ANALYSIS OF RELATIONSHIP BETWEEN SOCIO-ECONOMIC VARIABLES TOWARDS THE SELECTION OF INVESTMENT AVENUES AMONG THE INFORMATION TECHNOLOGY MANAGERIAL EXECUTIVES

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Abstract
  This study is observed by the researcher that managerial executives in the information technology companies are more reliable and attached with a particular type of investment avenues. So it becomes significant to study the factors that compel them for selecting the investment avenues. A study on the investment behaviour towards the investment avenues, assumes a greater significance in the formulation of policies for the development and regulation of market potential, which ultimately leads to the economic development of a nation. Hence, the present study has made an attempt to examine these aspects.

Introduction

Social psychology provides confirmation of a variety of societal effects that help better understand the behaviour of investors in context of equity markets. Individual investors appear to invest in a manner that is inconsistent with the traditional paradigm. Specifically, they are under diversified (Benartzi and Thaller 2001), loss averse (Odean 1998), and over confident (Odean, 1999). Barber and Odean (2000) document that individuals trade too much and tend to hold on to loser stocks too long while selling winners too early. Grinblatt and Keloharju (2001) find that traders are reluctant to realize losses and often trade for non-rational reasons, exhibited by reference price effects. There is even evidence that investor moods, as influenced by cloud cover or number of hours of day light affect financial market (Kamstra, Kramer and Levi, 2003). "People are limited in their capacity for processing information, since they possess a limited in their attention capacity and hence ability to perform multiple tasks simultaneously", (Kahneman, 1973). The proponents of the traditional paradigm are of the view that it is quite possible that few agents in the economy can make less than optimal investment decisions. However it does not affect the overall efficiency of the

market as long as marginal investors, that is "the investor, who is making the specific investment decision at hand, is rational', exist in the market. Milton Friedman, one of the greatest economists of the time raised the point that these are the rational investors who set the asset prices in the market. But his argument has been criticized as some fundamental problems have been found regarding it. Critics are of the view that, even if the prices of different assets are set only by 'rational investors', still studying the practices of individual investors is of main interest. Recent market trends imply increased participation by individual investors in the investment process. As financial markets become more 'peopled', their behaviour, actions, reactions and perceptions have a continuous impact on the stock prices that cannot be explained by traditional models. The behavioural quirks observed in individual investors do manifest themselves on a much larger scale in the overall stock market in the form of pricing anomalies and unexplainable movements in stock prices. Not only market do not behave neatly as dictated by the traditional market theories, but also there is strong evidence in the field of psychology and financial research that individual decision makers do not behave in accordance with the tenets of expected utility while making decision under uncertainty (Machina, 1982).

Most of the financial decisions are made under situations with high degree of uncertainty and complexity. Often we have to choose between many alternatives, with many possible uncertain outcomes and probabilities, while many other (previous) decision situations need to be considered as well. In such situations the 'homo-economics' acts if it performs comprehensive search of all relevant alternatives and examines all possible consequences by linking the current decision with other decisions in order to select the best possible choice. However, psychological work suggests that people are not able to behave in such a way in many situations. People are limited in their abilities and capabilities to solve especially complex problems (Conlisk, 1996). To deal with such problems people generally adopt simplifying rules-of-thumb, or heuristics, that may result in behaviour that is not fully rational (Gabaix and Laibson, 2000).

Theoretical Evidence on Behavioural Biases

Research in psychology has documented a range of decision-making behaviours called biases. These biases can affect all types of decision-making, but have particular implications in relation to money and investing. The biases relate to how we process information to reach decisions and the preferences we have. The biases tend to sit deep within our psyche and may serve us well in certain circumstances. However, in investment they may lead us to unhelpful or even hurtful decisions. As a fundamental part of human nature, these biases affect all types of investors, both professional and private. However, if we understand them and their effects, we may be able to reduce their influence and learn to work around them.

Apparently, many investors have the tendency to believe that he or she perceives better than others (Shiller, 1998) and also that they think of themselves to be above average and this basically results in over-confidence and an excessive trade activity that can affect the stock prices. An influential and worth mentioning research on the trading behaviour of the individual investors has been conducted by Barber and Odean, who obtained the record of the trade activity of some 35,000 investors, who had managed their accounts at a discount brokerage. The authors (Barber and Odean 1999) argued that investors were found to be involved in excessive trading because of their behavioural trait of over-confidence and that ultimately resulted in diminished returns. Shiller (1990) has highlighted the significance of the role of conversation in diffusion of admired ideas in context of financial markets. Shiller and Pound (1989) surveyed individual investors and observed that most of the investors are attracted towards some particular stock as a result of interpersonal communication. Oberlechner and Hocking (2004) examined the information sources, news and rumours in the foreign exchange market and derived an exciting result that the information pace is rated high, on a scale of importance, as compared to trustworthiness of the source and the precision of information.

Huberman and DeMiguel (2006) argue that 'familiarity breeds investment' and the familiarity bias is more observed in terms of investing in domestic stocks. Empirical studies reveal that individuals are found to have more distrustful expectations about foreign stocks as compared to local stocks. "In international financial markets, investors tend to hold domestic assets instead of diversifying across countries, a puzzle known as home bias" (French and Poterba, 1991). Research also confirms that firms have a propensity to float their stocks in countries where investors are more known with the listed firms and closer culture match (e.g religious and genetic similarities). Individuals usually favour those investments that are familiar to them, and that have geographical and linguistic proximity (Familiarity, Local or Home Bias), (Huberman 2001).

Scope and Need for the Study

In today's scenario there has been a major change i.e. economic prosperity all over. The entire world is talking about the robust growth rates in this part of the world. Higher income levels and booming stock markets have led to more and more numbers of high net worth investors (HNIs). This means the availability of huge investible surplus. The investors with higher risk appetite want to experiment and try new and exotic products in the name of diversification. It may get vary based on their profile, namely age, income, material possession, level of education, gender, experience and so on. The investment behaviour (both male and female) may vary from one to another. One may prefer low risk while another may prefer high risks. One may seek advice of experts to invest while another may invest by their own.

The investment behaviour, investment information, sources of investment, investment knowledge, investment risk attitude, investment decision and investment choices may get vary among (both male and female). The IT managerial executives are willing to ride on safer and consistent income yielding which is mainly for tax-saving and for wealth creation or for their future expense purposes. Their investment decision and choices of investment is highly influenced by their life-style, social factors, and knowledge towards investment and also by their environment basis. It is essential to study how the information technology managerial executives make their investment avenues towards their investment in order to develop their investment behaviour. It is observed by the researcher that managerial executives in the information technology companies are more reliable and attached with a particular type of investment avenues. So it becomes significant to study the factors that compel them for selecting the investment avenues. A study on the investment behaviour towards the investment avenues, assumes a greater significance in the formulation of policies for the development and regulation of market potential, which ultimately leads to the economic development of a nation. Hence, the present study has made an attempt to examine these aspects.

Objectives of the Study
1. To analyze the influence of the demographic and socio-economic factors on the investment behaviour and selection of investment avenues of the information technology managerial executives

Hypotheses Framed for the Study
Once the important variables are identified and their relationships are established through logical reasoning according to the theoretical framework, the next step is to test whether the relationships that have been theorized holds true or not. For testing these relationships scientifically through appropriate statistical analysis and the following hypotheses were framed for the study. The hypotheses were also developed based on the research questions raised and the objectives of the study.
1. There is no significant difference between gender, marital status, job experience and income level and Investment behaviour of IT managerial executives.
2. There is no significant association between gender, marital status, job experience and income level and selection of investment avenues of IT managerial executives.

Research Methodology
It is the key aspect which governs the outcome of the study. It encompasses and directs the researcher to conduct the study in a systematic process which ensures and facilitates the accuracy of the outcome. Research methodology deals with definition of the research problem, research design, methods of data collection, sampling

design, research instruments used, statistical tools employed and interpretation of survey data.

Primary Data

For the present study primary data were collected for analysis from the IT managerial executives in Coimbatore city. The details regarding the IT companies were obtained from the Company registry body and NASSCOM websites.

Secondary Data

Secondary data were collected from different sources like books, journals, magazines, NASSCOM reports, reports released by the IT companies and various e-resources like ebscohost, inflib net, etc. Details regarding the IT companies were obtained from the book records of Company registry body.

Sample Size

The sample size refers to the numbers of elements to be included in the study. Determining the sample size is complex and involves several qualitative and quantitative considerations. The sample size determination for the current is derived through Krejcie and Morgan (1970) formula. The total sample estimated through the Krejcie and Morgan formula was 312.

Limitations of the Study

The study is based on the primary data collected from the sample respondents by the survey method. The data were collected from the IT managerial executives on personal basis. The current study focuses only on the investment behaviour towards the investment avenues of the IT managerial executives. However, efforts have been made to minimize the recall errors and make the study definite and systematic as far as possible. Hence, the findings of the study may be considered appropriate.

Analysis of Association of Demographic and Socio-Economic Variables towards the Selection of Investment Avenues

The selection of investment avenues may be associated with the demographic and socio-economic variables among the information technology managerial executives. The association between the demographic and socio-economic variables among the managerial executives and the selection of the investment avenues has been examined with the help of Chi square. It has been considered that to what extent the age factor, gender, marital status, graduation level, and income are associated towards the selection of investment avenues

Hypothesis Framed

H_0: There exists no significant association between the demographic variables towards the selection of investment avenues.

H_1: There exists a significant association between the demographic variables towards the selection of investment avenues.

(a) Association of Age and Gender towards the Selection of Investment Avenues

The following Table 1 shows the level of association between the age and gender towards the selection of various investment avenues.

Table 1 Association of Age and Marital Status towards the Selection of Investment Avenues

Demographic variables	Investment avenues among the respondents	Categories in Demographic variables	Choices of Preferences			Significant value	Decision
			Yes	No	Total		
Age of the respondents	Safety/Low Risk Avenues	< 30 year	164	22	186	.009	S
		30 to 40 years	121	39	160		
		>40 year	101	21	122		
		Total	386	82	468		
	Moderate Risk Avenues	< 30 years	90	117	186	.000	S
		31 to 40 years	51	109	160		
		>41years	72	50	122		
		Total	213	255	468		
	High Risk Avenues	< 30 years	69	117	186	.000	S
		31 to 40 years	75	85	160		
		>41years	23	99	122		
		Total	167	301	468		
	Traditional Risk Avenues	< 30 years	127	59	186	.328	NS
		31 to 40 years	97	63	160		
		>41years	78	44	122		
		Total	302	166	468		
	Emerging Avenues	< 30 years	103	83	186	.508	NS
		31 to 40 years	81	79	160		
		>41years	60	62	122		
		Total	244	224	468		
Gender of the respondents	Safety/Low Risk Avenues	Male	218	34	252	0.15	S
		Female	168	48	216		
		Total	386	82	468		
	Moderate Risk Avenues	Male	129	123	252	.009	S
		Female	84	132	216		
		Total	213	255	468		
	High Risk Avenues	Male	90	162	270	.533	S
		Female	77	139	198		
		Total	167	301	468		
	Traditional Risk Avenues	Male	203	49	270	.000	S
		Female	99	117	198		
		Total	302	166	468		
	Emerging Avenues	Male	166	86	270	.000	S
		Female	78	138	198		
		Total	244	224	468		

*Source: Primary Data; *S – Significant; NS – Not Significant*

From the Table 1 it shows that, the impact of selection of investment avenues towards the age among the information technology managerial executives, the variables which shows significant association in safety/low risk 0.009, moderate risk

0.000, high risk 0.000, since respective Pearson Chi-square statistics is less than five percent significance level. Hence the null hypothesis is rejected in the above-said cases. Regarding the traditional risk avenues 0.328 and emerging risk avenues 0.508 since respective Pearson Chi-square value is greater than five percent level significance so there exists no significant association among the selection of investment avenue. Hence the null hypothesis is accepted in the above-said cases. While comparing the impact of selection of investment avenues towards the gender among the respondents, which show a significant association in safety/low risk 0.015, moderate risk avenues 0.005, traditional risk avenues 0.000 and emerging risk avenues 0.000 since respective Pearson Chi-square statistics less than five percent significance level. Hence the null hypothesis is rejected. Regarding the high risk avenues 0.533 since respective Pearson Chi-square value is greater than five percent level significance so there exists no significant association among the selection of investment avenue. Hence the null hypothesis is accepted in the above-said cases.

(b) Association of Marital Status and Graduation level towards the Selection of Investment Avenues

The following Table 2 shows the level of association between the marital status and graduation level towards the selection of various investment avenues.

Table 2 Association of Marital Status and Graduation Level towards the Selection of Investment Avenues

Demographic variables	Investment avenues among the respondents	Categories in Demographic variables	Choices of Preferences			Significant value	Decision
			Yes	No	Total		
Marital Status of the respondents	Safety/Low Risk Avenues	Single	228	42	**270**	.119	NS
		Married	158	40	**198**		
		Total	**386**	**82**	468		
	Moderate Risk Avenues	Single	115	155	**270**	.083	NS
		Married	98	100	**198**		
		Total	**213**	**255**	468		
	High Risk Avenues	Single	110	160	**270**	.005	S
		Married	57	141	**198**		
		Total	**167**	**301**	468		
	Traditional Risk Avenues	Single	177	93	270	.328	NS
		Married	125	73	**198**		
		Total	**302**	**166**	468		
	Emerging Avenues	Single	146	124	**270**	.188	NS
		Married	98	100	**198**		
		Total	**244**	**224**	468		
Graduation Level of the respondents	Safety/Low Risk Avenues	Arts & Science	164	36	200	.751	NS
		Engineering	212	45	257		
		Others	10	1	**11**		
		Total	**386**	**82**	468		
	Moderate Risk	Arts & Science	113	87	**200**	.000	S

	Avenues	Engineering	97	160	**257**		
		Others	3	8	**11**		
		Total	**213**	**255**	**468**		
	High Risk Avenues	Arts & Science	59	141	**200**	.052	NS
		Engineering	104	153	**257**		
		Others	4	7	**11**		
		Total	**167**	**301**	**468**		
	Traditional Risk Avenues	Arts & Science	120	80	**200**	.200	NS
		Engineering	175	82	**257**		
		Others	7	4	**11**		
		Total	**302**	**166**	**468**		
	Emerging Avenues	Arts & Science	90	110	**200**	.020	S
		Engineering	149	108	**257**		
		Others	5	6	**11**		
		Total	**244**	**224**	**468**		

Source: Primary Data; *S – Significant; NS – Not Significant

From the Table 2, it can be interfered that, When considering the impact of selection of investment avenues towards the marital status among the respondents, the variables show a significance association in high risk avenues 0.005 since respective Pearson Chi-square statistics less than five percent significant level. Hence the null hypothesis is rejected. Similarly safety/low risk 0.119, moderate risk 0.083, traditional risk 0.328 and emerging risk avenues 0.188 there exists no significance association among the selection of investment avenues. Since the Pearson Chi-square statistics value is greater than five percent significant level. Hence the null hypothesis is accepted. The impact of selection of investment avenues towards the graduation level among the respondents, show a significance association in moderate risk 0.000 and emerging risk avenues 0.020 among the investment avenues since respective Pearson Chi-square statistics is less than five percent significant level. Hence the null hypothesis is rejected. Meanwhile safety/low risk 0.751, high risk 0.052 and traditional risk 0.20 the variables show no significant association among the selection of investment avenues. Hence the null hypothesis is accepted.

(c) Association of income level towards the Selection of Investment Avenues

The following Table 3 shows the level of association between the income levels towards the selection of various investment avenues.

Table 3 Association of Marital Status and Graduation Level towards the Selection of Investment Avenues

Demographic variables	Investment avenues among the respondents	Categories in Demographic variables	Choices of Preferences			Significant value	Decision
			Yes	No	Total		
Income Level of the respondents	Safety/Low Risk Avenues	Less than 5 Lakhs	143	39	**182**	.033	S
		5.1 to 10 Lakhs	109	28	**137**		
		10.1 to 15 Lakhs	108	11	**119**		
		Greater than 15.1 Lakhs	26	4	**30**		
		Total	**386**	**82**	**468**		
	Moderate Risk	Less than 5 Lakhs	72	110	**182**	.000	S

	Avenues	5.1 to 10 Lakhs	45	92	**137**	
		10.1 to 15 Lakhs	71	48	**119**	
		Greater than 15.1 Lakhs	25	5	**30**	
		Total	**213**	**255**	**468**	
	High Risk Avenues	Less than 5 Lakhs	60	122	**182**	.000	S
		5.1 to 10 Lakhs	46	91	**137**	
		10.1 to 15 Lakhs	59	60	**119**	
		Greater than 15.1 Lakhs	2	28	**30**	
		Total	**167**	**301**	**468**	
	Traditional Risk Avenues	Less than 5 Lakhs	91	91	**182**	.000	S
		5.1 to 10 Lakhs	87	50	**137**	
		10.1 to 15 Lakhs	104	15	**119**	
		Greater than 15.1 Lakhs	20	10	**30**	
		Total	**302**	**166**	**468**	
	Emerging Avenues	Less than 5 Lakhs	69	113	**182**	.000	S
		5.1 to 10 Lakhs	74	63	**137**	
		10.1 to 15 Lakhs	90	29	**119**	
		Greater than 15.1 Lakhs	11	19	**30**	
		Total	**244**	**224**	**468**	

Source: Primary Data; *S – Significant; NS – Not Significant

From the Table 3, it can be interfered that, Regarding to the impact of selection of investment avenues towards the income level among the respondents, the variables which are significantly associated with investment avenues are safety/low risk 0.033, high risk 0.000, moderate risk 0.000, traditional risk 0.000 and emerging risk avenues 0.000 among the investment avenues. Since respective Pearson Chi-square is greater at five percent level, there exists no significant association between the variables. Hence the null hypothesis is rejected.

Summary of Findings

- The importance of impact level of gender towards the investment awareness level among the information technology managerial executives shows there exists no significant difference between the gender of the information technology managerial executives and the awareness level in investment.
- When considering the impact level of gender towards the investment knowledge level among the information technology managerial executives shows there exists no significant difference between the gender of the information technology managerial executives and the knowledge level in investment.
- When comparing the gender of the respondents towards the investment risk attitudes among the information technology managerial executives which shows that there exists no significant difference between the gender of the information technology managerial executives and the risk attitude level of investment.
- The impact level of gender towards the investment decision making among the information technology managerial executives, shows there exists a significant

difference between the gender of the information technology managerial executives and the investment decision making style.

- The importance of the impact level of gender towards the perception of loss and profit among the information technology professional shows that there exists a significant difference between the gender of the information technology managerial executives perception towards their loss and similarly there exists no significant difference between the gender of the information technology managerial executives perception towards profit.

Conclusion

The men and women managerial executives among the information technology companies rely more on their awareness level, knowledge level, choices level, decision-making style, risk attitude level, investment activities and the investment problems. The rate of impact on the investment behaviour among the men is higher than that of women managerial executives in the information technology companies. The rate of implementation various methods to evaluate the various investment avenues are equal when compared to men and women managerial executives.

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