

A Study on the Behavioural Biases of Retail Investors

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ABSTRACT

From time immemorial man has been in the search for avenues where he or she could invest in and earn a higher income. This search gave value to land, gold, various other commodities and over the past hundred years dealings in stock markets and exchange tradable funds have also increased. It is also seen that today more people are considering investing in stock markets and exchange tradable funds as a prospective choice. This paper intends to identify the behavioural variables that influence the decision making of retail investors and to study whether the demographic factors have an influence on the behavioural biases of retail investors. This study was able to conclude that age, marriage and gender significantly influences the decisions made by individual.

Keywords: Behavioural biases, retail investor, demographic variables, X^2 test

1. INTRODUCTION

From time immemorial man has been in the search for avenues where he or she could invest in and earn a higher income. Parking one's earnings with the expectation of a higher return for the sacrifice made, investments over the years have increased. It is also seen that today more people are considering investing in stock markets and exchange tradable funds as a prospective choice.

The Securities Contracts (Regulation) Act of 1956 defines, a stock exchange as "an association, organisation or body of individuals, whether incorporated or not, established for the purpose of assisting, regulating and controlling, business in buying, selling and dealing in securities." A place where the brokers and traders, both buyers and sellers of securities and debt instruments gather, a stock exchange provides the opportunities to all who are interested in trading. What began as an outcry system has now developed and reached online trading wherein the requirement of a physical space has diminished. Today people sit in their homes and actively trade using various soft wares that is available. This is also encouraged by the stock broking firms. Investment in any asset class involves risk. It is not possible to say that one option has no risk. In fact it is this risk element that ensures returns. There are no investments that have no risk attached with them; in fact it is mainly the perception that matters. Traditionally all investors are considered to be rational, who considers all the information, studies the movement and on the basis of various analysis, highly evaluative, goal oriented and consistent and free from emotions to arrive at conclusions.

Yet retail investors fail to reap the benefits because they are overconfident about their choices and do not find time every day to analysis the movements in the financial assets and hence end up buying those which the crowd purchases. It is also seen that retail investors do not have a positive outlook towards buying those stocks that institutional investors are buying.

2. STATEMENT OF PROBLEM

According to the study of Standard Chartered Emerging Affluent Study 2018 nearly two thirds of the emerging affluent Indians are using investment products to achieve their financial goals. Moreover, 63% of the people find financial products more attractive for investing to increase their

wealth. This study was also able to come up with the findings that 31% of the people are investing in mutual funds, 25% opt for fixed income instruments and 22% choose equity instruments. In this scenario this study intends to analysis whether all the retail investors in Thrissur are people who have complete knowledge or whether they are influenced by the behavioural factors as stated by Daniel Kahneman. It is also seen that these investors are not able to reap the benefits of investing in these stocks because they portray a tendency to purchase those stocks that have been underperforming the market.

3. OBJECTIVES

- To identify the behavioural variables that influences the decision making of retail investors.
- To study whether the demographic factors have an influence on the behavioural biases of retail investors.

4. RESEARCH METHODOLOGY

AREA OF STUDY

This study has taken the retail investors in Thrissur district to study whether the demographic factors influence their investment pattern in stock markets and mutual funds

UNIVERSE: The universe of this study is unknown as the investors in mutual funds need not always register themselves, although the stock market traders are registered.

SAMPLE DESIGN

`Sample Frame: Retail investors of Thrissur

Sample population: Unknown population

Sample size: 110 respondents

QUESTIONNAIRES CIRCULATED	QUESTIONNAIRES RECEIVED	QUESTIONNAIRES SELECTED	QUESTIONNAIRES SELECTED	QUESTIONNAIRES NOT FULLY FILLED
120	115	110	5	5

SOURCE OF DATA

- Primary Data was collected with the help of questionnaire and personal interview. A well-structured questionnaire has been used for this purpose.
- Secondary Data was collected from journals, websites, newspapers and other magazines.

5. SCOPE OF STUDY

This study mainly covers the retail investors who are living in the district of Thrissur.

HYPOTHESIS

- H1 The data does not follow normal distribution.
- H2 There is association between age and the factors influencing behavioural biases of retail investors.

- H3 There is association between marital status and the factors influencing behavioural biases of retail investors.
- H4 There is association between gender and the factors influencing behavioural biases of retail investors.
- H5 Factors influencing the behavioural biases of retail investors are not equally distributed.

6. REVIEW OF LITERATURE

- Barber and Odean (1999)¹ through this paper they study how behavioural finance has altered the traditional perspective of investors being highly rational. This paper throws light on the recurring mistakes commonly witnessed among the individual investors; they are excessive trading and disproportionately holding on the losing investment at the same time selling of the winning investments. Some of the reasons they have stated for this is that anticipation of changes in tax law, desire to rebalance, belief that the losers will bounce back, attempt to limit transaction costs and belief that all stocks revert to the mean
- O. Clement (2012)⁶ has studied the investment pattern and tested the knowledge of teachers in Kisumu Municipality. The number of investors in this municipality is comparatively very few and their financial literacy is very less. However he has studied that along with economic factors there are also a number of behavioural factors that are influencing the investors.
- Birau (2012)⁷ this paper analyses whether the investors are rational. It focuses on the anomalies in the stock market. This paper highlights that even psychological factors have a significant influence on the financial markets. It also states that investors are influenced by varied factors and that behavioural finance is not a perfect replacement of the traditional theory.
- Zahera (2017)¹⁹ has made an attempt to explain the various behavioural biases that are likely to influence investors both individual and institutional and financial advisors. The study was able to identify 17 biases prevalent in these investors. This paper is highly relevant as it helps decision making and financial advisors are able to base their decisions on this.
- Baker et.al. (2018)²⁰ This paper makes a thorough study of how the financial literacy and the demographic factors influence the behavioural biases of an individual. With the help of one way ANOVA, factor analysis and multiple regression the study was able to conclude that financial literacy has a negative association with the some of the behavioural factors, such as disposition effect and herding bias whereas a positive association towards mental accounting.

DESCRIPTIVE STATISTICS

Sl. No	Statements	Male			Female		
		A	N	DA	A	N	DA
1	Ease in identification of shares and mutual funds that outperform the market	46.43	28.57	25	20.37	50	29.63
2	Days when I have no transactions at all	8.93	3.57	87.5	25.93	35.19	38.89
3	Purchase those shares advised by experts	25	44.64	30.36	33.33	38.89	27.78
4	Attitude towards purchase of risky stocks	14.29	0	85.71	11.11	51.85	37.04
5	Preference for those shares that ensure regular returns	42.86	0	57.14	51.85	22.22	22.22
6	I ensure the shares I buy have good track record	66.07	33.93	0	55.56	33.33	11.11
7	I am vigilant about those shares that have shown sudden fluctuations	80.36	0	19.64	75.93	24.07	0
8	I always look for those stocks which give higher dividend	75	25	0	90.74	9.259	0
9	I invest in shares as a constant source of return.	73.21	5.36	21.43	27.78	70.37	1.85
10	I don't like to invest a lot in stock market	89.29	5.36	5.357	98.15	1.85	0
11	I look at investment as a tool to hedge the possible inflation.	25	44.64	30.36	61.11	38.89	0
12	I believe that every policy change will have a positive influence on the stock prices.	30.36	16.07	53.57	61.11	31.48	7.41
13	Even if the prices fall I believe that it will gradually increase	85.71	5.357	8.93	75.93	24.07	0
14	When the prices fall I purchase shares because I believe that the prices will rise in the near future.	66.07	25	8.93	83.33	16.67	0
15	I like to buy the shares that are advised by my relatives and family friends.	46.43	30.36	23.21	61.11	38.89	0
16	If the shares of some company are overbought in the IPO I will buy those shares.	51.79	35.71	12.5	16.67	83.33	0
17	I tend to keep those shares that which has been giving a little profit.	76.79	0	23.21	16.67	61.11	22.22
18	When the prices of shares increase I tend to sell them off.	85.71	8.93	5.357	64.82	1.85	33.33
19	If the prices of the shares I have tend to decrease I keep holding those shares	80.36	5.36	14.29	53.70	40.74	5.56
20	I feel that if there is a class on investment it could help me in my investment decisions.	91.07	8.93	0	72.22	27.78	0
21	If I had a job that would give me a promotion or increment every year I would invest a higher proportion in share market.	41.07	58.93	0	81.48	7.41	11.11
22	When I gain experience in trading in share market I shall invest more.	60.71	33.93	5.357	83.33	0	16.67

INFERENCE ANALYSIS

- H_0 : the data follows normal distribution
- H_1 : the data does not follow normal distribution

NORMALITY TESTING

PARTICULARS	K.S. VALUE	P VALUE
One-Sample Kolmogorov-Smirnov Test	2.027	0.001**

Source: SPSS Output

TABLE NO 1

INTERPRETATION

If the value p is ≤ 0.05 then the data does not follow normal distribution.

Here the value of p is 0.001. Reject H_0 . Accept H_1 . The data is not normally distributed.

- H_0 : there is no association between age and the factors influencing behavioural biases of retail investors.
- H_1 : there is association between age and the factors influencing behavioural biases of retail investors.

TESTING THE ASSOCIATION OF AGE AND THE FACTORS OF BEHAVIOURAL BIASES

AGE GROUP	SATISFACTION			TOTAL	X ² VALUE	P VALUE
	LOW	MODERATE	HIGH			
20-30	10	4	20	34	49.154	.000**
	(29.41)	(11.76)	(58.82)	(100)		
	[25]	[9.52]	[71.43]	[30.91]		
30-40	9	11	6	26		
	(34.62)	(15.38)	(23.08)	(100)		
	[34.62]	[26.19]	[21.43]	[23.64]		
40-50	3	17	2	22		
	(13.64)	(77.27)	(9.09)	(100)		
	[7.5]	[40.48]	[7.14]	[20]		
50-60	18	10	0	28		
	(64.29)	(35.71)	(0)	(100)		
	[45]	[23.81]	[0]	[25.45]		
Total	40	42	28	110		
	(36.36)	(38.18)	(25.45)	(100)		
	[100]	[100]	[100]	[100]		

Source: SPSS Output

TABLE NO 2

INTERPRETATION

Since the p value less than 0.01 then reject H_0 at 1% (99% confidence level) level of significance. Hence it is concluded that there is association between age and the factors influencing the behavioural biases of retail investors.

- H_0 : there is no association between marital status and the factors influencing behavioural biases of retail investors.
- H_1 : there is association between marital status and the factors influencing behavioural biases of retail investors.

TESTING THE ASSOCIATION OF MARITAL STATUS AND THE FACTORS OF BEHAVIOURAL BIASES

MARITAL STATUS	SATISFACTION			TOTAL	X ² VALUE	P VALUE
	LOW	MODERATE	HIGH			
Single	0	1	11	12	35.765	.000**
	(0)	(8.33)	(91.67)	(100)		
	[0]	[2.38]	[39.29]	[10.91]		
Married	40	38	17	95		
	(42.11)	(40)	(17.89)	(100)		
	[100]	[90.47]	[60.71]	[86.36]		
Divorced	0	3	0	3		
	(0)	(100)	(0)	(100)		
	[0]	[7.14]	[0]	[2.73]		
Total	40	42	28	110		
	(36.36)	(38.18)	(25.45)	(100)		
	[100]	[100]	[100]	[100]		

Source: SPSS Output

TABLE NO 3

INTERPRETATION

Since the p value less than 0.01 then reject H_0 at 1% (99% confidence level) level of significance. Hence it is concluded that there is association between marital status and the factors influencing the behavioural biases of retail investors.

- H_0 : there is no association between gender and the factors influencing behavioural biases of retail investors.
- H_1 : there is association between gender and the factors influencing behavioural biases of retail investors.

TESTING THE ASSOCIATION OF GENDER AND THE FACTORS OF BEHAVIOURAL BIASES

GENDER	SATISFACTION			TOTAL	X ² VALUE	P VALUE
	LOW	MODERATE	HIGH			
Male	28	17	11	56	9.176	.010**
	(50)	(30.36)	(19.64)	(100)		
	[70]	[40.48]	[39.29]	[50.91]		
Female	12	25	17	54		
	(22.22)	(46.29)	(31.48)	(100)		
	[30]	[59.52]	[60.71]	[49.09]		
Total	40	42	28	110		
	(36.36)	(38.18)	(25.45)	(100)		
	[100]	[100]	[100]	[100]		

Source: SPSS Output

TABLE NO 4

INTERPRETATION

Since the p value less than 0.01 then reject H_0 at 1% (99% confidence level) level of significance. Hence it is concluded that there is association between gender and the factors influencing the behavioural biases of retail investors.

- H_0 : Factors influencing the behavioural biases of the retail investors are equally distributed.
- H_1 : Factors influencing the behavioural biases of retail investors are not equally distributed.

TESTING THE GOODNESS OF FIT OF THE FACTORS OF BEHAVIOURAL BIASES

FACTORS	FREQUENCY	PERCENTAGE	X ² VALUE	P VALUE
Low	40	36.36	3.127	.209**
Moderate	42	38.18		
High	28	25.46		
Total	110	100		

Source: SPSS Output

TABLE NO 5

INTERPRETATION

Since p value is between 0.05 and 1.00 then we accept H_0 at 5% level of significance (95% level of confidence). Hence it is concluded that the factors influencing the behavioural biases of the retail investors are equally distributed.

7. FINDINGS

- Nearly 39% of the male respondents have strongly agreed that they trust their choices. The remaining 61% have stated that they also agree to the same. Among the female respondents 56% agree that they trust their choices and 44% are neutral to the statement.
- Nearly 46% of the males agree that they can identify the shares that outperform the market. Whereas only 20% of the females agree that they can easily identify the shares that

outperform the market. 29% of the men and 50% of the women are neutral to the statement. Almost 25% of the men and 29.5% of the women are of the opinion that they can't identify the shares that outperform the market.

- Nearly 87% of the men and 38% of the women agree that they have some transactions on a daily basis. Whereas 8% of men and 25% of women have the opinion that they do not engage in transactions on a daily basis.
- 25% of the men and 33% of the women are of the opinion that they do not purchase the shares that are
- Only 14.28% of the male respondents and 11.11% of the female respondents have agreed that they are willing to invest in risky stocks or other similar mutual funds. Nearly 52% of the women are neutral to this statement. 85% of the men have also stated their disagreement to investing in risky avenues so have 37% of the females.
- It is also seen that if those risky share offer a regular return then neatly 43% of the men and 53% of the women have a positive opinion towards investing in risky stocks.
- 80% of the male respondents and 75% of the female respondents have agreed that they will invest in risky stocks that have a good track record.
- 75% of the males and 90% of the females have agreed that they always look into the fluctuations in the market. Nearly 25% of the males and 10 % of the females are neutral to the statement.
- Nearly 73% of the men invest in stock market as a constant source of income and they are not interested in taking risk. Among the women 28 % are of the same opinion, the remaining are indifferent to looking at these sources as a constant source of income.
- Nearly 90% of the men and 98% of the women do not like investing in stock market.
- Among the opinions received only 25% of the men consider investing in stock markets or mutual funds as a tool to hedge the possible inflation. Whereas among the women 61% of them consider it as a tool to hedge the inflation that is likely to occur in the near future.
- Out of the male respondents 30% have an optimistic attitude towards all the policy changes and 61% of the female respondents have also shown the same. Almost half of the male respondents have a pessimistic attitude towards the policy changes' influences on the market.
- The opinion towards the statement as to whether they believe that the prices would rise even though they are low right now 85% of the men and 75% of the women have shown a positive outlook. This shows the optimistic attitude among the people.
- This is further proven by their opinion for the statement that they would purchase the stocks or invest more in the mutual funds when the prices decline as they expect the prices to rise. Nearly 66% of the men and 83% of the female respondents have stated agreement to the statement.
- Women tend to show more of the familiarity bias than men, as 61% of the female respondents have stated that they are likely to purchase those shares and mutual funds that which has been advised by their family and relatives. Whereas only 46% of the men agreed to the same. 23% of the men have also stated that they do not purchase those shares and units which have been advised by their family.
- Nearly 52% of the male respondents have stated that if the shares of a particular company are overbought in the IPO then they have a tendency to purchase those, whereas 83% women are neutral to this statement.
- Nearly 76% of the male respondents have stated that they tend to keep the stocks even if they have only been giving them small profit. Whereas only 17% of the women have stated so. Among the female respondents 61% of them are neutral to this statement.

- Majority of the men and women respondents have stated that they try to sell off the shares and other mutual fund investments when the prices show an increasing trend. at the same time if the prices are declining then 80% of the male respondents and 53% of the female respondents tend to keep them instead of selling them off to earn the possible income.
- Both the male and female respondents are of the opinion that if some session was given on trading and other technicalities of the fluctuations in the market it could benefit them. This clearly shows that they depend on technical advice to take decisions.
- Only 41% of the male respondents are of the opinion that if their income levels increase they would spend more in these investment venues. However the female respondents, nearly 82% have stated they would invest more in these sources provided they have an increase in their income.
- Nearly 60% of the men and 83% of the women have stated that experience would help them and it would also increase their trading activities.
- The data is not normally distributed
- That there is association between age and the factors influencing the behavioural biases of retail investors.
- There is association between marital status and the factors influencing the behavioural biases of retail investors.
- There is association between gender and the factors influencing the behavioural biases of retail investors
- Factors influencing the behavioural biases of the retail investors are equally distributed.

8. SUGGESTIONS

- If there is a class on investment occasionally then it could increase the confidence and knowledge of the investors.
- In the beginning all the investors are very careful about their investment but gradually when it requires more attention and concentration investors gradually lose their interest in the same at that point of time, they need proper guidance.
- There is a need for offices or firms that offer consultancy services wherein well informed, updated and competent consultants can guide potential investors.
- It would be good if students at the college level get an opportunity to trade in these stock exchanges and mutual funds under the guidance of experts., because many investors have stated that if they gain experience, they were willing to invest more.

9. CONCLUSION

Since ages man has been in the quest for knowledge. Knowledge about the resources around him, knowledge which leads to greater discoveries and inventions which has helped him grow and flourish. What started as the barter system gradually leading to the outcry, further sophistication led to the development of stock market and now the online trading. Investors have been highly benefitted by these discoveries. Although stated as rational investors by Eugene Fama in the Efficient Market Hypothesis, the studies over the years have proven to the contrary.

This study was able to conclude that the investors are influenced by several biases, like overconfidence, familiarity bias, pessimism optimism, anchoring etc. a number of demographic variables are also influencing these biases, like gender, age, marital status etc.

Women are likely to showcase more familiarity biases than men and show disinterest towards risky investments. Whereas it is evident that men have more overconfidence it could be because they have been investing for more years or they get more time to study the variations in the market. Nearly 87% of the male respondents have transactions on the daily basis but only 39% of the women have daily transactions. Even the findings that 61% of women feel that every policy change would have a positive change, indicating that they are more optimistic

However, it is common that herding is common among men than among women, as they have stated that if the shares are outbought in an IPO nearly 52% of the men tend to purchase the same whereas only 17% of the women have shown this attitude.

Although investors might not show behavioural biases in the initial stages of investment, over the years, as they become constant in investing, these biases are likely to surface up and influence their decisions.

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