Interpreting the Behaviour of Investors on Their Expected Returns

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Abstract

The present study is an attempt to discuss the behavior of the investor, and the relationship between the clients and the financial advisor. The study aims at understanding and interpreting the behavior of working employees of private and public sector on their investment decisions. Such knowledge will be highly useful for financial advisors as it will help them to advise their clients regarding investments that will maximize their expected rate of return. The study shows that how an investment is chosen on the basis of expected rate of return gets affected by demographic variables, which helps to advise the clients better. The clients on the other hand, are being advised to make investment that suits their profile. The present study expects to improve the mutual trust between the advisor and his clients.

***Key words:** Investors, Investment, Rate of return, Real investment.*

Introduction

The term "investment" is used differently in economics and finance. Economists refer to a real investment, while financial economists refer to a financial asset, such as money that is put into a bank or the market, which may then be used to buy a real asset. These financial investments include shares, other equity investment, and bonds (including bonds denominated in foreign currencies) are then expected to provide income or positive future cash flows, and may increase or decrease in value giving the investor capital gains or losses. Since the late 1950s, research models in finance were influenced by the seminal work of Modigliani and Miller (1958), which stressed that, under perfect capital market setting; financial decisions had little bearing on the investment decision of firms. This has been challenged by theoretical and empirical studies since the mid-1970s, which produced results inconsistent with studies based on Modigliani and Miller propositions (Gertler, 1988; Stiglitz, 1988; Fazzari, 1992; Fazzari and Athey, 1987; Fazzari and Variato, 1994). These studies focused on how human beings should make their decisions but not on how they make their decisions. It can be said that the questions about how people in general and investors in particular make their decisions is a subject matter of behavioral psychology (Peters, 1996). The aversion of the traditional approach to understand and explain the decision processes of

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the investors was the main reason to trigger the emergence of behavioral finance as an approach which tries to identify and understand the meaning of psychological decision processes for financial markets (Ricciardi and Simon, 2000). The main approach of behavioral finance is that the investors are not rational and they are under influence, as opposed to traditional finance (Matthew, 1998). Therefore, it highlights the need of new approach which does not neglect the decision processes of the investors. The main concepts of behavioral finance can be classified into four groups: Expectations theory, Regret Aversion, Over- Confidence and Cognitive-Dissonance. Based on these concepts, this study presents and the results of a survey aimed at understanding and interpreting the behavior of working employees of private and public sector on their investment decisions. Such knowledge will be highly useful for financial advisors as it will help them to advise their clients regarding investments that will maximize their expected rate of return. The paper is organized as follows. In Section 2, literature pertaining to investors and financial advisor is reviewed. Section 3 provides the objectives and methodology of the study, while Section 4 delineates analysis and interpretation of the data and results. Finally, Section 5 highlights the summary, conclusion and limitations of the study.

Review of Literature

The wide variety of literatures both of academic and non-academic nature are available on the different aspects of the topic discussed in the paper. However, only few major literatures have been covered here to provide a comprehensive idea about the research trends on the different dimensions of current research. Investors' trading activity is often associated with price impacts in general and volatility of stock prices in particular.

Chan and Lakonishok (1995) find that less patient asset managers with higher turnover rates incur larger price impacts. The traditional explanations for the volume-volatility relation are a mixture of distribution hypothesis (Epps and Epps, 1976 and Harris, 1986), asymmetric information (Admati and Pfleider, 1988) and differences in opinion (Varian, 1985; Harris and Raviv, 1993).

Ippolito (1992) and Bogle(1992) have reported that fund selection by investors is based on past performance of the funds, and money flows into winning funds. Harlow and Brown (1990) found that women tend to take less risk than men in case of investment. Women are less likely to invest in riskier but high return assets tham men(McDonald, 1997). Recent studies yield that males and females are equally succesful in taking decisions under condition of risk (Charness and Gneezy, 2004).

Many studies have found similar level of performance for women-owned business as those which are owned by men (Kalleberg and Leicht, 1991). Schubert (2000) in his study found that women are more risk averse than men in domain of gain, while men are more risk averse than women in the frame of loss domain. Women fund managers hold portfoloios which are marginally riskier than those onf men, and their returns also outperform those of men (Bliss and Potter, 2001).

Review of literature also suggests that there are certain other factors like risk tolerance (Riley and Chow, 1992), aversion to realized lossess (Fama and French, 1992), investors confusion (Shefrin and Statman, 1995) also affect individual's investment decision.

Objectives of the Study

The study has the following objectives:

- To analyze the profile of the salaried class investors.
- To analyze the expected rate of return on their investment.
- To analyze the significance difference among the age groups in the average expected rate of return on their investment.
- To analyze the significance difference between male and female investors in the expected rate of return on there investment.
- To analyze the difference among the educational qualification in the average expected rate of return on their investment.
- To analyze the significant difference among the monthly income groups in the average expected rate of return on their investments.
- To analyze the significant difference among the monthly investments in the average expected rate of return on their investments.
- To analyze the significant difference between public and private sector investors in the expected rate of return on there investment.

Research Methodology

This section deals with the testing of hypothesis by using appropriate statistical tools. For the purpose of analyzing responses gathered data we have employed *SPSS (15.0)* for Windows. The study employs primary data collected by communicating with the respondents with the help of a structured questionnaire. The data was collected on a combination of simple random and judgment sample of 150 educated and salaried class individual investors. The survey was conducted during December 2007 to February 2008 in Delhi and NCR. The Statistical tool used in the study is *ANOVA* and *t - test*.

Result & Analysis

This section deals with testing of hypothesis by using appropriate statistical tools. The total numbers of responses were 150. Out of 150 respondents 127 (84.7%) were males and 23 (15.3%) were females. Education - wise, 15 were graduates, 106 post graduates and 29 professionals. Profession - wise, 27 (18%) work in public sector and 123 (82%) working in private sector. Working Labels - wise, 3 (2%) at clerical label, 88 (58.7%) at managerial label, 38 (25.3%) are professionals, 6 (4%) teachers and 15 (10%) were others. Income - wise, 32 (21.3%) were in the income group of Rs.5000 – Rs.10000 monthly, 67 (44.7%) were in the monthly income group of Rs.10000 - Rs.20000 and 51 (34%) were in the monthly income group of Rs.20000 and above. Table 1 below gives summary of the demographic details of the respondents.

Table 1: Demographic Profile of the Respondents

	Number	Percentage (%)
Gender		
Male	127	84.7
Female	23	15.3
Education		
Graduates	15	10
Post Grduates	106	70.7
Professionals	29	19.3
Working Label		

Clerical	3	2
Managerial	88	58.7
Professional	38	25.3
Teachers	6	4
Others	15	10
Monthly Income		
Rs. 5000- Rs. 10,000	32	21.3
Rs. 10,000- Rs. 20,000	67	44.7
Above Rs. 20,000	51	34
Age (in Years)		
21-30	72	48
31-40	23	15.3
41-50	34	22.7
Above 50	21	14

The respodents were asked to give their choice of investments for various investment avenues, monthly amount invested and their expected rate of return are presented in Table 2.

Table 2: Investment Decision

	Number	Percentage (%)
Investment Choice		
Insurance	30	20
Stock Market	57	38
Mutual Fund	34	23
Post Office	6	4
Bank Deposit	15	10
Others	8	5
Monthly Amount Invested		
Below Rs. 3000	54	36
Rs.3000-Rs. 6000	73	49
Rs.6000-Rs.9000	14	9
Above Rs.9000	9	6
Expected Rate of Return		
Below 9 %	18	12
9-10 %	25	17
11-12%	31	21
13-14 %	41	27
15% and Above	35	23

The result reveals that maximum investors are likely to invest in Stock Market and Mutual Fund. The result also shows that 48.7% investors are investing Rs.3000- Rs 6000 to increase their earnings with an expected return between 9% to 12%.

Age and Expected Rate of Return
Age of investors influence the investors to expect a particular rate of return. The role of age of investors with respect to expected rate of return was analysed and the relevant particulars are presented in the Table 3 and 4.

Table 3: Age and Expected Rate of Return

Age	Return					Total
	Below 9%	9 – 10%	11 - 12%	13 - 14%	15% & above	
21 - 30	12	9	3	22	26	72
31 - 40	0	7	13	0	3	23
41 - 50	0	9	0	19	6	34
above 51	6	0	15	0	0	21
Total	18	25	31	41	35	150

H_0: there is no significance difference among the age groups in the average expected rate of return on their investment.

H_1: there is a significance difference among the age groups in the average expected rate of return on their investment.

Table 4: ANOVA

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	3.822	3	1.274	.797	.08
Within Groups	233.517	146	1.599		
Total	237.339	149			

One way ANOVA is applied to find whether there is any significance difference among the age group in the average expected rate of return on investment. The ANOVA result shows that the calculated F ratio value is 0.797 and significance is .08 which is greater than the p-value of 0.05, and hence the hypothesis is accepted. Hence there is no significance difference among the age groups in the average expected rate of return on their investment.

Gender and Expected Rate of Return
Gender influences the expected rate of return. A general opiniobn is that men expect a higher return then women. An analysis is made to find out whether the men and women show any significant association in expected treturn on investment in the Table 5.

Table 5: Gender and Expected Rate of Return

		Return					Total
		Below 9%	9 – 10%	11 - 12%	13 - 14%	15% & Above	
Gender	**Male**	12	22	23	41	29	127
	Female	6	3	8	0	6	23
Total		18	25	31	41	35	150

From the above table it is ascertained that 18 percent male and 34 percent female investors expected 11-12 percent of return on their investment and 22.8 percent male and 26 percent females expect rate of return above 15 percent. The t test is applied to find whether there is significant difference betwwen males and females in their expected rate of return. The calculated t value is .845, which is less than the table value of 1.96 at 5% level of significance. Since, the calculated value is less than the table value it is concluded that there is no significant difference between the males and females in the expected rate of return on their investments.

Education and Expected Rate of Return

To test whether education level affects the expected rate of return in making choice of investments, ANOVA is applied. The results of the test are given in Tables 6 and 7. The result shows that the calculated F ratio value is .266 and significance is .531 which is greater than the tabulated value of .05 and hence the hypothesis is accepted. Hence there is no difference among the educational qualification and the average expected rate of return on their investment of an investor.

Table 6: Education and Expected Rate of Return

		Return					Total
		below 9%	9 - 10%	11 - 12%	13 - 14%	above 15%	
Education	Graduate	6	3	3	3	0	15
	Post - graduate	12	16	20	38	20	106
	Professional	0	6	8	0	15	29
Total		18	25	31	41	35	150

Table 7: ANOVA

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	.850	2	.425	.266	.531
Within Groups	234.915	147	1.598		
Total	235.765	149			

Monthly Income and Expected Rate of Return

To test whether Monthly Income affects the expected rate of return, ANOVA is applied. The results of the test are given in Table 8 and 9. The results show that that the calculated F ratio value is 0.600 and significance is .550 which is greater than p value of .05 so the hypothesis is accepted. Hence there is no significant difference among the monthly income groups in the average expected rate of return on their investments.

Table 8: Monthly Income and Expected Rate of Return

		Return					Total
		Below 9%	9 - 10%	11 - 12%	13 - 14%	Above 15%	
Income	10 000 - 15 000	0	0	26	6	0	32
	15 000 - 20 000	12	12	0	19	24	67
	Above 20 000	6	13	5	16	11	51
Total		18	25	31	41	35	150

Table 9: ANOVA

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	2.115	2	1.058	.600	.550
Within Groups	259.218	147	1.763		
Total	261.333	149			

Monthly Investment and Expected Rate of Return

To test whether Monthly Investment affects the expected rate of return, ANOVA is applied. The results of the test are given in Table 10 and 11. The result shows that the calculated F ratio value is.106 and significance is .125 which is greater than the tabulated value of .05 and hence the hypothesis is accepted. Hence, there is no significant difference among the monthly investments in the average expected rate of return on their investments.

Table 10: Monthly Investment and Expected Rate of Return

		Return					Total
		below 9%	9 – 10%	11- 12%	13 - 14%	Above 15%	
Investment	below 3000	6	3	8	16	21	54
	3000 - 6000	12	13	15	22	11	73
	6000 - 9000	0	6	8	0	0	14
	above 9000	0	3	0	3	3	9
Total		18	25	31	41	35	150

Table 11: ANOVA

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	.516	3	.172	.106	.125
Within Groups	236.517	146	1.620		
Total	237.033	149			

Working Sector and Expected Rate of Return
To test whether working sector affects the expected rate of return, ANOVA is applied. The results of the test are given in Table 12 and 13. The results show that the calculated F - ratio value is.659and significance is 0.564 which is greater than the tabulated value of .05 and hence the hypothesis is accepted. Hence, there is no significant difference among the monthly investments in the average expected rate of return on their investments.

Table 12: Working Sector and Expected Rate of Return

		Return					Total
		below 9%	9 - 10%	11- 12%	13 - 14%	above 15%	
Working Sector	**Public**	12	12	0	3	0	27
	Private	6	13	31	38	35	123
Total		18	25	31	41	35	150

Table 13: ANOVA

	Sum of Squares	DF	Mean Square	F	Sig.
Between Groups	2.324	2	1.162	.659	.564
Within Groups	259.218	147	1.763		
Total	261.542	149			

Conclusion

As the data suggests people who mostly invest in the market are service class person who don't have enough time to keep continuous watch on the market fluctuation, they need regular assistance from their relationship manager who is assigned to them. Therefore, every company is suggested to enforce their relationship managers to stay in contact with their clients. There is no significance difference among the age groups in the average expected rate of return on their investment. Furthermore, there is no significance difference between male and female investors in the expected rate of return on there investment. There is no difference among the educational qualification in the average expected rate of return on their investment. Moreover, there is a significant difference among the monthly income groups in

the average expected rate of return on their investments. There is no significant difference among the monthly investments in the average expected rate of return on their investments. There is no significance difference between government and private sector investors in the expected rate of return on their investment. The study has a special relevance for the financial advisors and consultants. The insight of how an investment is chosen on the basis of expected rate of return gets affected by demographic variables, which helps to advise the clients better. The clients on the other hand, are being advised to make investment that suits their profile. The present study expected to improve the mutual trust between the advisor and his clients. In spite of the bleak and grim outlook, the future of capital market it is growing at a very high pace. Taking this things into consideration there are lots of opportunity for the broker house which already exist and which are ready to enter into the Indian capital market. There is little awareness regarding equity and mutual funds among the Indian investors. As people entered in this particular investment avenue they lost there money due to fluctuations in the market which is below the par value and consequently this has shaken the faith of investor in this particular avenue. In addition to these factors, there are some other factors such as poor performance of different sectors and the regular scams happening in the capital, which reduces the faith in Indian capital market. Once the investor know about the benefit offered by it, capital market will become one the sought after investment avenue. It is however emphasized that the capital market should have a strong marketing strategy to avail the quick service and forms availability to the investors in a short notice rather keeping the traditional base of marketing which is a price sensitive. Besides these facts, the study reveals that most of the respondents in this study are male who have invested their money in the market and expected for better returns as the Indian capital market is still a male dominated sector.

However, the present study is not free from *limitations*. First, the sample size is limited to 150 educated and salaried class individual investors in Delhi and NCR, which may not adequately represent the national market. Second, we have undertaken the random sampling and judgment sampling technique due to time and financial constraints. Finally, the study does not consider movements of stock market which has an impact in investor's decision.

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