

Impact of Behavioural Biases on Investment Decision: With special Reference to Gwalior City**Ms. Swati Vishnoi, Research Scholar,****Jiwaji University, Gwalior****Abstract:**

Decision-making can be defined as the process of choosing a particular alternative from many available alternatives. Investment Decision is usually based on different factors one of them is behavioral factors. The study of Behaviour or psychology of investors while making investment decision is known as Behavioural finance. Behaviour Biases can be grouped into two factors they are heuristic and prospect, which are further categorized. Study aims to explore the factors which impact the investor decision making. For research 100 retail investors are targeted For data analyses SPSS 18 is used to know descriptive statistics and factor analysis.

Keywords: Behavioral finance, Investment Decision, Heuristic, Prospect

INTRODUCTION

Behavioural finance is the application of psychology to financial decision making and financial Market (Shefrin. H 2001). Investors decision making is based on cognitive illusion and they are grouped into two Heuristic decision process and Prospect Theory (Paul Tarak, 2010). Heuristics are simple efficient rules of the thumb which have been proposed to explain how people make decisions, come to judgments and solve problems, typically when facing complex problems or incomplete information. These rules work well under most circumstances, but in certain cases lead to systematic cognitive biases” (Daniel Kahneman), Parikh (2011) Prospect theory is second groups of illusions which may impact the decision process showed how people manage risk and uncertainty. They discussed several states of mind which may influence an investor’s decision making process. (Kahneman and Tversky 1979).

This study is considering only two behaviour biases they are Heuristic and Prospect. This table shows the behavior biases and their variable which is taken for the purpose of the research and in questionnaire each variable is described

Table No. 1

Behaviour Biases	Behaviour Variable
Heuristic	Representativeness
	Overconfidence
	Anchoring
	Gamblers Fallacy
	Availability Bias
Prospect	Loss Aversion
	Regret
	Mental Accounting
	Self-Control

LITERATURE REVIEW

Ritter R Jay (2003), provided with introduction of behavior finance and he concluded that there are two building blocks of behavioral finance are cognitive psychology (how people think) and the limits to arbitrage (when markets will be inefficient).

Vijaya, E. (2014) studied the factors which influence the retail investor's behaviour in Indian stock market. Factor analysis and Cronbach's Alpha was used to find out the determinants of individual investment behavior. The results shows that there are five behavioural factors influencing the investment decisions of individual investors in Indian stock market are Overconfidence, Anchoring, Loss Aversion, Herding and Market factors. Where Overconfidence has high impact and other variables of other factors have moderate impact on retail investors' investment decision in Indian stock market

Adoda et.al (2012) examined behavior and financial performance of individual investors in trading shares of companies listed at the Nairobi Stock Exchange, Kenya. Results shows that some investors exhibit rational behaviour in making their investment decisions. On the contrary, there were investors who were poised to realize negative results due to irrationality and herding behaviour.

Subhash Rahul (2010), analyzed the effects of the behavioural biases on the decision making process of portfolio investors in Kerala, The focus was on nine identified behavioural biases, namely: Overconfidence, Representativeness, Herding, Anchoring, Cognitive Dissonance, Regret Aversion, Gamblers' Fallacy, Mental Accounting and Hindsight Bias. Techniques like Discriminant Analysis, Weighted Scoring, and Chi-squared Tests were employed to analyze the data. the study investigated that the average individual investor participation in the Indian Stock Market was rational at all times.

OBJECTIVE OF THE STUDY

- To identify the major characteristics of the respondents which affect Investment Decision making.
- To study the impact of behavioral biases on the investment decision making.
- To analyze the authenticity/reliability of the collected data.
- To open vistas for further research.

HYPOTHESIS OF THE STUDY

H_{0a} : Behavioural Biases have no impacts on the investment decisions of individuals investors.

RESEARCH METHODOLOGY

The Study- The study is exploratory (Explanatory and descriptive) in nature.

Sample Design

Population- The populations for the study is investors from Gwalior

Sample Size- 100 Retail Investors.

Sampling Techniques – Purposive sampling technique and Stratified random sampling is used for the purpose of research

Data collection source: The study is based on primary data and data is collected by adaptive questionnaire.

Tools for Data Analysis - For the purpose of data analysis SPSS software is used to calculate

Descriptive analysis is used to understand the profile of the data.

Cronbach's Reliability coefficient is utilized to analyze the authenticity/Reliability of the collected data and correlation among the variable is assessed.

Factor Analysis was carried out to explore the factors which impact investment decision making

Result and Discussion

Sample data: The total sample of customers consisted by 200 responses Majority of the respondents were male 116 (63%) and it was followed by female respondents 84 (37). Age was categorize in 5 category. 22 (11%) respondents were in 18-25 years category, 80 (40%) were in 26-35 years category, 42 (21%) respondents were in 36-45, 26 (13%) respondents were under the 46-55 years category and 30 (15%) were above 55 years category. Investment Experience of the respondents shows 67 (33.5%) respondents were having experience for under five years, 115 (57.5%) respondents were experience from 5-10 years and 18 (9%) respondents were having experience for more than 10 years. Amount invested in the stock market shows 30 respondents (15%) have invested under Rs. 50,000. 66 (33%) respondents have invested Rs. 50,000-1,00,000. 40 respondents (20%) have invested Rs. 1,00,000-2,00,000. 24 (12%) respondents have invested Rs. 2,00,000 and 5,00,000. 34 (17%) respondents have invested Rs. 5,00,000- 10,00,000 and only 6 (3%) respondents have invested Rs. 10,00,000 and above.

Table -2 Sample Data Statistics

Characterstics	No.of Respondent	%
Gender		
Male	116	63
Female	84	37
	200	100
Age		
18-25	22	11
26-35	80	40
36-45	42	21
46-55	26	13
Over 55	30	15
	200	100
Investment Experience		
Under 5 Years	67	33.5
5-10 Years	115	57.5

Over 10 Years	18	9
	200	100
Amount of Investment		
Under 50000	30	15
50000-1 lakh	66	33
1 Lakh- 2 lakh	40	20
2Lakh- 5 lakh	24	12
5 Lakh-10 Lakh	34	17
Over 10 lakh	6	3
	200	100

Internal consistency of the data

Consistency of all the statements in the questionnaire was checked through item to total co-relation. All the items in the performance measure with their item to total co-relation are shown in the table 4.5.

Table 2: Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted	Status
VAR00001	40.4372	77.015	.635	.806	Accepted
VAR00002	40.0754	82.090	.575	.813	Accepted
VAR00003	40.2915	78.480	.629	.807	Accepted
VAR00004	39.7789	82.254	.478	.818	Accepted
VAR00005	39.9146	85.291	.363	.825	Accepted
VAR00006	40.0704	85.086	.375	.824	Accepted
VAR00007	39.7487	86.472	.298	.829	Accepted
VAR00008	39.9146	85.240	.311	.829	Accepted
VAR00009	39.8191	84.745	.359	.825	Accepted
VAR00010	39.9347	82.526	.464	.819	Accepted
VAR00011	39.9196	85.994	.322	.827	Accepted
VAR00012	39.8894	83.745	.459	.819	Accepted
VAR00013	39.8995	86.162	.297	.829	Accepted
VAR00014	40.2312	80.775	.509	.816	Accepted
VAR00015	40.0352	78.327	.659	.806	Accepted

Correlation value of the entire item in questionnaire is more than 0.8, that means all the items were consistent, relevant and accepted for the study. It indicate that all the questions used in the study were relevant and useful for the purpose of investigation

Table 3: Reliability Statistics

Cronbach's Alpha	N of Items
.830	15

From the above table, it is found that the calculated value of Cronbach's alpha .830 which is more than the standard value of Cronbach's alpha which is (0.7) Therefore it can be stated that this scale is useful for the further analysis.

Factor analysis

Factor analysis was calculated by using SPSS software, in this firstly all the data of the items was loaded in the SPSS software. Then correlation between these items was calculated. The total variance was calculated which gives the value of variance and cumulative. The total variance is explained in three ways i.e., first in the initial Eigen value, second were the extraction sum of square loading and the last was rotation sum of square loading and the rotation covered into six iteration.

Table 4: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.831
Bartlett's Test of Sphericity	Approx. Chi-Square	775.445
	df	105
	Sig.	.000

The KMO and Bartlett's test of Sphericity indicates that the data is suitable for factor analysis. The KMO measures the sampling adequacy and it should be greater than .5 for a satisfactory factor analysis to proceed. Looking at table above, the KMO measure is .901 which is significant at .0 per cent level of significance. This means the item to item correlation matrix was not an identity matrix.

Calculation of Factors

The factor are calculated with the help of total variance explained the final 2 factors which were calculated from the rotation sum of squared value loading which is the outcome of SPSS software.

1. Factor 1

This factor has emerged as the first important determinant of research with a total percentage of variance. This factor has received higher Eigen value of 2.975 with percentage value of variance of 27.058. The variable converged for normally able to predict the end of good or poor market returns (.523), prefer to buy local stocks than international stocks (.599), treat each element of my investment portfolio separately (.679), ignore the connection between different investment possibilities (.685), use tools to avoid losses and protect the investment (.597) and consider carefully the price changes of stocks that I want to invest in (.650), and cumulative % Eigen value is 27.058.

2. Factor 2

This factor has received second Highest value i.e. 1.957 with percentage value of variance Explained of 6.988 in this statement even statements were clubbed in this factor. The variable converged for buy popular stocks (.457), Other investor's decisions impact on my investment decisions (.627), Other investor's decisions of the stock volume have impact on my investment decisions (.645), Other investor's decisions of buying and selling stocks have impact on my investment decisions (.760), react quickly to the changes of other investor's decisions and follow their reactions to the stock market (.667), rate of return of my recent stock investment meets my expectation (.514) and the cumulative % is 34.045.

Conclusion: Impact of Behavioural biases on investment decision is one that considered attention in stock market. This study will help us to know various behavioural biases and its impact on investors' decision. Hence it is concluded that there is significant impact of behavioural factor on investors' decision. It is also found that no. of female are very less comparatively to male investors. Investors of age group 26-45 are more active than other age group. Major investors have investment experience of 5-10 yr followed by less than 5 year. Maximum amount investment of investors' in stock market lies between 50000-1 lakh . Result shows that investors of Gwalior city are very cautious about their investment. So it is suggested to invest by creating portfolio and investors should know various behavioural biases before investing.

Factor	Eigen Values			Variable Converged	Loadings
	Total	%Variance	%Cumulative		
1.	2.975	19.834	19.834	S4: I rely on my previous experiences in the market for my next investment.	.690
				S14: I ignore the connection between different investment possibilities.	.656
				S15: I use tools to avoid losses and protect the investment.	.585
				S6 - I am normally able to predict the end of good or poor market returns.	.549
				S2-I use past performance of some representative stocks to make investment decisions.	.540
				S7- I prefer to buy local stocks than international stocks .	.498
				S8- I take information from my close friends and relatives for my investment decisions	.472
	2.	2.971	19.605	19.438	S9- After a prior gain, I am more risk seeking than usual.
				S1- I buy popular stocks .	.538
				S11- I avoid selling shares that have decreased in value and readily sell shares that have increased in value.	.694
				S5- I forecast the changes in stock prices in the future based on the recent stock prices.	.645
				S10- After a prior loss, I become more risk averse.	.595
				S13- believe that my skills and knowledge of stock market can help me to outperform the stock market.	.700
				S12- I feel more sorrow about holding losing stocks long than about selling winning stocks soon.	.414

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