BEHAVIORAL FINANCE IN INDIVIDUAL INVESTORS' DECISION MAKING

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ABSTRACT

Investment Decisions is one of the most challenging areas of decision making in an individual's life. A best investment decision plays an active role in an individual's success story. While selecting a particular portfolio for investment, the investor should consider all factors including the level of risk which he can accommodate, the financial goals etc. Apart from these the investor should consider a fare return on his investment along with the return of his original investment.

Key Words: Behavioural finance, investor Behaviour

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INTRODUCTION

Behavioural finance is basically a study on the effect of psychology on an individual's decision making with respect to his investments in financial markets. The Area of behavioural finance is having significant importance since it heavily influences the performance of an investor. The theory of behavioural finance is having great impact on individuals decision making process because of the great influence on investors' performance. Knowledge of behavioural finance will help the investors to select a better investment instrument and thereby they can avoid the expensive mistakes in their future investment decisions. The science of behavioural finance makes an attempt to study and predict the systematic financial market implications of psychological decision process. Meantime it gives importance to psychological and economic principles for the improvement of the effect of financial decision making. It also deals with the behaviour of individuals and the ways in which they gather and use the informations.

Behavioural finance introduces the behavioural aspects and focuses on the application of psychological and economic principles for the betterment of individual's financial decision making process. Shefrin (2000) wrote a book on behavioural fiancé and Efficient Market Hypothesis titled "Beyond Greed and Fear" provides a nice introduction to behavioural finance. The key concept conveyed in it is that people are imperfect processors of information and are usually biased, commit mistakes and have perceptual problems. At present, no unified theory of behavioural finance exists. Shefrin and Statman (1994) began work in this direction, but so far, most emphasis in the literature has been on identifying behavioural decision making attributes that are having systematic effect on stock market behaviour. The paradigm of new finance, "Behavioural finance" is no more into much controversy as it was before. Now theorists have come to acknowledge the human behaviour and its impact on the decision making process and derivation of stock prices in the market

REVIEW OF LITERATURE

Determinants of Investor Behaviour

The in-depth interviews and secondary research identified 4 multi-items broad dimensions of investor behaviour that could have an impact on their investment decisions . These four dimensions of investment behavior are; ***Overconfidence*** may include- Specific skills, Stock Picking, Self- Control, Market Knowledge etc., ***Investor Optimism-*** incorporates keep invested, increased investment, price increase expectation, index recovery etc. , ***Investor Involvement*** comprises of Quick money, trade activity etc ***and Risk Preferences-*** familiarity bias, risk taking, stable returns, enjoyment from risk trades so on**,** that are further divided into different factors and respondents were asked to rate each factor. Overconfidence carries more than 50% weight, so it is the most prominent behavioral dimension that has greater impact in the formation of overall behavior of the investor while other three dimensions have relatively similar weights between 10 to 20 percent.

The behavioral dimension of **Overconfidence**:

This dimension is divided into four main factors. These four factors are measured with the help of four separate statements. In the overall dimension of overconfidence the most prominent factor is the confidence on specific skills that result in successful investment, as greater weights (approx 32%) are assigned to this factor, while on second rank there comes factor of self-control with approximate weights of 28%. On third rank is the stock picking ability with weights of 21.95% while on fourth rank there comes the factor of confidence on market knowledge with weights 17.48%.

The next behavioral dimension of **Optimism:**

Investors‟ determination to stay invested in the stock market is the most important behavioral factor that shows their optimism about stock market. This factor is assigned first rank with weights of 47.06%, while on second rank there comes investors expectations about an increase in the stock prices with weights of 20.20%. Investors are not found to be much interested in increasing their investments and not much hopeful about the recovery of the index if there comes a down fall. So these two factors are not much contributing towards the formation of optimistic behavior of the investor rather these two factors depict investors to be little pessimistic about the market so these factors (increasing investment and index recovery) are given third and fourth rank with 17.54% and 13.20% respectively.

In the third section of we studied the dimension of **Involvement**. Investors have the attitude of making quick money has the highest weights approximately 80% while trade activity is at second rank with weights of 20% approx.

Fourth section measures the fourth dimension of the investor behavior that is **risk preferences/attitude.** Investors have greater fear of un-known and uncertainty and to avoid it they make investments in the stocks of the companies they are familiar with. The factor of familiarity bias gets the highest rank among all four factors with weights of 38% approx. Second rank to the tendency of investing in stocks with stable returns with weights of about 28%. These two factors basically reveal the tendency of risk aversion of the investor. While the other two factors that are assigned with third (risk taking) and fourth (enjoying risky trade) measures the risk loving attitude of the investors. Investors are not risk loving rather the tendency of risk aversion is higher among the investors as compared to risk loving attitude. This shows that investors are risk averse not risk seeking or risk indifferent.

OBJECTIVES OFTHE STUDY

1) To study about the individual investors investment decision and their return pattern
2) To evaluate the determinants of investment behaviour of individual investors with respect to their investment decisions

3) Analyse the major behavioural traits such as Over Confidence, Trading Involvement, Optimism and Risk attitudes

4) To find the relationship between the dependent variables i.e. Risk Tolerance level, Over Confidence and Independent variables as Age, Gender of an individual investor on the basis of the survey

SCOPE OF THE STUDY

The study on Individual Investors' Behavior is an attempt to know the profile of the investor and also know the characteristics of the investors so as to know their preference with respect to their investments. The study also tries to unravel the influence of demographic factors like gender and age on risk tolerance level of the investor

SAMPLING DESIGN

The entire salaried class people in Ernakulam district in Kerala belonging to south India constituted the population in this study. The sample size was 80.Sampling technique used for this study is random sampling. Primary and secondary data were used for this research study. The sample units were selected from the existing investors in the Indian stock market.

DATA ANALYSIS AND INTERPRETATION

1. **Relationship between the Age and Attitude towards risk of the respondent**

Based on the review of literature it has been cleared that there exists a significant relationship between age group and risk attitude of the respondents. To study the relationship the following hypothesis has been tested.

Hypothesis (H1): A significant relationship is existing between the age group and the risk attitude of the respondent.

The hypothesis has been tested using the following regression model

$Y = \alpha + \beta_1 X_1 + \varepsilon$

Where, Y- Risk Attitude (dependent variable)

α =Constant

β_1 =Coefficient of independent variable

X_1 = Age Group (independent variable)

ε = Regression Residual

The findings from the regression analysis are shown in the following tables.

1.1) Table showing the model summary of relationship between Age group and Risk Attitude

Model Summary

Model	R	R Square	Adjusted R square	Std . Error of Estimate
Dimension 1	.428	0.183	0.173	0.987

Predictors: (Constant), Age group

It is found that the Coefficient of correlation[R] between current position of an individual and investing is 0. 428 . Hence there is a moderate correlation between these two variables. The R^2 value is 0. 183. Hence it is inferred that 1.83% of the variation in risk attitude is explained by the age group. The results of regression test are presented in the above table.

1.2) Table showing the regression result of relationship between Age Group and Risk Attitude

ANOVA

Model	Sum of Squares	df	Mean Square	F	Sig.
Regression	17.024	1	17.024	17.480	.000
Residual	75.963	78	.974		
Total	92.987	79			

Predictors; (Constant), Age group

a. Dependent Variable : Risk Attitude

Coefficents

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error			
(Constant)	1.263	.341		3.704	.000
Age group	.459	.110	.428	4.181	.000

a. Dependent Variable : Risk Attitude

T – Value arrived from regression test is 4.181 and its significance level is .000 which is less than 0.05 (since it is 95% confidence level). As $p < 0.05$, the null hypothesis is rejected. Hence it is concluded that there is a significant relationship between Age Group and Risk Attitude.

2. Relationship between Gender and Over-Confidence

Based on literature review it can be assumed that there is a significant relationship between the Gender and the level of Over Confidence. This relationship has been tested with the following hypothesis.

Hypothesis (H2). Significant relationship is existing between gender and the level of overconfidence.

The above hypothesis has been tested using the following model

$Y= \alpha + \beta_1 X_1 + \varepsilon$

Where, Y- Over- Confidence (dependent variable)

α =Constant

β_1 =Coefficient of independent variable

X_1 = Gender (independent variable)

ε = Regression Residual

The results of the regression analysis are consolidated in the following tables.

2.1) Table showing model summary of relationship between gender and over- confidence.

Model Summary

Model	R	R Square	Adjusted R Square	Std. error of Estimate
1	.578	.334	.327	.30962

a. Predictors : (Constant), Gender

The coefficient of correlation is 0.578. Hence there is a moderate correlation between these variables. The R square value is 0.334 , hence it is inferred that 3.34 % of variation in over confidence is explained by the gender. The results of regression test are as follows;

2.2) Table showing regression results of relationship between Gender and level of Overconfidence

ANOVA

Model	Sum of squares	Df	Mean Square	F	Sig.
Regression Residual Total	4.715 9.395 14.110	1 98 99	4..715 .096	49.187	.000

a. Predictors ; (Constant), Gender

b. Dependent Variable : Over Confidence

Coefficients

Model	Unstandardized Coeffeciencts		Standardized Coefficients	T	Sig.
(Constant)	.553	.093		5.922	.000
Gender	.447	.064	.578	7.013	.000

T – Value arrived from regression test is 7.013 and its significance level is .000 which is less than 0.05, hence the null hypothesis is rejected. Therefore it is concluded that there is a significant relationship is existing among gender and the level of overconfidence.

3. **Evaluation of relationship of Age Group and Investment Objectives of the respondent**.

On the basis of literature review it has been assumed that there is a significant relationship is existing between age group and investment objective of the respondent. To study this following hypothesis has been tested.

Hypothesis (H3): Significant relationship is existing between age group and investment objective of the respondent.

Table 3.1) Cross Tabulation Table

Chi – Square test

	Value	df	Asymp. Sig (2 sided)
Persons' Chi-Square	179.475	9	.000
Likelihood Ratio	164.927	9	.000
Linear –by-Linear Association	69.852 80	1	.000
N of Valid Cases			

Here significance level is 0.00 < 0.05, so the null hypothesis is rejected. Therefore there is a significant relationship between age group and investment objective of the respondent.

4. **Relationship between the gender and risk attitude of the respondent**.

Following hypothesis has been tested to study the relationship

Hypothesis (H4): There is a significant relationship between gender and risk attitude of the respondent.

4.1) Cross tabulation table

Chi – Square test

	Value	df	Asymp. Sig (2 sided)
Pearsons Chi-Square Likelihood Ratio Linear –by-Linear Association N of Valid Cases	33.311 36.803 5.409 80	4 4 1	.000 .000 .000

Here the significance level is 0.05, so the null hypothesis is rejected. Thus there is significant relationship between gender and risk attitude of the respondent

CONCLUSION

- Gender is having behavioural implication since it affects the attitude of the investors. 82 % of the investors are men and the rest 18 % are females. Females adopt more conservative behaviour are being risk averse while investing in stock market
- Age accounts for the major differences in risk taking decisions by the investors. 36 % of the respondents are above 50 years. 11 % of the respondents in the age limit of 20 to 30 and 20 % of them are in the age group of of 30 to 40 . Brokers are having the opinion that the older an investor, the better seemed his performance in comparison to younger ones.
- 44 percent expect 25 -50 percentage of returns from their investments on yearly basis. 21 % of the investors expect only less than 25 percentage from their investments. Investors prefer low return stocks when the risk attached with them is low and high risk stocks are selected if risk premium associate with risk level is offered. The individual investor prefers to invest in financial products which give risk free returns.

- Respondents show indication of herd mentality since approximately 22 % of the respondents would be affected of the actions of colleagues, family and friends.
- The e study reveals that behavioural dimensions have greater impact on the overall decision making process of an individual investor.
- From the Regression analysis and ANOVA test of the data it is found that Individual investors have high level of involvement and overconfidence while they are not much optimistic about the future outlook of market moreover they have been found to have an aversion to risk. Investors rather seemed to be pessimistic. One possible reason can be the dismal market conditions at the time the responses were taken.
- **Fr**om the analysis of hypothesis 1 it is clear that there is a relation among age of the respondent and attitude towards risk. The correlation (R) between dependent and independent variable is 0.428.
- From the analysis of hypothesis2 it is clear that there is a correlation between the Gender and over-confidence means Overconfidence in individual investors leads to in trading too much, with the belief that stocks that they themselves hold will perform better than others.
- Analysis of hypothesis 3 reveals that significant relationship is existing between the age of the investor and investment objective**.**
- From the analysis of hypothesis 4 it is clear that there is a correlation between the Gender and Risk Attitude. Majority of investors are risk averse who do not prefer making riskier investments. Rather they prefer investing in familiar companies that give stable returns even if lower.
- Overconfidence carries more than 50% weight, so it is the most prominent behavioral dimension that has greater impact in the formation of overall behavior of the investor while other three dimensions have relatively similar weights between 10 to 20 percent. Investors are confident that have complete knowledge of market particularly those investors who have many years of investment experience
- The theory of behavioural finance plays an important role in investor's decision making process. The volatility and anomalies is significantly affected by behavioural factors. Hence investors should take necessary steps to minimize or avoid illusions for influencing in their decision making process, investment decisions in particular.

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