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Analysis

Knowledge Levels of Mutual Fund Investors

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Abstract

As an anonymous saying goes "Knowledge is one factor of production that does not give diminishing returns". When this is extended to the knowledge of the investors it can be presumed that with increased level of knowledge the investors would derive maximum utility only when they use the acquired knowledge by experimenting with innovative and risky investment opportunities. But the level of knowledge – high or low will in turn affect the risk perception of an investor or it may be vice versa i.e. the low or high risk appetite may be due the levels of knowledge. With this background the researcher in the present study makes an attempt to understand knowledge (limited to mutual fund investments) of respondents and find if there exists any relationship between risk and knowledge.

Key words: Risk Perception, Knowledge levels, Mutual Fund Investors, Mutual Funds.

Introduction

Knowledge is one factor of production that does not give diminishing returns. When this is extended to the knowledge of the investors it can be presumed that with increased level of

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knowledge the investors would derive maximum utility only when they use the acquired knowledge by experimenting with innovative and risky investment opportunities. The knowledge of simple facts/information or complex/strategic information relating to mutual funds could influence the risk perception of an investor in the process of investment decision. Management's preannouncement decision and subsequent reports on actual earnings is treated as an antecedent to trustworthiness judgements about management by the stakeholders (Cianci and Kaplan, 2008), which in turn affects risk perception of the non professional investor depending upon the magnitude and direction of the preannouncement. This knowledge shared with the stakeholders will affect other related investment decisions of non professional investors.

Many of the investors perceive firms having good ranking to perform well and are of the opinion that the investments in those firms carry less risk. On the contrary, firms that are rated high in the rankings do not generate abnormal excessive returns and have higher risk than their peers in both pre ranking and post ranking periods, suggesting that funds which receive ranking may be risk takers (Detzler, 2002) and if the individual investor makes an attempt to gain knowledge about mutual fund and its rankings, it may lead to a different conclusion on risk regarding investment.

Indian investors may be considered to be least informed investors as majority of investors delegate their investment management to fund managers. This may impact the mutual fund flows as it is affected by unsophisticated investor sentiment. There may be a problem of knowledge acquisition as Grossman (1976) and Grossman and Stiglitz (1980) argue that rational investors take measures to become informed only when marginal benefits of becoming informed exceed the marginal costs (as quoted in Indro, 2004). Researches have reported a statistically significant and positive correlation between risk tolerance and individual's financial knowledge about personal finance issues such as investment alternatives available (Van de Venter, 2006). Financial literacy of individual investors also contributes towards understanding risk perception of investors (Rooij, Lusardi and Alessie, 2007). Investor has more confidence on his own judgement about an investment only when he considers himself more knowledgeable or competent (Karlsson and Norden, 2008). In this direction the researcher has made an attempt to

1. Evaluate the knowledge levels of the respondents regarding mutual fund investments.
2. To analyze the demographic variables (age, gender, qualification and income) in relation to knowledge levels of mutual funds.

3. To establish whether there exists any association between knowledge level and risk perceived by the investors.

Review of Literature

Wilcox (2003), in the paper ***"Bargain hunting or Star gazing? Investors' Preferences for Stock Mutual Funds"*** has studied the responses of 50 participants who were presented profiles of different stock mutual funds and asked to select their most preferred fund. Using choice-based conjoint analysis, the author estimated the utility generated by the different levels of each attribute. The study concluded that investors are much more attentive to the past performance of a fund. When evaluating a fund's overall fee structure, consumers vastly overweight loads relative to expense ratios. The study indicates that the men, who were wealthier and highly educated, had good knowledge on finance related topics were able to hold complex portfolios.

Van de Venter (2006) in the research work titled ***"Financial Planners' Perceptions of Risk Tolerance"*** examined eighteen academic studies to understand the factors influencing risk tolerance. The author identified thirteen factors and constituted it in a questionnaire. The questionnaire was administered to 406 registered Australian financial planners. The study found that there was difference in risk tolerance on

individual factors like women, older individuals, large family households, people not owning residential property, low wealth individuals, individuals with externalities as locus of control and individuals with low knowledge of finance and investment were risk averse. On the other hand factors like marital status, occupation and level of education gave inconsistent results on risk tolerance levels.

The authors **Rooij, Lusardi and Alessie (2007),** in the paper ***"Financial Literacy and Stock Market Participation***" have used the data of 2005 DNB Household Survey covering information about demographic and economic characteristics with focus on wealth and saving data. The research was conducted by administering a questionnaire to test the level of financial literacy of the Dutch population using internet resources. The research results were established using regression analysis and it was found that financial literacy of peers affected stock market participation as the respondents having social association was more likely to participate in the stock market; self assessed economic literacy is also a factor; knowledge of finance and cognitive ability affects risk taking attitude of the investor; and finally understanding economics and finance is a major determinant of stock ownership.

Al-Ajmi (2008) in the paper titled ***"Risk Tolerance of Individual Investors in an Emerging Market"***, has analyzed

the risk perception of investor by administration of Questionnaires to a sample of 1500 individual investors in Bahrain. The findings of the study indicate that as investors, men have high propensity towards risk tolerance than women: Investors with better level of education and wealth are more likely to seek risk: Risk tolerance declines with increased financial commitments and increasing age. Another important finding of the study was low risk tolerance level of citizens of Bahrainis in comparison with non-Bahrainis.

Martenson (2008) in the paper titled ***"Are Men better investors than Women? - Gender Differences in Mutual Fund and Pension Investments"*** reflects how women are financially vulnerable after their retirement. The study was conducted on the representative sample of consumers in Sweden to understand their choice of investment of their retirement money in share funds/ mutual funds, mixed funds and interest bearing funds. The study analyzed the choices made by the Swedish population during the years 2002-2005. From the review of literature done in the paper it is apparent, women in general exhibited low confidence, lack of financial knowledge, low motivation to invest, have a risk averse attitude, low risk propensity in the case of financial decision making and the study done by the author also confirmed the same. The study reveals that women consider the investing

activity to be masculine area. Men are more profit-oriented and more motivated to make financial investments rather than women.

Karlsson and Norden (2008), in the research study titled ***"Investor Competence, Information and Investment Activity"*** investigate the link existing between individual investors' perceived competence and their decisions to make active investment choices. The study is based on a sample of 1083 scheme investors between the age group 20 to 62 selected as representative population representing Sweden. The authors analysed the empirical results on basis of individual's perceived competence and information processing for investment activity, information usage. The findings of the study revealed that there was a positive relationship between investment activity, perceived competence and information processing. In other words, individual investors were more confident in active management of pension funds when they became familiar with the information relating to the funds.

Alexander, Jones and Nigro (2009) have analysed the responses of 2000 randomly selected mutual fund investors to understand their characteristics, knowledge of risk, expenses and performance related to mutual fund investments and sources of information used for making investment decision

in the research work titled ***" Mutual Fund Shareholders: Characteristics, Investor Knowledge, And Sources Of Information"***. A multivariate analysis was made using Logit model. The findings of the study are: The typical mutual fund investor surveyed is older, wealthier, and better educated than the average American. Investor knowledge of the expenses and risks associated with mutual funds can be improved. Although the average fund shareholder has invested in funds for several years, most fund shareholders do not appear to appreciate the relationship between fund expenses and performance. Although broker and direct fund company purchasers are relatively more knowledgeable about the costs and risks of mutual fund investments than fund company purchasers who did not use brokers and did not purchase directly, it is likely that investors self-select the various distribution channels.

The review of literature confirms there is an association between knowledge and risk perceived. Very few researches have evaluated the knowledge level of the investor. The present study attempts to fill in the gap.

Research Methodology

The population for this research includes mutual fund investors in the city of Visakhapatnam, Andhra Pradesh. The

primary data from the respondents has been collected during February 2009 to May 2009. The unit of observation and analysis of survey is only among Individual Investors whose definition is “An Individual who has currently invested in any Mutual Funds and this does not include high net worth individuals (i.e., those who earn above Rs. 10, 00,000/- per annum) and institutions. The sample size in study consists of 436 respondents who are mutual fund investors in the city of Visakhapatnam. The present research uses random sampling at point of purchase of mutual funds like banks and broking agencies. As perceptions regarding investments are highly vulnerable to changes in market conditions, the researcher felt the need to accelerate the collection of Questionnaires by adoption of another method called snowball sampling were the respondents at point of purchase and acquaintances of researcher were requested to provide referrals.

The limitations of the study are:

1. The data is limited to the city of Visakhapatnam and the results therefore cannot be generalized.
2. The study is not exhaustive as it does not provide scope for any opinion to be collected outside the scale.
3. The results cannot be used as a standard or a measure as they are restricted only to the opinions of respondents

4. The study is opinion based, the results may have inherent bias as opinions are highly personal.

Analysis of Knowledge Levels

Categorisation of Knowledge Levels of Mutual Fund Investors

The researcher had assigned 6 statements on mutual fund plans and 7 statements on terms related to mutual fund investments in the questionnaire to examine the knowledge levels of the respondents. The respondents were asked to rate their responses on the basis of how close they agree to the statements. The answers were on a three point scale where 3 meaning “Yes”; 2 meaning “Doubtful” and 1 meaning “No”. The responses of the respondents were evaluated in the following manner. Every right answer carried one mark and wrong or doubtful answers carried zero mark. The correct marks gained by every respondent were then converted in to percentages. The assignment of marks was done with an intention to arrive at a standard evaluation pattern in order to understand the percentage level of knowledge of respondents which will enable the researcher to make accurate conclusions. The results were interpreted on the basis of the following classification.

Level I: 0-20%: Very poor awareness levels.

Level II: 20-40%: Poor awareness levels.

Level III: 40-60 %: Average awareness levels.

Level IV: 60-80%: High awareness levels.

Level V: 80-100%: Very high awareness levels**.**

Every statement was evaluated for correct answer and the number of respondents answering correctly to each and every statement was then converted to a percentage by the following formula:

$$\% \text{ respondents aware of “A”} = \frac{\text{Number respondents answering correctly to “A”}}{\text{Total Number of respondents}} \times 100$$

“A” means statement given for testing awareness

The responses when tabulated yielded the following results:

Table 1: Knowledge Of Sample Respondents Regarding Mutual Fund Plans

Sl. No.	Statements	N*	Level of Awareness	Percentage of respondents
1.	Income schemes give safety & regular income	122	2	27.98
2.	Growth funds have higher risk than income scheme	121	2	27.75

3.	Balanced fund has medium risk & return	187	3	42.89
4.	Money market mutual fund: Is safest option during recession	93	2	21.33
5.	Debt funds invest in risky assets	141	2	32.34
6.	Index funds: Work on basis of Nifty/Sensex	161	2	36.93

* N denotes the number of respondents who have given the correct answer of the total respondents

On an individual analysis of statements from table no 1 it is evident that sample investors have average awareness level (Level III) regarding balanced funds with 43% of the sample responding positive for the statement. All the other plans have scored poor awareness level with the percentage of respondents giving a right answer ranging between 21-36%. The researcher feels that the investors might be considering balanced fund as a best alternative and a popular plan for investment as the plan has lower risk attached.

The next awareness levels are found to be in the area of index funds which work on the basis of Nifty/SENSEX This finding is surprising as it does not coincide with the other studies of Karmarkar (2001) and Ganesan, Rengamani and Sajjad

(2006)-preferred avenues to invest was Life Insurance Corporation of India; Qamar (2003) and SEBI-NCAER survey (2000) – preferred investment choice was Bank Deposits; Sinha (2006) - preference for insurance schemes. Here it may be inferred that though the investors prefer investments that are apparently safe they still entertain slight interest in mechanisations of capital market. Thus, indicating the possibility of a shift in their investment pattern triggered by their interest given the appropriate personal and market variables. Another possible reason for very low awareness levels as is revealed in the present study is that 62 % of the respondents depend upon professional advice for management of their investments. This may indicate that the respondents follow the professional advice and do not take measures to understand the intricacies of knowledge related to the plans offered.

Table 2: Knowledge Regarding Terms Related to Mutual Funds

Sl. No.	Statement	N*	Percentage of respondents
1.	NAV is the market value of a fund share	176	40.37

2.	sale price and NAV are same	129	29.59
3.	Mutual funds are not stocks	171	39.22
4.	when investor takes back his investment from mutual fund is redemption	122	27.98
5.	sale charges of mutual funds are loading charges	74	16.97
6.	open ended funds can be sold any time	363	83.26
7.	closed ended have minimum lock in period	253	58.03

* N denotes the number of respondents who have given the correct answer of the total respondents.

Table 3: Preference of Schemes Given by Repondents.

Sl. No.	Structure	Number	Percentage
1.	Open ended	261	59.9
2.	Closed ended	175	40.1

The integrated analysis of the table no 2 and 3 indicates that the sample investors have exhibited excellent understanding of open ended schemes with 83% of respondents aware of the scheme and 58% of the respondents showing preference to invest in such schemes.

Table 4: Preferred Savings Avenue

S.No	Preferred savings instruments	Weighted Average score
1.	Cash/Bank savings	3.406
2.	Fixed Deposits in Banks	3.578
3.	Insurance funds	3.881
4.	Shares and debentures	2.596
5.	Postal saving schemes	4.08
6.	Chits	2.456
7.	UTI/Mutual funds	3.548
8.	Provident/Pensions funds and retirement plans	4.039

Table 5: Showing Safest Investment Avenue

S.No	Safest Investment avenue	Weighted average score
1.	Cash/Bank savings	4.14
2.	Insurance funds	3.484

3.	UTI Units	3.553
4.	Shares and Debentures	2.42
5.	Mutual funds	3.553
6.	Post office savings	4.599

It is clearly seen that the respondents prefer postal savings schemes and Provident/Pensions/retirement plans. The respondents on the other hand consider cash /bank savings as the safest investment option. Here it may be understood that the post office savings and Provident/Pensions/retirement plans are by nature designed with the concept of social security and therefore are highly safe. Once again the risk-averse nature of the respondent is depicted as they are more favourable towards cash and bank savings when compared to investing the same cash in instruments like Insurance funds, UTI units, shares and debentures and mutual funds. Here it may also be inferred that the investor /respondent exhibits a clear personality type of external locus of control were an individual places importance on external environment on his life. This may also refer to the contingency orientation of the investor were the investor would like to have easy access to liquid cash to face an unforeseen contingency and therefore would not like to tie up the cash in not-so-easily retrievable

instrument. The association between magnitude of savings with reference to preferred instruments for investments is reinforced by the chi square values in table 6.

Table 6: Chi Square Values Of Magnitude Of Savings With Reference To Preferred Instruments For Investments

Instruments	Cash/ Bank	Insurance	UTI units	Shares/ Debentures	Mutual Funds	Postal savings
Chi Square Values	136.50**	90.92**	65.40**	159.69**	74.71**	29.73**

** Significant at 1% level.

The integrated analysis of the table no 2, 3, 4 and 5 strengthens the opinion of the researcher regarding respondents exhibiting contingency approach towards savings and investments. Excellent understandings of open ended scheme which are primarily easy to redeem in the market further strengthen the inference drawn. The awareness level falls under Level-V as per the aforesaid classification. The

popularity of open ended funds may be more than closed ended schemes given the present scenario of economic recession. The investors would probably want to have an element of liquidity in the investments and hence prefer open ended funds to closed ended schemes.

B) MODEL INDICATOR OF AWARENESS LEVELS: Further analysis was done by consolidating the correct answers per respondent to arrive at an overall percentage score which indicated the awareness levels of the sample investors. The model index so calculated was 37.28% which falls under the Level II category of classification. As the level II indicates poor awareness levels, it may be inferred that the respondents on an overall basis have high risk averseness as they lack awareness of the investment alternative i.e. mutual funds (Huberman, 2001). The obvious desire of the respondent to disassociate himself with a risky investment may create an inherent lack of desire to gain knowledge about the same.

Difference in Knowledge Levels and Demographic Factors

The researcher further seeks to categorize awareness levels on the basis of demographic variables on acquisition of knowledge of mutual funds.

Table 7: Level Of Knowledge Across Demographic Factors

Sl. No.	Variable	Group	Levels of aware-ness for terms	Levels of aware-ness for plans
1	Gender	Male	4	4
		Female	2	2
2	Age	20 – 30	2	2
		30 – 40	3	2
		40 – 50	1	2
		50 – 60	1	1
		Above 60	1	1
3	Marital Status	Married	4	4
		Unmarried	2	2
4	Number of children	One	2	3
		Two	2	2
		More than two	1	1
		None	2	2
5	Income	Below Rs. 20,000	1	1
		Rs. 20000 – 30000	2	2
		Rs. 30000 – 40000	2	2
		Rs. 40000 – 50000	1	1

Sl. No.	Variable	Group	Levels of aware-ness for terms	Levels of aware-ness for plans
		Rs. 50000 – 60000	1	1
		Above Rs. 60000	1	1
6	Earning members	One	2	3
		Two	3	3
		Three	1	1

The table 7 given above provides information on awareness levels of the sample respondents across the demographic variables for plans and terms related to mutual funds. It is evident on the basis of the above table that:

Male sample respondents have high awareness levels than female mutual fund investors who have poor knowledge regarding plans and terms related to mutual fund with respondents falling under 20-40% awareness category. Male respondents being the bread earners of the family have a better exposure to investment alternatives at work place than in comparison with female sample investors. This exposure may provide them an opportunity to acquire more knowledge.

The investors falling in the category 30-40 years have a better understanding of plans and terms related to mutual funds than

other age groups. Their awareness levels falls under Level II category. The probable reason could be the greater interest of this age group to invest in mutual funds than the other age groups. Investors of above 60 years of age are very poor awareness of plans and terms. The researcher presumes two dimensions 1. They have no commitments or the requirements to stay invested in innovative instruments as they are in their prime of the lifecycle and/or 2. Since the sample respondents belong to a different generation their preferences may be for traditional investment alternative than mutual fund investments.

The sample respondents belonging to the married category have high levels of knowledge awareness when compared with unmarried sample. The unmarried sample belongs to Level II classification with poor awareness levels. With the help of a cross table of Age with marital status an attempt has been made to establish a relationship between lifecycle, marital status and awareness of mutual fund investment options.

Table 8: Showing Age and Marital Status

Age	Marital Status	
	Married	Unmarried

20 – 30 –Young Age	23	54
	6.9%	53.5%
30 – 50 – Middle Age	242	39
	72.3%	38.7%
Above 50 – Old Age	70	8
	20.9%	7.9%
Total	335	101
	100.0%	100.0%

Table 8 has classified the age group of 20-30 years as young, 30-50 years as middle age and above 50 years as old age. It is clearly found that 54% of the young respondents are unmarried and 72% of the respondents between the age group of 30-50 are married. It may be said that married respondents belong to the 2nd stage of their lifecycle where they realise that they have to save for the future making them search for better investment alternative that would match their requirement. This might have resulted in married respondents acquiring information of plans and terms related to mutual funds considering it's the next best option available to traditional forms of investing. The unmarried sample belong in the first stage of the lifecycle where they may be spending more than

savings which may contribute towards a lack of inclination to know about mutual funds as an investment alternative.

Respondents having single child have average awareness of mutual fund plans (Level III) indicating that the respondents want to provide for their children in future and hence would like to be aware of the different types of schemes that would match their requirement and may have excess disposable income which they would want to channelise into other instruments to provide a better education and future for their children.

Respondents belonging to the income group below Rs.20000; Rs.50000-60000 and above Rs.60000 have very poor knowledge levels regarding mutual fund plans and terms as the number of respondents aware falls under the class interval of 0-18%. This can be understood as, firstly, the group earning below Rs.20000 would not prefer to invest or experiment with innovative investment alternatives as mutual funds, as they do not have the required income levels and by nature would be risk averse. Secondly, above 50000 rupees income levels would probably leave their investments to be managed by wealth managers and hence lack of awareness.

Respondents belonging to single earning member family are aware of mutual fund plans yet they fall under level II in relation to awareness of terminology. It may be inferred that

their savings are more for safeguarding the future by investing in plans that suit their needs. Families that have two earning members have a better understanding of mutual funds. The reason could be the higher amount of disposable income forcing them to re-look at the investment alternatives available so that they can invest effectively and since 2 members earn, their risk tolerance levels may be higher than other categories.

D) KNOWLEDGE AND RISK PERCEIVED: Significant differences have been identified between experts and lay investors in their perception of financial risks (Diacon, 2004). Financial experts are considered less averse than lay investors (ibid). The present study attempts to examine this phenomenon with reference to the sample respondents by application of correlation analysis. The opinion on risk perception was collected using the following statements:

Sl. No.	Statements
1.	You prefer savings accounts in a bank to stock-market related investments including mutual funds
2.	You need to have safety in investment than faster gain
3.	you are greatly satisfied with minimum return with least risk

Sl. No.	Statements
4.	You prefer to stay in a known situation than a new situation
5.	You prefer public sector investment as compared to private sector investment
6.	You discuss with others before you finally save
7.	You prefer having a long term financial plan for security
8.	You prefer to invest in stocks that rise slowly and steadily as the loss is less in case of volatility
9.	You do not save in mutual funds because you lack good financial knowledge
10.	You do not prefer to have a major part of your savings in shares/debentures because of volatility

The scale was 3: Agree; 2: Neutral; 1: Disagree

The values were tabulated for analysis on SPSS package and a correlation analysis was done between Knowledge and Risk perceived.

Table 9: Correlation Co Efficient Between Knowledge and Perceived Risk

Correlation between	Risk perceived
Awareness of mutual fund plans	0.157**

Awareness of mutual fund terms	0.232**

** Correlation is significant at the 0.01 level (2-tailed).

The correlation analysis establishes a positive association at 1% level of significance (albeit low in strength) between awareness of mutual fund plans, terms and risk perceived. Familiarity breeds investment (Huberman, 2001). This statement displays the sentiment of confidence that is built within an investor, armed with informational resources to be able to take financial decisions in volatile markets where there is risk involved. There is an increase in the supply of complex financial products over the years which require financial knowledge and skills to navigate the emerging financial environment (Rooij, Lusardi and Alessie, 2007). Levels of financial sophistication can be only obtained by increase of financial knowledge. There is a need to address the gap between financial literacy and financial participation as the robustness of an economy depends upon ability of its citizens to participate in the financial markets. This gap may be the reason as to low association between knowledge and risk perceived.

Conclusion

Lack of knowledge is the cause of cognitive resistance exhibited by the investors. Cognitive resistance refers to resistance that is triggered by the fear of unknown phenomena. The investor caught in such a typology is afraid of loss of his financial resources. In a country like India the financial scams have further influenced the investor psyche and lead to discrepancies in the movement of the financial market, which could lead to faulty valuations of financial instruments by the investors (Iyer and Bhaskar, 2002). In the past there have been very few surveys that provide information on financial literacy and variables related to decision making (Rooij, Lusardi and Alessie, 2007). In depth knowledge of investment alternatives has undeniable implications on household behavior leading to rule of thumb influencing various investment decisions (ibid). Since there are low levels of awareness there is a need for the financial industry as a whole and mutual fund industry in particular to implement trust building initiatives. The financial services industry needs to needs to adopt mechanisms for building trust in the investors on a national scale in the lines of "The Gold Council of India". Yet it is to be recognized that instruments like equity, debentures and innovative instruments like mutual funds do not hold popular trust and appeal as in the case of gold. Therefore there is a need for the

industry to examine innovative vistas of educating the potential investors for efficient and effective functioning of the mutual funds.

References

Al-Ajmi, J.Y., 2008**.** Risk Tolerance of Individual Investors in an Emerging Market. *International Research Journal of Finance and Economics*, Issue 17, 15-26.

Alexander, G.J.; J. D. Jones, and P. J. Nigro, 2009. Mutual Fund Shareholders: Characteristics, Investor Knowledge, and Sources of Information. Retrieved from *www.ingentaconnect.com/content/els/10570810/1998/.../art0002.*

Cianci, A.M.,and S. Kaplan, 2008. The Effects of Management's Preannouncement Strategies on Investors' Judgements of the Trustworthiness of Management. *Journal of Business Ethics,* Vol. 79: 423-444.

Detzler, M.L., 2002. The Value of Mutual Fund Rankings to the Individual Investor. *Journal of Business and Economic Studies*, Vol. 8(2):48-72.

Diacon, S., 2004. Investment Risk Perceptions: Do consumers and Advisers agree? *International Journal of Bank Marketing*, Vol.22 (3):180-199.

Ganesan, P., K. T. Rengamani, H. M. Sajjad, 2006. Can ULIP Products Lure Mutual fund Investors? A Case Study of Indian Retail Investor. *Journal of Management Research*, Vol. 1 (4): 39:48.

Grossman, S. and J. Stiglitz, 1980. On the Impossibility of Informationally Efficient Markets. *American Economic Review*, Vol.70: 393-408.

Grossman, S., 1976. On the Efficiency of Competitive Stock Market when Traders have Diverse Information. *Journal of Finance*, Vol 31: 573-585.

Huberman, G., 2001. Familiarity Breeds Investment. *Review of Financial Studies*, Vol.14:659-680.

Indro, D.C., 2004. Does Mutual Fund Flow Reflect Investor Sentiment? *The Journal of Behavioral Finance*, Vol.5 (2):105-115.

Iyer and Bhaskar, 2002. Investors's Psychology: A Study of Investor Behavior in Indian Capital Market. *Finance India*, Vol. XVI (4):1357-1375.

Karlsson, A., and L. Norden, 2008. Investor Competence, Information and Investment Activity. *Working Paper Series, Stockholm University*. Retrieved on 17th August

2009 from h*ttp://papers.ssrn.com/sol3/papers.cfm?abstract_id=100719.*

Karmarkar, M., 2001. Investment Behavior of Household sector- A study of a Rural Block in West Bengal, *The Indian Journal of Commerce*, 58-65.

Martenson, R. 2008. Are Men better investors than Women? - Gender Differences in Mutual Fund and Pension Investments. *Journal of Financial Services Marketing,* Vol: 13(1):72–81.

NCAER, 2000. *Survey of Investors*, Securities Exchange Board of India, New Delhi.

Qamar, F., 2003. Saving Behavior and Investment Preferences among Average Urban Households. *The Indian Journal of Commerce*, Vol.56 (1): 36-49

Rooij, M., A. Lusardi and R. Alessie, 2007. Financial Literacy and Stock Market Participation. *DNB Working Paper No. 146, Michigan Retirement Research Center Research Paper No. 2007-16.* Retrieved on 17th August 2009 from *http://papers.ssrn.com/sol3/papers.cfm?abstract_id=1014994.*

Sinha, S.K. 2006. Investment Preference and Behavioural Pattern of Mutual Fund Investors. *Management Insight,* Vol. II (2), 74:83.

Van de Venter,G., 2006**.** Financial Planners' Perceptions of Risk tolerance. *Paper presented in the Financial Management Associations Annual Conference*, 11-14 October.

Wilcox, R.T., 2003. Bargain hunting or Star gazing? **Investors' Preferences for Stock Mutual Funds**. *Journal of Business*, October, Vol. 76(4):645-663.