INVESTMENT DECISIONS: ARE DEMOGRAPHIC VARIABLES RELEVANT?

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ABSTRACT

The study is a contribution to the works in behavioural finance which understands the relationships between social, economic and psychological factors that influence individual investor's investment process. To understand Indian investors a twenty seven questions questionnaire was constructed and information was collected from three twenty six investors. Using conditional probability the relationship among variables was discovered. In the survey it was found that irrespective of gender respondent's preferred achieving more than one objective while undertaking investments. Growth was more preferred as an investment purpose by females. Saving for future contingencies and Tax saving was more preferred by males than females. While interpreting the affect of age on investment purpose it was seen that more than one objective was the unanimous most preferred choice of all age groups except respondents of 60 years and above. With reduction in retirement horizon it was observed that tax saving became more desirable. It was observed that more than one objective is preferred by married respondents more than unmarried respondents, unmarried respondents prefer saving for future contingencies and growth more than married respondents. Both married and unmarried respondents had similar preferences as regards Tax savings. It was seen that professional people have more tendency to pursue more than one objective as compared to salaried or businessman. Businessmen prefer growth most followed by professional and finally salaried people. Businessmen are also showing maximum tendency for saving for future contingencies followed by salaried and finally professionals. Tax saving is most preferred by salaried individuals followed by professional and finally businessman. Respondents who prefer return showed maximum preference to pursue more than one objective followed by respondents concerned about risk and finally respondents who give equal weights to risk and return. Growth is equally preferred by those who weigh return more and who weigh risk and return equally. Growth is less liked by those who give more weight to risk. Respondents giving more weight to risk prefer saving for future contingencies. It was seen that as incomes increase the desire to pursue multiple objective also increases. Speculation was preferred by none of the income groups.

Keywords: Investment Behaviour, Portfolio, Investment Decision, Wealth Management

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INTRODUCTION

Study on Investors' Behaviour involves the application of existing knowledge from psychology to wealth management. Currently, risk and return values helps portfolio managers compare efficiency among alternate portfolios and hence make portfolio recommendations. However, the selection of a particular portfolio by an investor depends upon the investor profile and the expected utility that can be expected from alternate portfolio choices. Existing studies have focused on modelling portfolios with high returns and low risk and undertaking detailed risk analysis but there exists limited empirical work on dynamics of investor's behaviour. The current research using conditional probability tries to find how cognitive factors affect the purpose of making an investment.

OUTLINE OF THE STUDY

The study has been divided into six parts. Section one gives the introduction to the topic. Section two covers the review of literature. Section three discusses the research objectives. Section four discusses the methodology used for the purpose of the study. Section five discusses the findings of the study. Section six discusses the summary and conclusions of the study.

REVIEW OF LITERATURE

This section tries to provide an overview of existing studies focussing on investor's psychology and investment pattern. Studies focussing on gender and investment strategy have found that women invest more conservatively than men (Bajtelsmit and Derhai, 1996) and that woman are more risk averse (Jianakoplos and Bernasek, 1996). Bajtelsmit and Bernasek (1996) in their paper on "Why do Women invest differently than Men?" have surveyed existing literature and discussed the policy implications of these differences. Lewellen, Lease, and Schlarbaum (1977) found gender to be the third most important determinant of investor style after age and income with women being more conservative. Prince (1993) found that men and women had differences in styles of money handling. Men felt more competent while handling financial matters and were willing to take risks to amass wealth. It has been almost impossible to explain the observed gender difference. One possible accepted explanation is the differences in individual preferences. Alternatively, differences in level of income, wealth and employment may be the possible cause for gender differences in investment decisions and risk taking. Research on gender differences in investing is a new area in Finance and Economics and is at a very nascent stage. From research on Age and Investment style by Hanna and Chen (1997), they recommended that the proportion of equities in a portfolio should decrease with age, assuming that risk tolerance does not change with age. Morin and Suarez (1983) found that on an average, risk aversion increased with age. However, those with low levels of net worth, risk aversion increased with age and in contrast, for those individuals with high net worth, risk aversion decreased with age. Both net worth and age influences risk aversion affecting investment behaviour. Bakshi and Chen (1994) Confirmed that risk aversion increases as the population ages. McInish, Ramaswami and Srivastava (1993) and Cohn, Lewellen, Lease and Schlarbaum (1975) found a positive relationship between risk Tolerance and both net worth and income. Wealthy investors were

found to be holding higher proportion of risky assets. Investors aged between 45 to 54 years held the highest proportion of risky assets. In contrast, those with age less than 45 years held the highest proportion of their total assets in non risky assets. Lewellen, Lease and Schlarbaum (1977) found that investors of the age of fifty five years and above prefer to invest in dividend generating instruments. Investors who are older than 65 years are affected by family size in their investment decisions. Wang and Hanna (1997) found that relative risk aversion decreased with an individual's age (i.e. the proportion of net worth invested in risky assets increases as people age). The results were contrary to that of Morin and Suarez's (1983) finding that risk aversion increases with age. How to save and invest for the retirement is one of the most difficult decision an investor faces. Turner, Bailey and Scott (1994) in a study of 2760 individuals found that total family income is the most important factor influencing retirement planning. Their study also assists mid-life individuals in preparation for retirement. With changes in retirement horizon the investment objectives tend to change as an individual tends to plan investments in such a manner that the income from such investments coupled with pensions and other social security receipts are sufficient to provide for the spending after retirement. Poterba (1996) and Hurd (1990) provide a good overview of financial literature on saving decisions and retirement. Poterba, "The life-cycle model, permanent income hypothesis has been the dominant economic model for analyzing saving behaviour". In these models, which are based on the works of Ando and Modigliani (1963) and Friedman (1957), individuals makes Decisions over their entire life to consume and shift consumption to invest saving and try maximising lifetime utility. Brunson, Snow and Gustafson (1998) In their specialized sample of Military personnel found that adequate financial planning had a significant positive impact on the level of satisfaction after retirement. Similar finding were made by Cooper (1993) and Reis and Gold (1993).

Research focussing on marital status and investment style shows that single women and married men are less likely than single men to choose equities. Married women are more likely than single women to choose mostly bonds (Sunden and Surette, 1998). Recently it is debated that the investment allocations of married men and women differ from unmarried men and women. The reason for the difference in the decision of married men and women is that the decision of a married couple incorporates the wishes of both the partners.

On analysing the effect of occupation on investment behaviour Roszkowski (1998) found that other things being equal, different occupations can be used to differentiate between levels of financial risk tolerance. There also is a general consensus among researchers and practitioners that individuals employed professionally are more likely to have higher levels of risk tolerance than those employed in nonprofessional occupations (Grey & Gordon, 1978; Masters, 1989; Quattlebaum, 1988).

Over the years a positive pattern between income and financial risk tolerance has been observed. Cohn, Lewellen, Lease, and Schlarbaum (1975) concluded that relative financial risk tolerance increases with wealth and income. Similar findings have been reported by Cicchetti and Dubin (1994), Friedman (1974), Schooley and Worden (1996) and Shaw (1996). As income increases strong pattern of decreasing relative risk aversion was observed. Yao

and Hanna (2005) investigated the effect of marital Status and gender on the risk tolerance of the investor. It was found that risk tolerance is highest amongst single males and least amongst married females. The results are based on statistical test using one tailed z tests over data from 1983 to 2001. Singh and Dibyojyoti (2010) investigated the impact of demographic variables on the equity investment decisions. The study is based on the employees of Oil India Ltd. It was investigated how age, gender, qualification and designation affect the decision making of the investors in past, present and future. Amongst all of these demographic variables, age was found to be the most significant variable. Gender only affected day to day investment decisions. Qualifications and designation had almost insignificant. Bogan, Just and Dev (2013) using an innovative experimental economics approach examined the relationship between gender diversity and investment decisions. It was observed that gender influenced the team decisions as regards assessment of risk and loss. Male pursue higher risk investment and are less affected by losses. This study is relevent in current times as it recommends gender diversity in investment management teams for preventing risky trades and loss aversion.

RESEARCH OBJECTIVES

To fill the gaps existing in the current literature and to undertake an in-depth understanding of an Indian investor the research tries to uncover the relationship between investment purpose (IP) and gender / age / retirement horizon / marital status / occupation / relative importance of risk and return and annual income.

METHODOLOGY

Sampling Design

Non probability sampling in which each member does not have a known non zero chance of being included was used for the purpose of the study. Non probability samples that are unrestricted were used for the purpose of research. The investor is the basic sampling unit of the study. Only those who are above 18 years and are earning are included in the sample.

Data Collection

The study has an ex post facto design with no control over the variables. Being a cross-sectional study the responses were collected between May 2006 and March 2007. Various questions were created keeping in account to maintain validity and reliability of the questionnaire. A pilot test was conducted in June 2006 on the Management of Business Administration students (MBA) correspondence students of Pondicherry University. They were working as executives in various companies. Fifty three students helped in the process of pilot testing of the questionnaire. This helped in improving the wording of a number of questions. The number of questions was also reduced from original thirty four to twenty seven. The final questionnaire of twenty seven questions was sent by mail to two thousand three hundred and fifty respondents. They were mainly chairman and managing directors of companies listed on Bombay stock exchange. The database was collected from www.bseindia.com. More than eight thousand emails were sent with an attachment of the questionnaire. The database for emails was drawn from the Prime directory, directory of Federation of Indian Chambers of Commerce and Industry (FICCI), Indo American Chamber of Commerce (IACC), PHD Chamber of Commerce and Industry (PHDCCI) and Assocham. The universe for sampling was created in a manner to give adequate attention to individuals working in Indian incorporations.

The response through the mail and email was very dismal. The questionnaire was posted and emailed in August 2006. Only eight responses were received through this method. When a reminder email was sent then three more individuals responded. The reminder email sent after two months in October 2006 increased the number of respondents for the study to eleven from initial eight responses. The study experienced a low response rate of self administered questionnaire through mail and email. To increase the number of respondents for the study a mixed model was used. In this the questionnaire was personally taken to various corporate offices in Delhi. The respondents were asked to fill the questionnaire and the questionnaire was collected the same day. This personal touch increased the response rate to seventy four percent. The low response rate of self administered survey was managed by using "drop off" delivery of the self administered questionnaire. Finally, three twenty six questionnaires were found suitable for the purpose of analysis. When primary data for the final questionnaire was gathered care was taken to collect visiting cards from the respondents. Those who did not have visiting cards were requested to give their email ids. In March 2007 test- retest technique was used to establish stability. Only twenty three respondents decided to cooperate with the process of retest. An average high correlation of 0.86 was found in the responses taken in October and November 2006 and March 2007. The study uses conditional probability on the primary data set for studying the inter - relationship among variables.

FINDINGS

Gender and Investment Purpose

Here conditional probability is used to analyze the impact of Gender on Investment Purpose (Table I). Investment purpose and Gender are taken as subset of sample space S_1 such that

S_1= {Investment Purpose (K), Gender (D)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $D = \{D_1, D_2\}$

TABLE I
GENDER AND INVESTMENT PURPOSE

	Male (D_1)	Female (D_2)
Tax saving (K_1)	$P(K_1/D_1)$=0.159	$P(K_1/D_2)$=0.139
Saving for future contingences (K_2)	$P(K_2/D_1)$=0.217	$P(K_2/D_2)$ =0.194
Speculation (K_3)	$P(K_3/D_1)$=0.003	$P(K_3/D_2)$=0
Growth (K_4)	$P(K_4/D_1)$=0.2	$P(K_4/D_2)$=0.222
More than 1 objective (K_{99})	$P(K_{99}/D_1)$=0.421	$P(K_{99}/D_2)$=0.444

Source: Self Constructed

The sample collected had only 36 females and 290 males. Irrespective of Gender respondents preferred achieving more than one objective while undertaking investments. Growth was more preferred as an investment purpose by females. Saving for future contingencies and Tax saving was more preferred by males than females. The preference order for males in descending order was More than one objective, Saving for future contingencies, Growth, Tax saving and finally Speculation. The preference order for females in descending order was More than one objective, Growth, Saving for future contingencies and finally Tax savings. Tax saving as investment purpose has the least probability for females may be because of the various tax concessions already provided by the tax authorities to females.

Age and Investment Purpose

Here attempt is made to analyze the effect of age on Investment purpose. Conditional probability is used to study the investment purpose of different Age groups (Table II). Age and Investment purpose are taken as subset of sample space S_2 such that

S_2 = {Investment Purpose (K), Age (C)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $C = \{C_1, C_2, C_3, C_4, C_5\}$

TABLE II
AGE AND INVESTMENT PURPOSE

	Under 30 (C_1)	30-40(C_2)	40-50(C_3)	50-60(C_4)	60 and above (C_5)
Tax saving (K_1)	$P(K_1/C_1) = 0.142$	$P(K_1/C_2) = 0.193$	$P(K_1/C_3) = 0.10$	$P(K_1/C_4) = 0.133$	$P(K_1/C_5) = 0.428$
Saving for future contingences(K_2)	$P(K_2/C_1) = 0.237$	$P(K_2/C_2) = 0.205$	$P(K_2/C_3) = 0.162$	$P(K_2/C_4) = 0.167$	$P(K_2/C_5) = 0.286$
Speculation (K_3)	$P(K_3/C_1) = 0$	$P(K_3/C_2) = 0.012$	$P(K_3/C_3) = 0$	$P(K_3/C_4) = 0$	$P(K_3/C_5) = 0$
Growth (K_4)	$P(K_4/C_1) = 0.207$	$P(K_4/C_2) = 0.181$	$P(K_4/C_3) = 0.270$	$P(K_4/C_4) = 0.2$	$P(K_4/C_5) = 0$
More than 1 objective (K_{99})	$P(K_{99}/C_1) = 0.414$	$P(K_{99}/C_2) = 0.410$	$P(K_{99}/C_3) = 0.459$	$P(K_{99}/C_4) = 0.5$	$P(K_{99}/C_5) = 0.286$

More than one objective was the unanimous most preferred choice of all age group except respondents of 60 years and above. Individuals between 50-60 years have the maximum probability to pursue More than one objective followed by age group of 40-50 years, age group of under 30 years and 30-40 years showed similar probabilities, age group of 60 years and above showed the least probability of pursuing More than one objective, however it should be noted the number of respondents of age group age 60 years and above were only seven. Growth was most preferred by age group of 40-50 years followed by age groups under 30 years, 50-60 years, 30-40 years and finally 60 years and above. Speculation was not preferred by any age group except for some between the age group of 30-40 years. Respondents who are of the age group 60 years and above save maximum for future contingencies followed by Under 30 years, 30-40 years, 50-60 years and finally 40-50 years. Tax saving was maximum preferred by 60 years and above, next by 30-40 years, under 30 years, 50-60 years and 40-50 years. The reason for Tax saving as objective for under 30 years and 30-40 years may have been promoted because of the existing tax laws. A young individual may undertake long term investment and take advantage of exemptions available under the Indian income tax laws.

RETIREMENT AND INVESTMENT PURPOSE

Here an attempt is made to understand the effect of retirement prospects on Investment purpose. Here various conditional probabilities are calculated given that the respondent has a particular retirement horizon (Table III). Retirement and Investment purpose are taken as subset of sample space S_3 such that

S_3 = {Investment Purpose (K), Retirement (G)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $G = \{G_1, G_2, G_3, G_4\}$

TABLE III
RETIREMENT AND INVESTMENT PURPOSE

	3 yrs. or less(G_1)	3 - 5 yrs. (G_3)	5 - 10 yrs. (G_2)	10 and above (G_4)
Tax saving (K_1)	$P(K_1/G_1) = 0.25$	$P(K_1/G_3) = 0.25$	$P(K_1/G_2) = 0.167$	$P(K_1/G_4) = 0.149$
Saving for future contingences(K_2)	$P(K_2/G_1) = 0.333$	$P(K_2/G_3) = 0$	$P(K_2/G_2) = 0.167$	$P(K_2/G_4) = 0.22$
Speculation (K_3)	$P(K_3/G_1) = 0.0$	$P(K_3/G_3) = 0$	$P(K_3/G_2) = 0$	$P(K_3/G_4) = 0.004$
Growth (K_4)	$P(K_4/G_1) = 0.083$	$P(K_4/G_3) = 0.25$	$P(K_4/G_2) = 0.125$	$P(K_4/G_4) = 0.213$
More than 1 objective (K_{99})	$P(K_5/G_1) = 0.333$	$P(K_5/G_3) = 0.5$	$P(K_5/G_2) = 0.542$	$P(K_5/G_4) = 0.415$

Source: Self Constructed

The results regarding retirements should be interpreted with caution as the sample has 282 out of 326 respondents retiring after 10 years. Respondents with retirement age of 10 years and above pursue More than one objective followed by Savings for future contingencies and Growth with similar probabilities and Tax saving as the last objective. Investors with 5 to 10 years to retirement prefer More than one objective followed by Saving for future contingencies, Tax savings and finally Growth. Hence with the reduction in retirement age, Tax saving becomes more desirable.

Investors with 3 to 5 years to retirement pursue more than one objective followed by Growth, Tax saving and are less concerned for Saving for future contingencies. With 3 years or less left for retirement, after More than one objective as the investment purpose investors prefer Saving for future contingencies followed by Tax saving and finally Growth.

MARITAL STATUS AND INVESTMENT PURPOSE

Here an attempt is made to understand the investment purpose from the perspective of marital status. How married and unmarried respondents differ in their investment purpose. Various probabilities are calculated given that the respondent is married or single (Table IV). Marital status and Investment purpose are taken as subset of sample space S_4 such that

S_4 = {Investment Purpose (K), Marital Status (E)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $E = \{E_1, E_2\}$

TABLE IV
MARITAL STATUS AND INVESTMENT PURPOSE

	Married(E_1)	Unmarried(E_2)
Tax saving (K_1)	$P(K_1/E_1) = 0.157$	$P(K_1/E_2) = 0.156$
Saving for future contingences (K_2)	$P(K_2/E_1) = 0.2$	$P(K_2/E_2) = 0.234$
Speculation (K_3)	$P(K_3/E_1) = 0.005$	$P(K_3/E_2) = 0$
Growth (K_4)	$P(K_4/E_1) = 0.2$	$P(K_4/E_2) = 0.206$
More than 1 objective (K_{99})	$P(K_{99}/E_1) = 0.437$	$P(K_{99}/E_2) = 0.404$

Source: Self Constructed

More than one objective is preferred by married respondent's more than unmarried respondents. Unmarried respondents prefer Saving for future contingencies and Growth more than married respondents. Both married and unmarried respondents had similar preferences as regards Tax savings.

OCCUPATION AND INVESTMENT PURPOSE

Here an attempt is made to understand the effect of occupational traits on Investment purpose. This part of the study tries to analyze how the Investment purpose of a professional, Salaried and a Businessman differ. Conditional probabilities are calculated given that a respondent has a particularoccupation (Table V). Occupation and Investment purpose are taken as subset of sample space S_5 such that

S_5 = {Investment Purpose (K), Occupation (H)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $H = \{H_1, H_2, H_3\}$

TABLE V
OCCUPATION AND INVESTMENT PURPOSE

	Professional (H_1)	Salaried (H_2)	Businessman (H_3)
Tax saving (K_1)	$P(K_1/H_1) = 0.147$	$P(K_1/H_2) = 0.187$	$P(K_1/H_3) = 0.05$
Saving for future contingences (K_2)	$P(K_2/H_1) = 0.107$	$P(K_2/H_2) = 0.237$	$P(K_2/H_3) = 0.2$
Speculation (K_3)	$P(K_3/H_1) = 0$	$P(K_3/H_2) = 0$	$P(K_3/H_3) = 0.01$
Growth (K_4)	$P(K_4/H_1) = 0.24$	$P(K_4/H_2) = 0.177$	$P(K_4/H_3) = 0.25$
More than 1 objective (K_{99})	$P(K_{99}/H_1) = 0.507$	$P(K_{99}/H_2) = 0.399$	$P(K_{99}/H_3) = 0.4$

Source: Self Constructed

In an attempt to understand the impact of occupation on investment purpose it is found that professional people have more tendencies to pursue More than one objective as compared to salaried or businessman. Businessmen prefer Growth most followed by professional and finally salaried people. Businessmen are also showing maximum tendency for Saving for future contingencies followed by salaried and finally professionals. Tax saving is most preferred by salaried individuals followed by professional and finally businessman.

RISK/RETURN AND INVESTMENT PURPOSE

Here an attempt is made to understand the effect of Risk and Return on the Investment purpose. Conditional probabilities are calculated given that a respondent has given more weight to either risk or return or equal weight to risk and return (Table VI).

Risk, Return and Investment purpose are subsets of the sample space S_6 such that

S_6 = {Investment Purpose (K), Risk/Return (U)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $U = \{U_1, U_2, U_3\}$

TABLE VI
RISK/RETURN AND INVESTMENT PURPOSE

	Return (U_1)	Risk (U_2)	Risk & Return (U_3)
Tax saving (K_1)	$P(K_1/U_1) = 0.155$	$P(K_1/U_2) = 0.149$	$P(K_1/U_3) = 0.164$
Saving for future contingences (K_2)	$P(K_2/U_1) = 0.182$	$P(K_2/U_2) = 0.319$	$P(K_2/U_3) = 0.255$
Speculation (K_3)	$P(K_3/U_1) = 0.005$	$P(K_3/U_2) = 0$	$P(K_3/U_3) = 0$
Growth (K_4)	$P(K_4/U_1) = 0.214$	$P(K_4/U_2) = 0.127$	$P(K_4/U_3) = 0.218$
More than 1 objective (K_{99})	$P(K_{99}/U_1) = 0.445$	$P(K_{99}/U_2) = 0.404$	$P(K_{99}/U_3) = 0.364$

Source: Self Constructed

Respondents who prefer return showed maximum preference to pursue More than one objective followed by respondents concerned about risk and finally respondents who give equal weights to risk and return. Growth is equally preferred by those who weigh return more and who weigh risk and return equally. Growth is less liked by those who give more weight to risk.Respondents giving more weight to risk prefer Saving for future contingencies followed by equal risk/return weighing group and finally by return preferring group. Respondents from the three groups had similar probabilities for tax saving hence risk/return does not have much effect when purpose of investment is Tax saving.

ANNUAL INCOME AND INVESTMENT PURPOSE

Here an attempt is made to understand how annual income affects investment purpose. Various probabilities are calculated given that the respondent belongs to a particular annual income group.

(Table VII). Annual Income and Investment purpose are subsets of the sample space S_7 such that

S_7 = {Investment Purpose (K), Annual Income (F)}

Subset 1 $K = \{K_1, K_2, K_3, K_4, K_{99}\}$

Subset 2 $F = \{F_1, F_2, F_3, F_4, F_5, F_6, F_7\}$

TABLE VII
ANNUAL INCOME AND INVESTMENT PURPOSE

	Less than Rs. 1 Lakh(F_1)	Rs. 1 Lakh - 2 Lakhs (F_2)	Rs. 2 Lakhs - 5 Lakh (F_3)	5 lakh - 8 lakhs (F_4)	8 lakhs - 12 lakh (F_5)	12 lakh-16 lakh (F_6)	Above 16 lakh (F_7)
Tax Saving(K_1)	$P(K_1/F_1)$ =0	$P(K_1/F_2)$ =0.173	$P(K_1/F_3)$= 0.204	$P(K_1/F_4)$=0.024	$P(K_1/F_5)$=0.138	$P(K_1/F_6)$= 0	$P(K_1/F_7)$=0
Saving for future contingences (K_2)	$P(K_2/F_1)$ =0.308	$P(K_2/F_2)$ =0.230	$P(K_2/F_3)$= 0.238	$P(K_2/F_4)$=0.071	$P(K_2/F_5)$=0.103	$P(K_2/F_6)$= 0	$P(K_2/F_7)$=0.6
Speculation(K_3)	P (K_3/F_1)= 0	P (K_3/F_2)= 0	P (K_3/F_3)=0.006	$P(K_3/F_4)$=0	$P(K_3/F_5)$=0	$P(K_3/F_6)$= 0	$P(K_3/F_7)$=0
Growth(K_4)	P (K_4/F_1)= 0.462	$P(K_4/F_2)$ =0.231	$P(K_4/F_3)$= 0.155	$P(K_4/F_4)$=0.357	$P(K_4/F_5)$=0.103	$P(K_4/F_6)$= 0	$P(K_4/F_7)$=0.4
More than 1 Objective(K_{99})	$P(K_{99}/F_1)$ =0.231	$P(K_{99}/F_2)$ =0.365	$P(K_{99}/F_3)$= 0.398	$P(K_{99}/F_4)$=0.548	$P(K_{99}/F_5)$=0.655	$P(K_5/F_6)$=1	$P(K_{99}/F_7)$=0

Source: Self Constructed

More than one objective is pursued by individuals with annual income between Rs. 12 lakhs to Rs. 16 lakhs followed by respondents with annual income between Rs. (8-12) lakhs, Rs (5-8) lakhs, Rs (2-5) Lakhs, Rs (1-2) Lakhs and less than Rs. 1 lakhs in descending order showing the phenomenon that as incomes increase the desire to pursue multiple objective also increases. Growth is maximum preferred by individuals with income less than 1 lakh followed by those who had annual income greater than 16 lakhs, Rs (5-8) lakhs, Rs (1-2) lakhs, Rs (2-5) lakhs and finally Rs (8-12) lakhs. Speculation was preferred by none. Saving for future contingencies was also preferred maximum by individuals with income greater than 16 lakhs followed by those who had annual income between Rs (2-5) lakhs, Rs (1-2) lakhs, Rs (5-8) lakhs. Tax saving was maximum preferred by those with annual income between Rs. (2-5) lakhs followed by those who had annual income between Rs (1-2) lakhs, Rs (8-12) lakhs and Rs (5-8) lakhs in descending order of preference. The result is consistent with various tax policies.

SUMMARY AND CONCLUSION

Behavioural finance is one of the lesser researched field in literature. However, for maximisation of utility from a portfolio to an investor it is important to incorporate the element of individual psychology for creating appropriate portfolios. The study has to identify relevant psychological biases and investigate their influence on investment purpose of an individual. To understand Indian investors a twenty seven questions questionnaire was constructed and information was collected from three twenty six investors. Using conditional probability the relationship among variables was discovered. In the survey it was found that irrespective of gender respondent's preferred achieving More than one objective while undertaking investments. Growth was more preferred as an investment purpose by females. Saving for future contingencies and Tax saving was more preferred by males than females. While interpreting the affect of age on investment purpose it was seen that more than one objective was the unanimous most preferred choice of all age groups except respondents of 60 years and above. With reduction in retirement horizon it was observed that Tax saving became more desirable. It was found that More than one objective is preferred by married respondents more than unmarried respondents, unmarried respondents prefer Saving for future contingencies and Growth more than married respondents. Both married and unmarried respondents had similar preferences as regards Tax savings. It was seen that professional people have more tendency to pursue More than one objective as compared to salaried or businessman. Businessmen prefer Growth most followed by professional and finally salaried people. Businessmen are also showing maximum tendency for Saving for future contingencies followed by salaried and finally professionals. Tax saving is most preferred by salaried individuals followed by professional and finally businessman. Respondents who prefer return showed maximum preference to pursue More than one objective followed by respondents concerned about risk and finally respondents who give equal weights to risk and return. Growth is equally preferred by those who weigh return more and who weigh risk and return equally. Growth is less liked by those who give more weight to risk. Respondents giving more weight to risk prefer Saving for future contingencies. It was seen that as incomes increase the desire to pursue multiple objective also increases. Speculation was preferred by none of the income groups.

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