DOI : 10.18843/ijms/v6i1(7)/10
DOI URL :http://dx.doi.org/10.18843/ijms/v6i1(7)/10

The Impact of Demographic and Behavioural Biases Factors on Investment Decision of Equity Investors in Kerala

Vidya A.,
Assistant Professor,
Sree Narayana College Nattika,
Thrissur, Kerala, India.

Dr. Satheesh E. K.,
Professor and Dean
Department of Commerce and Management Studies, University of Calicut, Kerala, India.

ABSTRACT

Behavioural finance explain how cognitive errors (mental mistakes) and emotions of the investors influence the decision making process. According to behavioural finance people are not always rational. Their investment decisions are affected with various behavioural biases. This paper is an attempt to find out whether there is any association between demographics variable and behavioural biases of investors. Whether investment biases vary according to various demographic factors. Chi-square analysis is used for analysing the relationship between behavioural biases and demographic factors. The findings of the study shows that optimistic bias and herd biases are vary according to the age group, occupation, educational level of the respondents. Overconfidence bias vary according to the gender, age and occupation of the investors. This study is very useful to both investors and stock brokers to understand the emotions and mental mistakes of investors.

Keywords: Behavioural finance ,demographic factors, behavioural biases.

INTRODUCTION:

Behavioural finance is a relatively new growing field of study that applies behavioural psychology to economic decision making. Various studies in this field help as to understand why rational people can often make irrational decision when it comes to money and investing. According to traditional finance theory while making financial decision, investors are rational and take investment opportunity that maximize their wealth but in reality in most of the time investors behave irrational way. Emotions and mental mistakes lead them to various behavioural biases which is the biggest obstacle in their attempt to maximize their profit. Due to high uncertainty and complexity exist in the stock market, most of the time its very difficult even for financial analyst to take a correct investment decision . In most of the uncertainty situation investor take irrational decision by purchasing high on speculative period and sell low in panic mode. As a human being it is impossible to unbiased in our decision making. However we can mitigate those biases by identifying and creating trading and investment rules.

Statement of Problem:

According to traditional economic theories, investors always act in a rational manner to maximize their income. But Psychologist across the world conducted many studies which prove that human beings have limited cognitive possibilities and are controlled by various emotions while making decision in risky and uncertain situations. Most of them take investment decision without the support of correct information and knowledge. High volatility and desire to get a huge return in short span of time pave the way of irrational judgment among the investors.
The present study analysis whether investors behavioural biases vary according to their age, gender, educational qualification, residential area and also investigative which biases are affect them most.

Scope and Significance of the Study:

The present study analysis how emotional factors influence the investment choice of individual investor, and whether demographic factors have impact on various behavioural biases of investors. This study help individual investors to understand their pitfalls in their investment decision making. It also help financial planners, financial advisors and financial managers to advice their client for avoiding various behavioural biases in their investment decision making and also help them to select suitable stock from the stock market. Geographically the study limited to Thrissur district in Kerala the present study may help financial institution and assets management companies in developing appropriate investment strategies as per the needs of equity investors .

OBJECTIVE OF THE STUDY:

- To identify the impact of demographic factors on investment behaviour of individual investors.
- To identify various behavioural biases exist among stock market investors among Thrissur district in Kerala.
- To analyse the impact of demographic variables on investment biases.

LITERATURE REVIEW:

Zipporah Nyaboke onsomu and Dr. Cyrus Iraya in (2017) conducted a study to determine whether demographics factors influence the effect of investors biases among individual investors at Kenyan stock exchange, a sample of 279 equity investors are interviewed for the study. From the study it is found that majority of investors are affected by various behavioural biases like representativeness, anchoring biases and status quo biases. Demographic factors like age, experience and educational qualification did not significantly effect investors investment biases. But gender and behavioural biases are significantly related each other. Men's are more affected with various biases as compared to women's.

An investigation was carried out by Dr. Chetan makwan(2015) to identify the interaction between demographic variable and behavioural biases of mutual fund investors . The data was analysed by using correlation and Chi square tests. From the study it is found that age group of the investors is the most important factors which affect the over confidence of investors. There is no association between familiarly biases and demographic factors. The variation in behavioral biases is mainly due to the following demographic factors such as income, age, education, where as gender and behavioural biases like over confidence, mental accounting and familiarity biases are negatively correlated .Awareness is not influenced by behavioural biases but perception is significantly influence on behavioural biases of the investors.

Dr. Taqadus Bashir, Nazish Azam, Arslan Ali Butt, Aaqiba Javed and Ayesha Tanvir(2013) through their Study investigate the impact of demographic factors like, age, gender, marital status and domical factors and personality factors on behavioural biases(Over confidence, herding, disposition effect) and risk taking behaviour among Pakistani investors. 225 respondents are collected for the study and Primary data is analysed by using Amos 20 and SEM analysis. The study concluded that personality traits have positive significant relation with herd behaviour, over confidence and risk taking behaviour. while demographic factors do not have significant relationship with investment biases and risk taking behaviour.

Dr. K. Chitra and Ms.T. Jayashree in (2015) conducted a study to identify whether the influence of cognitive biases on investor behaviour differ with their demographic profile. A sample of 150 investors from Indian stock market is considered for the study .The data is analysed by using descriptive statistics, factors analysis and ANOVA test. The result of the study depicted the existence of various cognitive biases like framing, hindsight and conformation biases among the investors. Framing and conservative biases vary with gender of the respondents. Representative biases differ with age group and income of the respondents .Influence of representative biases and framing biases vary with the occupation of the respondents.

Shabla Amiri, Nooredin Razavizadas Gholam Hosein Vahidi(2013) They conducted a study to analysis the interaction between five personality traits and demographic factors with behavior biases among stock market investors in Tehran stock exchange. Amos and SEM analysis tool is used for analysis the primary data. The study concluded that the investment biases in individual investors has relationship with personal characteristics positively and with some of demographics variables negatively.

Armaki and Abbasi(2015) Analysis the impact of demographic factors on overconfidence and loss a version biases among investors in Iran's capital market. The study result shows that age was negatively related with over confidence biases but education was positively related with these biases. Highly educated investors are more affected with over confidence biases. There exists gender difference in loss aversion biases. Old age investors are more loss avert as compared to younger generation but educated investors are less loss avert.

METHODOLOGY:

The present study adopts descriptive research design .A well-structured questionnaire is designed to collect primary data from the respondents. Snow ball sampling method is used to collect data from the respondents. The Sample includes all stock market investors who have demat account in Thrissur District. Primary data collected through three leading stock broking firm in Thrissur district. In order to fulfil the main objective of the study i.e. whether there is any relationship exists between various demographic factors (i.e. Age, gender, educational qualification, marital status, residential status occupation) with various behavioural biases (such as herd behaviour, optimistic biases, loss aversion biases ,familiarity biases etc.) . Primary data is analysed with the help of SPSS 23 version and chi-square test.

Population:
The Population of the study consist of all stock market investors in Thrissur district who have demat account. From this population 55 respondents were selected by using snow ball sampling technique.

Tools for Analysis:
Chi- square analysis, mean and standard deviation is used for analysing the primary data.

Variables of the Study:
Dependent Variables:
Various cognitive and emotional biases like herd behaviour, optimistic biases, loss aversion biases ,cover confidence biases ,herd biases etc.

Independent Variable:
Demographic factors like Age, educational qualification, experience, occupation gender ,income etc.
Hypothesis of the study.
H0: There is no significant relationship between demographic traits (Age, gender, education, occupation, annual income, and educational qualification) and behavioural biases (such as optimistic bias, herd biases, Loss aversion bias, over confidence bias, Heuristic bias) of the investors.
H1: There is significant relationship between demographic traits and various behavioural biases of investors
In this paper an attempt is made to analyse whether there is any relationship exists between various behavioural biases and socio demographic factors among stock market investors in Kerala. This paper arranged in following manner like first part deal with introduction to various behavioural biases and Socio- demographic factors and its importance in investing. Second part describe reviews of earlier papers. The third section deal with objective and methodology used for the study fourth section describe findings and results analysis and fifth section deals with conclusion.

LIMITATION OF THE STUDY:

- Some of the investors are reluctant to reveal the correct information.
- The study is limited to only one district.
- The study considered only limited variable in behavioural finance.

ANALYSIS AND DISCUSSION:

There are lot of behavioural biases that affect the individual investors while making investment decision such as loss aversion bias, heuristic bias, optimistic biases, over confidence biases etc. The present study analysis whether there is any association between demographic factors such as age, gender, education, occupation etc. with various behavioural biases of investors such as herd biases, heuristic biases, overconfidence, optimistic and loss aversion biases.

Table 1: Demographic Profit of respondents

Factors	Description	No.of Respondents	Percentage
Gender	Male	35	64
	Female	20	36
	Total	**55**	**100**
Age Group	Up to 25 Yrs.	3	6

Factors	Description	No.of Respondents	Percentage
(in years)	26-45 yrs	35	64
	46-65 yrs	7	12
	Above 65 yrs	10	18
Average monthly Family Income	25000-50000	11	20
	50000-100000	24	43
	Above 100000	20	37
	Total	**55**	**100**
Residential Status	Rural	23	42
	Urban	26	47
	Semi Urban	6	11
	Total	**55**	**100**
Occupation	Business	14	26
	Salaried	21	38
	Retried	8	14
	Profession	12	22
	Total	**55**	**100**
Marital Status	Married	47	86
	Unmarried	8	14
	Total	**55**	**100**
Educational Qualification	School	3	6
	Graduate	22	40
	P.G	10	17
	Professional	12	22
	Others	8	15
	Total	**55**	**100**

The above table shows that 64% of the respondents are males and 64% belongs to the age group of 26-45 years. 40% of the respondents have completed Graduation 38% of the respondents are salaried persons. Majority i.e. 86% are married and 47% belongs to urban area 43% have family monthly income in between 50000-100000.

Table 2: Behavioural Statements

Description	Mean	Standard deviation
I have confidence to earn high return from my investment	3.309	1.274
I follow rule of thumb method in investment decision making	3.127	1.244
I trust more on investment opportunity close to home	3.322	0.449
In the complex situation, I would like to imitate my friends decisions	3.593	1.272
I feel nerves when price drop in my stock .	3.636	1.267
Gain in my Investment must be attributed to my competence	3.634	1.685
I feel I am a good investor	2.363	0.930
I have more control over outcome of my investment	3.221	1.890

The high mean score value of dimension shows the presence of various investment biases among the investors. The highest mean score are obtained by variables like Gain in my investment must attributed to my competence (3.63) Followed by tendency to imitate others 3.59 (herd biases) Confidence to earn higher return 3.39(over confidence) The lowest mean score is obtained to the statements i.e I feel I am a good investor 2.363(optimistic biases) second statement is" follows rule of thumb in complex situation 3.12(Heuristic biases).

Behavioural biases v/s Demographic Variables:

To Analysis the influence of various behavioural biases and its interaction with demographic variables. The following hypothesis is framed. Rule for selection of hypothesis is that if P-value of test is larger than 0.05(Significance5%) then null hypothesis will be accepted otherwise reject the null hypothesis.

Table 3: Chi - square Analysis for association between herd biases and Demographic factors

Sl.No	Demographic factors	Chi-Square value	P-value	Significance	Hypothesis
1	Gender	3.0990	.541	Not significant	Accept
2	Age Group	26.335	.010	Significant	Reject
3	Education	25.960	.045	Significant	Reject
4	Income	9.0660	0.42	Not significant	Accept
5	Occupation	31.332	.002	Significant	Reject
6	Marital Status	12.391	.004	Significant	Reject
7	Residential Area	11.490	.480	Not significant	Accept

Table 4: Chi - Square analysis for association between optimistic biases and demographic factors

Sl.No.	Demographic factors	Chi-Square value	p- value	Significance	Hypothesis
1	Gender	2.682	.008	Significant	Reject
2	Age Group	5.736	.125	Not significant	Reject
3	Education	3.780	.437	Not significant	Reject
4	Income	1.341	.511	Not significant	Accept
5	Occupation	7.944	.047	Significant	Reject
6	Marital Status	4.101	.047	Significant	Reject
7	Residential Area	4.791	.326	Not significant	Accept

Table 5: Chi - Square analysis for association between Loss aversion biases and demographic variables

Sl.no	Demographic Factors	Chi-Square valve	P-value	Significance	Hypothesis
1	Gender	2.682	0.08	Significant	Reject
2	Age	5.736	.125	Not Significant	Accept
3	Education	3.780	.437	Not Significant	Accept
4	Income	1.341	.511	Not Significant	Accept
5	Occupation	7.944	.047	Significant	Reject
6	Marital Status	4.101	.047	Significant	Reject
7	Residential Status	4.79	.32	Not Significant	Accept

Table 6: Chi - Square analysis for association between over confidence biases and demographic factors.

Sl.no	Demographic Factors	Chi-Square value	P-value	Significance	Hypothesis
1	Gender	15.461	.004	Significant	Reject
2	Age	11.487	.048	Significant	Reject
3	Education	15.735	.047	Significant	Reject
4	Income	18.265	.019	Significant	Reject
5	Occupation	5.6651	.685	Not Significant	Accept
6	Marital Status	19.716	.033	Significant	Reject

- The above tables show the relationship between gender and herd biases (table 1) gender and optimistic biases (table2) Gender and overconfidence biases (table3). from the study it shows that Chi- Square test value .54 in herd biases, .483 in optimistic biases, .413 in heuristic biases are greater than the significance level of 0.05, it shows that there is no significant relationship between gender and all this three biases. But over confidence biases and loss a version biases is positively associated with gender. It is concluded that male respondents are more overconfident than females.
- From the above table it is observed that there is positive significant association between the age group of the investors and various behavioural biases. We reject the null hypothesis in most of the cases and it is concluded that while increasing the age of the investors, the chance of behavioural biases is reduced.
- The study shows that higher education lead to low level of biases . While increasing the educational level the biases like herd tendency, overconfidence, loss aversion, optimism and heuristic tendency is highly reduced among the respondents.
- The variable income has positive significant relationship with over confidence biases. High income group exhibit more over confidence biases as compared to lower income group. There is negative relationship

between income and herd biases, optimistic biases and loss aversion biases. So Null hypothesis is rejected in all the three cases so we concluded that income variation does not lead to behavioural biases.

- The variables like marital status and locality have a positive significant relation with all investment biases under the study.
- Irrational investment behavioural is highly among less experienced investors.
- Males and female investors significantly differ in herding and tendency of overconfidence.
- There exists significant gender difference in loss aversion biases. Old age investors are more loss avert as compared to younger generation but educated investors are less loss avert.

SUGGESTIONS:

- Individual investor should allow professional experts to manage their portfolio this will reduce personal biases in their investment.
- Stock market analyst and investors can conduct various diagnostic tests on behavioural biases expressed by the investors in order to device appropriate investment strategies which maximize the wealth of investors.
- Understanding of various behavioural biases help the investors to avoid emotions and sentiments which make ambiguous financial decisions.

CONCLUSIONS:

Behavioural finance represents a revolution in modern financial theory. This theory explains how cognitive errors and emotions influence investor's investment decision making process. The present study shows that there are lots of behavioural biases affect investor's investment decisions. Investors trust more on advice from stock analyst for taking wise investment decision. Their Investment decision varies according to their gender, age, education etc., They are highly optimistic to investment in home country securities. The study also reveals that herd biases and optimistic biases vary according the age group, occupation and educational level of respondents. Loss aversion biases vary according to the age group, occupation, and marital status of the respondents. Overconfidence biases vary according to the gender, age, occupational of the investors.

REFERENCES:

Armaki AG and Abhasi E (2015). the effect of Gender, Age, and educational level on over confidence and loss aversion in Iran's capital market. *Asian Journal of Research in Marketing*, volume 4,PP 75-87.

Armaki Au and Abbasi E (2015). the effect of Gender, Age, and educational level on over confidence and loss a version in Iran's Capital Market. *Asian Journal of Research in marketing*, Volume 4,PP 75-87. ol 9 no.29 pp 277-293.

C R Kothari. (2008). *Research methodology,* New Delhi: New age Publication.

Dr. Chetna Makwana (2015). Interaction between demographic variables behavioural biases of Mutual fund investors, *Global Journal for Research Analysis,* Volume 4, issue 2 pp 105-108..

Dr. K. Chitra and Ms. T. Jayashree (2015). Does the influence of cognitive biases on investor behaviour differ with demographic profile? An empirical study, *International Journal of Research Publication*, Volume 5, No.4 PP 161-168.

Dr. Taqadus Bashir, Zazish Azam, Arslan Ali Butt, Ayesha Tanvir (2013). Are behavior biases influence by demographic characteristic and personality characteristics? Evidence from Pakistan. *European scientific journal*, Volum 9, no.29 pp 277-293.

O.R.Krishana swami, M Raguanathem (2009). *Methodology of research in social science.* New Delhi: Himalaya publishing house.

Shabla Amiri, Nooredin Razavizade Gbolam Hosein vabidin (2013). The effect of interaction between demographic factors and personality traits and financial behavioural factors in terms of investment decision making. *AENSI Journal of applied science and Agriculture.* vol 8, issue 5. PP 721-728.

Zipporah Nyaboke Onsomu, Prof Erasmus Kaijage, Prof Josiah Aduda and Cryus Irayas (2017). Demographic and investor biases at the Nairobi securities exchange Kenya, *International Journal of Arts and Commerce,* Volume 6 No 5 PP 51-60.
