnaire and by collecting sample of 181 investors of Ahmedabad. The primary objective was to know effects of behavioural financing on investors and to study the impact and relevance of behavioural financing in investment decision of investors. Whereas secondary objective of our study was to know factors influencing the investors while investing and to study the concepts of behavioural financing and various theories related to it. The research showed Behavioural biases exhibited.
6. (Krunal Soni, 2019) This paper tried to identify the various behavioural biases like representative biases, over-confidence biases, regret aversion, mental accounting and herd behaviour etc. on decision making process of investor's in the Indian stock market. The data was collected from the major Vadodara city of Gujarat by developing questionnaire by asking open ended and close ended questions. Various statistical tools like Descriptive statistics, Parametric test, Factor analysis etc. had been applied to check the impact of different behavioural biases.
7. (Kavita Shah, 2018) This paper focused on getting an insight on behaviour of individual investors across preferred investment avenues and the pattern of investment decisions with respect to Ahmedabad city. Investors have to carefully choose across all these options depending on their risk appetite and other factors like liquidity and time frame involved. It is not possible to completely avoid risks but they can minimize the risk by hedging their investments or diversifying the

investment across variety of options. This study had further led the way for the researcher to understand the investment pattern of Individual investors and factors affecting the same.

8. (Bhatt, 2013) This Study tried to explore the Investment and Trading Pattern of Individual Investor who resides in Jamnagar City. The Primary objective of the study is to check the investment pattern of people those who are dealing in stock market. It is found during the study that, occupation, age, education does affect the investment decision of individuals dealing in stock market. It was also found that new generation investors (whose age is less than 35) prefer online trading rather than off line.
9. (Indra Sen Singh, 2013) This research paper focused on preferences of investors“ for mutual funds and to study the impact of various demographic actors like age, gender, occupation, income and education on the decision of mutual fund investment. The present study analysed the mutual fund investments in relation to investors’ behaviour. Investors“ opinion and perception had been studied relating to various issues like type of mutual fund scheme, main objective behind investing in mutual fund scheme, role of financial advisors and brokers, investors“ opinion relating to factors that attract them to invest in mutual funds, sources of information.
10. (Swadia, 2017) The key objective of this research was to examine the investment behaviour of the middle income class investors in Ahmedabad city. The research study had been directed to answer few significant questions related to the investor behaviour of the middle income class group of Ahmedabad and their investment pattern, to know the numerous goals of investment of the middle income class investors of Ahmedabad city. Hence this research paper had also been focused towards discovery the difference in selection of investment pattern in different age-groups and income classes of the middle income class group of Ahmedabad city.

RESEARCH METHODOLOGY

1. *Problem statement/ Research Gap:*

Getting a high paying job in this economy is easier said than done. Learning the various behavioural biases of the investors of Ahmedabad city is no sweet pills to swallow. The main deviation I found was in the previous LRs were that no one has examined behavioural biases such as Mental Accounting and Nudging amongst investor in Ahmedabad city.

2. *Objectives of the study:*

- I) Primary Objectives: To examine whether investors of Ahmedabad city are affected by Mental accounting as a behaviour bias.
- II) To examine whether investors in Ahmedabad city are affected by Nudging as a behaviour bias.
- III) Secondary Objective: To examine what are the preferred sources of information of investors before taking their investment decisions.

3. Scope of the study:

My study is regarding the impact of behavioural finance affecting investor's investment decisions in Ahmedabad city.

4. Methodology of data collection:

- A structured questionnaire, which will be presented to individual investors.
- Secondary data will be gathered from various related journals, newspapers and through Google.

5. Research type:

Descriptive research

6. Sampling type and Sample size:

- The sample type and sample size used in this report were convenience sampling of 100 investors in Ahmedabad city.

7. Beneficiaries:

- The main beneficiary are the investors of Ahmedabad city as it will help the investors to take a rational decision knowing the impact of the behavioural finance biases on investment decisions.
- I, as a doctoral researcher will be one of the beneficiary of my own research as I would enhance my own knowledge in the process of completing my research and becoming a Doctor of Philosophy in my subject. As it is well said that research is a movement from known to unknown.

8. Limitations of the study:

- It has been observed in the past that the respondents tend to guard the responses because of the fear of the unknown.
- Problem to an extent may occur because many questions will be framed in an attempt to make the respondents admit mistakes they have made in the past. So respondents might not share their true past experiences.
- I have tried to cover investors in Ahmedabad city as a sample size. It remains to be seen whether investors in other parts of the country would exhibit a similar behaviour or not.
- The time factor is another hurdle in my way, I completed my final reporting work within approx. 15 days.

HYPOTHESIS AND ANALYSIS

1. H0: You do not think that taking investment decisions on the basis of gut-feelings will be a correct choice of investment strategy
H1: You think that taking investment decisions on the basis of gut-feelings will be a correct choice of investment strategy

Observed	yes/not sure	no	Grand total
male	18	40	58
female	7	35	42
grand total	25	75	100

Expected	yes	Not sure/ no	Grand total
male	14.5	43.5	58
female	10.5	31.5	42
grand total	25	75	100

Chi Square	yes	Not sure/ no	Grand total
male	0.844827586	0.281609195	1.126436782
female	1.166666667	0.388888889	1.555555556
grand total			2.681992337

Table 1			
Rules		alpha= 0.05	
p value < α	Reject H0	p=	0.101488684
p value > α	Fail to reject H0	so 0.10 > 0.05	Fail to reject H0

Analysis

So as per the hypothesis the main aim was to examine whether investors take investment decisions on the basis of gut-feelings or not. As per the Chi Square test, it was found that: investors think that taking investment decisions on the basis of gut-feelings will not be a correct choice of investment strategy. Thus, its found that investors in Ahmedabad city are not affected by gut-feelings as behavioural biases.

- H0: In past you have not relied on your inner feelings or emotions and have decided any investment decision based on it
H1: In past you have relied on your inner feelings or emotions and have decided any investment decision based on it

Observed	yes	no	Grand total
male	14	44	58
female	4	38	42
grand total	18	82	100

Expected	Agree/S agree	Disagree/S disagree/ Neutral	Grand total
male	10.44	47.56	58
female	7.56	34.44	42
grand total	18	82	30

Chi Square	Agree/S agree	Disagree/S disagree/ Neutral	Grand total
male	1.21394636	0.26647603	1.48042239
female	1.676402116	0.367990708	2.044392825
grand total			3.524815215

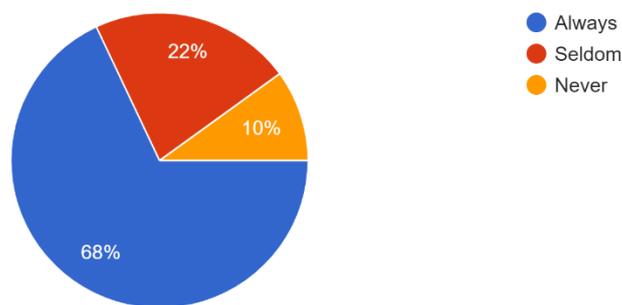
Table 2			
Rules		alpha= 0.05	
p value < α	Reject H0	p=	0.060456564
p value > α	Fail to reject H0	so 0.06 > 0.05	Fail to reject H0

Analysis:

So as per the hypothesis the main aim was to examine whether investors rely on their inner feelings or emotions and have decided any investment decision based on it or not. As per the Chi Square test, it was found that: investors do not rely on their inner feelings or emotions to take investment decision based on it. Thus, its found that investors in Ahmedabad city are not affected by gut-feelings as behavioural biases.

- 3. H0: You do not hesitate selling stocks that had high returns in the past even though their prices have decrease nowadays
- H1: You do hesitate selling stocks that had high returns in the past even though their prices have decrease nowadays

Do you hesitate selling stocks that had high returns in the past even though their prices have decrease nowadays?
100 responses



	always	seldom	never	total
male	36	15	7	58
female	32	7	3	42
total	68	22	10	100

Analysis

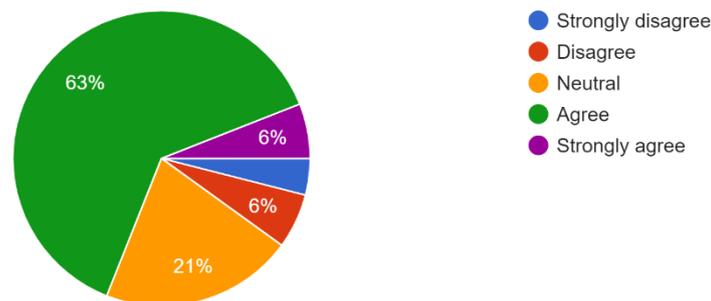
So as per the hypothesis the main aim was to examine whether investors hesitate selling stocks that had high returns in the past even though their prices have decrease nowadays or not. As per the responses the aforementioned pie chart and the table clearly shows that 68% of the investors hesitate selling stocks that had high returns in the past even though their prices have decrease nowadays. So as per the findings investors in Ahmedabad city suffer from Mental accounting as behavioural biases.

4. HO: You do not care more about your returns of each invested avenue separately than the performance of your entire portfolios

H1: You do care more about your returns of each invested avenue separately than the performance of your entire portfolios

I care more about my returns of each invest avenue separately than the performance of my entire portfolios?

100 responses

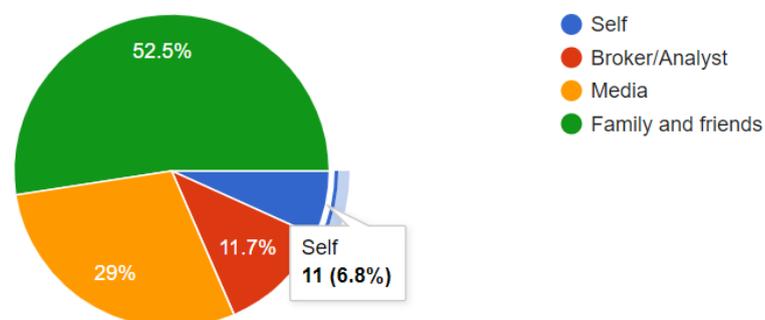


Analysis

So as per the hypothesis the main aim was to examine whether investors care more about their returns of each invested avenue separately than the performance of their entire portfolios or not. As per the responses the aforementioned pie chart and the table clearly shows that 63% of the investors care more about their returns of each invested avenue separately than the performance of their entire portfolios. So as per the findings investors in Ahmedabad city suffer from Mental accounting as behavioural biases.

5. Whose judgment/ analysis do you trust most while making investments? (Select all that is applicable)

100 responses



Analysis

As per the responses the aforementioned pie chart and the table clearly shows that investors in Ahmedabad city most rely on Family and friends as a source of information to take investment related decision having 52.5%, next is media having 29% followed by Broker/Analyst having 11.7% and least is self as it's having 6.8%.

This shows that majority of the Ahmedabad investors have herding bias as they are not taking their own judgements and doing any fundamental analysis before investing

FINDINGS

1. Investors of Ahmedabad city are not having Nudging (Gut-feeling) as Behavioural biases.
2. Investors of Ahmedabad city are having Herding biases.
3. Investors of Ahmedabad city are having Mental accounting biases.
4. Investors in Ahmedabad city most rely on family and friends as a source of information to take investment related decision.
5. Investors in Ahmedabad city least rely on their selves as a source of information to take investment related decision.

SUGGESTIONS

1. Herding Biases and mental accounting biases amongst investors of Ahmedabad city was observed so I suggest that investors should be self-reliant and take investment decisions on their own rather than to rely on family and friends as an investment source.
2. Investors in Ahmedabad city least rely on their selves as a source of information to take investment related decision so I suggest that they should always do fundamental analysis before taking their investment decision and be self-reliant.

CONCLUSION

The main objectives of this research paper were to examine whether investors in Ahmedabad city were affected by the behavioural biases or not. The findings from the test applied proved that Ahmedabad city investors were affected by Herding as behavioural bias. Thus it can be concluded that “Behavioural biases is a two edged sword, if it works in your favour it can make you a king and on the contrary if can turn you in rags”. So refraining from any sort of behavioural biases is always better.

ANNEXURES

Questionnaire on A study on Behavioural Biases with special reference to Mental Accounting and Nudging as behavioural biases amongst investors in Ahmedabad city.

(I, the student of GLS University-SDRI am collecting this data solely for the purpose of my research. I assure you that the data will be purely used for this purpose only.)

1. Name : _____
2. Gender : a) Male b) Female
3. Age a) Below 20 b) 20 to 30 c) 31 to 40
d) 41 to 50 e) 51 to 60 f) Above 60

4. Occupation

a) Service b) Business c) Not working/ household

d) Any other work: _____

5. Since how many years you are investing?

a) 0 to 1 year b) 2 to 5 years c) 6 to 10 years

d) More than 10 years

6. Do you think that taking investment decisions on the basis of gut-feelings will be a correct choice of investment strategy?

a) No its not correct b) Not sure c) Yes its correct

7. In past have you ever relied on your inner feelings or emotions and have decided any investment decision based on it?

a) Yes b) No

8. Do you hesitate selling stocks that had high returns in the past even though their prices have decrease nowadays?

a) Always b) Seldom c) Never

9. I care more about my returns of each invested avenue separately than the performance of my entire portfolios?

a) Strongly disagree b) Disagree c) Neutral

d) Agree e) Strongly agree

10. Whose judgment/ analysis do you trust most while making investments? (Select all that is applicable)

a) Self b) Broker/Analyst c) Media

d) Family and friends e) Any other: _____

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