Original Research Paper



Management

RELATIONSHIP BETWEEN THE SOCIO - ECONOMIC STATUS AND INVESTMENT BEHAVIOR OF INVESTORS IN CHENNAI CITY

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ABSTRACT The study has made an attempt the relationship between Socio economic status and investment behaviour of investors. A financial market can be defined as the situation in which financial assets are created or transferred. A financial transaction involves the creation or transfer of a financial asset as against a real transaction that involves exchange of money for real goods or services. Financial assets also called as financial instruments or financial products represent claims to the payment of a sum of money sometime in the future and / or periodic payment in the form of interest or dividend to the investor. The financial institutions mobilize the savings of surplus units and allocate these mobilized funds in productive investments with promise of better rate of return. They also provide services to those entities who seek advice on various issues ranging from restructuring of investments to diversification of investments apart from providing a whole range of services to the entities who want to raise funds from the markets. Kendall Coefficient of Concordance is 0.2454 with Friedman ANOVA chi-square value of 490.79, which is significant at 1 per cent level. Similarly, using technical analysis has also been at little extent range (Mean = 2.24, proportion of none, little and moderate cases is 32.0%, 29.8% and 22.4%). Therefore, it is deduced that the investors in the sample is found to have used both fundamental and technical analysis for making investments in capital market only at little extent.

KEYWORDS: SEBI, Investors Protection, Capital Market, Indian Financial Market, Intermediaries

INTRODUCTION

In India, like in any other countries, the financial System consists of financial markets, financial intermediaries and financial products (instruments). The financial system play vital role in the economic development of any nation which, in turn, is reflected by the progress of the various economic units such as corporate sector, government bodies and household sector. While performing their activities, these units are always placed in either a surplus, deficit or balanced situation, which gives rise to the process of lending and borrowing. So, there are units or people of these units with surplus funds and there are those with a deficit. In this scenario, the financial system functions as an intermediary and facilitates the flow of funds amongst the various units in such a way that people with surplus funds provide funds to the those with deficit. A financial market can be defined as the situation in which financial assets are created or transferred. A financial transaction involves the creation or transfer of a financial asset as against a real transaction that involves exchange of money for real goods or services. The financial market comprises of following four main components, namely: (i) the money market, (ii) the capital market, (iii) foreign exchange market and (v) the credit (debt) market. The each component is described hereunder.

STATEMENT OF THE PROBLEM

The problem of the present study is boosted by the need to empirically measure the behaviour of investors towards capital market and how effective the SEBI in redressing grievances of the investors. This is because, the investors have been, day by day, experiencing with some market irregularities like economic crisis and corporate scandals due to gradual synchronization of Indian capital market with global market after economy liberalization leading to chance of market volatility. This happens despite market regulators implement various policy initiatives to rebuild a confidence among investors about the capital market investment.

OBJECTIVES OF THE STUDY

- To find out the relationship between the socio-economic status and investment behaviour of the investors of Chennai City.
- 2) To identify the factors influencing to make decisions in investments to capital market of investors in the study area

HYPOTHESIS

Ho1 There is no significant relationship between years of investment and socio-economic status of the capital market investors. Ho2 The purpose of investment is independent of the socio-economic status of the capital market investors.

METHODOLOGY

This study both analytical and descriptive type of methodology. The study mainly based on both primary and secondary data. The primary data collected from stock market investors in Chennai metropolitan, capital of Tamil Nadu. The secondary data collected from publications, books, articles in journals and websites. For collecting data from population of stock market investors, a well structured questionnaire instrument is used. The statistical techniques from descriptive to multivariate are used to analyze the data such as Frequency Distribution Analysis, Descriptive statistics, Cross tabulation analysis with Chi-square test , t-test / One way ANOVA, Canonical Correlation Analysis.

Sampling Technique

The researcher has conducted a survey among 500 investors of share market. For the survey the respondents are selected using simple random sampling technique from the said population in the study area. The sample size is selected using following formula as suggested by Osisioma et al. (1974).

$$n = \frac{Z^2_{\alpha/2}}{4e^2}$$

In the formula, n is sample size, Z is a value corresponding to a given confidence level (Z value is 1.96 for confidence interval, simply CI, of 95% and 2.57 for CI of 99%). The sampling error 'e' is in proportion, varying between 0.04 and 0.05 (i.e., maximum allowance of error in sampling is from 4% to 5%). As sample size is 384 for error level of 5 per cent and 600 for error of 4 per cent, the sample size for the presented study is fixed at 500, which is between 400 (384 rounded to nearest 100) and 600.

RESULTS AND DISCUSSION

Table 1Demographic Profile of the Sample Respondents

Demographic Characteristics	Number of Respondents	% to	o Total
Sex			
	Male	336	67.2
	Female	164	32.8
Age			
1150	<= 35	132	26.4
	36 - 50	256	51.2
	> 50	112	22.4
	> 30	112	22.4
Location			
	Rural	139	27.8
	Semi-urban	115	23.0
	Urban	246	49.2
Education			1
	Secondary	101	20.2
	Degree /	120	24.0
	Diploma	120	27.0
	PG	128	25.6
	Professional	151	30.2
	Professional	131	30.2
Occupation			
	Self-	159	31.8
	Employed/Business	0.4	16.0
	Private Sector	84	16.8
	Public Sector	81	16.2
	Government	79	15.8
	Professional	62	12.4
	Retired & Pensioner	35	7.0
Family Size	i ensioner		
	Up to 3	178	35.6
	4 – 5	246	49.2
	> 5	76	15.2
Earning embers			
	Only one	270	54.0
	Two	122	24.4
	Above Two	108	21.6
Family Income Monthly)			
	Up to Rs.25000	86	17.2
	Rs.2 5001- 50000	230	46.0
	Rs.50001- 7000	109	21.8
	> Rs.75000	75	15.0
	+		

Source: Primary Data

It may be observed from the table 1 indicates that 49.2 per cent of the investors are the residence of urban areas whereas rural and semi-urban resident group constitute 27.8 per cent and 23.0 per cent respectively. As far as the education of the investors is concerned, professionally educated group leads with 30.2 per cent followed by post-graduates with 25.6 per cent, degree / diploma holders with 24.0

per cent and secondary educated with 20.2 per cent of the total sample. Majority of investors (31.8%) are found to be either selfemployed or business men. However, employees of all sectors are combined, dominance of salaried group is identified in the investors sample. The number of respondents employed in private sector, public sector and government departments is 16.8 per cent, 16.2 per cent and 15.8 per cent respectively. Next to this, professionals comprise 12.4 per cent and retired persons / pensioners comprise 7.0 per cent. More number of investors is found to be from medium size family, i.e., families with number of members between 4 and 5 (49.2%). The number of investors from small (up to 3 members) is 35.6 per cent and large (above 5 members) size families is 15.2 per cent. There are only one earning member in 54.0 per cent of the investors in the sample. The number of earning members is two in 24.4 per cent and more than two in 21.6 per cent of the total investors in the sample. The income is between Rs.25000 and Rs.50000 in 46.0per cent of the respondent families. That is, majority of the investors belong to middle income group. Those from low income families (Up to Rs.25000) constitute just 17.2 per cent. At the same time, the family income is between Rs.50000 and Rs.70000 in 21.8 per cent and above Rs.75000 in 15.0 per cent of the investor respondent families. In sum, it is found that majority of the investors are male, most of them are aged between 36-50 years and residing in urban areas. The $professionally\,educated\,investor\,group\,are\,found\,to\,be\,more\,followed$ by post graduates and graduates. The investors with salaried employment are dominant and self-employed / business group comes only next to the above group. Those from medium size families involved in making investment in capital market are higher compared to that of those from small and large size families. There is only one earning members in more than 50 per cent of the families of investors in capital market. The income is above Rs.25000 in majority of the investor families.

Table: 2 Significance of the Canonical Correlation between Extent of Investment by Category and Socio-Economic Status of Investors

Canonic al Function	Canonica I R	Canonical R2 (Eigenvalu e)	Chi- Square	df	p- Value	Wilks Lambda
0	0.3874	0.1501	170.18	48	0.0000	0.7073
1	0.3104	0.0963	90.24	35	0.0000	0.8323
2	0.2311	0.0534	40.46	24	0.0191	0.9210
3	0.1393	0.0194	13.48	15	0.5650	0.9729
4	0.0816	0.0067	3.85	8	0.8705	0.9922
5	0.0340	0.0012	0.57	3	0.9037	0.9988

Source: Primary Data

It is seen from the table 2 shows that the first three canonical functions out of seven obtained from the analysis are significant statistically, first two functions at 1 per cent level and third one at 5 per cent level. However, only first two canonical correlation functions have sufficient correlation of above 0.30 (canonical correlation = 0.3874 for the first and 0.3104 for the second) while third function has correlation of 0.2311, which is less than the required norm of 0.30. However, due to its statistical significance, the third function is also taken into consideration. So, further interpretation on canonical loadings of the variables in the dependent (investment avenues) and independent (socio-economic status) sets with first three canonical functions are carried out to ascertain which socio-economic factor has unique contribution to which avenue for making investment.

Table: 3 Loadings of Investment Categories and Socio-Economic Status Variables with Significant Canonical Functions

Variables Canonical Function							
	First	Second	Third				
CRITERION VARIABLES							
Investment Category							
Equity Shares	0.0982	0.7391	0.4639				
Derivatives	-0.0826	0.7661	0.2240				
Mutual Funds	0.6610	0.1184	0.1919				
Forex	0.0736	-0.3904	0.8272				
Commodities	-0.7148	-0.0582	0.2151				
Tax Shield Instruments	0.3494	-0.2221	-0.1982				
Variance Extracted	0.1820	0.2254	0.1787				
Redundancy Index	0.0273	0.0217	0.0095				
PRE	DICTOR VA	RIABLES	!				
Soc	io-Econom	ic Status					
Sex	0.5431	-0.6491	0.2265				
Age	0.1414	0.1486	0.6125				
Location	-0.2368	0.0136	-0.2428				
Education	0.3308	0.0609	-0.6218				
Occupation	-0.0524	-0.2037	-0.1668				
Family Size	0.5230	0.0201	-0.2366				
Earning Members	0.3559	0.5829	0.1417				
Family Income	-0.6022	-0.0803	0.0425				
Variance Extracted	0.1557	0.1044	0.1222				
Redundancy Index	0.0234	0.0101	0.0065				

Source: Primary Data (Note: Canonical loadings of 0.40 & above are considered).

From the observation of the table 3 indicates that the dependent variables, mutual funds and commodities have high loadings with their first canonical variate. The negative sign of commodity variable reveals that it is negatively correlated with mutual funds and vice versa. That is, investment in mutual funds is higher when investment in derivatives is less and vice versa. The second dependent canonical variate is highly loaded by equity shares and derivatives, in turn envisaging that the investment in both equity shares and derivative are at similar extent. With third canonical variate of the dependent, the loading of forex is very high at 0.8272 followed by considerable loading of equity shares. This envisages that those who invest in forex at high extent also invest in equity shares to considerable extent. In the independent canonical variate of the first function, the socioeconomic status variables, family income, sex and family size have high loadings in the specified order, in turn indicating that female investors of large size low income families tend to invest more in mutual funds. The second canonical variates of the independent variables is highly loaded by sex and earning members. This envisages that the male investors belong to families with more than one earning member is likely to invest more in equity shares and derivatives. Similarly, from loadings of the socio economic status variables with independent canonical variate of the third function, it is ascertained that the less educated investors in the high age group are likely to invest more in forex and substantially in equity shares. The respondents are asked to rank the factors influencing their decisions to invest in capital market in order to identify mostly influencing factor(s) for making decision to invest. The rank data are subjected to non-parametric, Friedman ANOVA and Kendall Coefficient of Concordance analysis to evaluate whether there is any similarity among the respondents in ranking the items as ascertaining the extent of similarity in ranking the items is mandatory to arrive at irrefutable conclusion about the influencing

factor(s). The Kendall's coefficient of concordance, also called Kendall's W ranges between 0.0 and 1.0 with 0.0 for perfect dissimilarity and 1.0 for perfect similarity. The statistical significance of the Kendall's W is ascertained using Friedman ANOVA chi-square value.

Table 4 Results of Freidman ANOVA and Kendall Coefficient of Concordance for Factors Influencing Decision to make Investments

Influencing Factors	Sum of Ranks	Mean Ranks	Rank Order	
Self	1126	2.252	1	
Brokers	1289	2.578	3	
Print Media	1258	2.516	2	
Electronic Media (TV)	1794	3.588	4	
Actions of other investors	2033	4.066	5	
Coefficient of Concordance (Kendall W)		0.2454		
Friedman ANOVA Chi- Square (df=5)	490.79**			

Source: Primary Data. **Significant at 1% level

From the table 4 shows that the Kendall Coefficient of Concordance is 0.2454 with Friedman ANOVA chi-square value of 490.79, which is significant at 1 per cent level. This reveals the existence of similarity in ranking influencing factors for capital market investment in the study area. As there is similarity in ranking the factors, the major factors can be identified using average rank scores. From the observation of the average rank scores (lower the ranking score higher the preference) as well as the ranking orders based on these scores, it is apparent 'self' is the mostly influencing factor to invest in capital market followed by "print media" and "brokers". The "electronic media" and "actions of the other investors" have little influence on the investors.

Table 5 Type of Analysis Used for Making Investments

Analysis Type	Usage Extent					
	None	Little Extent	Moderat e Extent	HighExte nt	Very High Extent	
Fundam ental Analysis	187 (37.4)	139 (27.8)	96 (19.2)	54 (10.8)	24 (4.8)	2.18 [1.18]
Technicl Analysis	160 (32.0)	149 (29.8)	112 (22.4)	70 (14.0)	9 (1.8)	2.24 [1.10]

Figures in parenthesis are percentages to row total; Figures in square brackets are standard deviation

It can be seen from the table 5 indicated that 37.4 per cent of the respondents have never used fundamental analysis while using this type of analysis is little extent for 27.8 per cent and moderate extent for 19.2 per cent. Only 10.8 per cent and 4.8 per cent of the respondents is found to have been using this analysis at high and very high extent respectively. The mean scores for fundamental analysis use 2.18, which is in little extent range. Similarly, using technical analysis has also been at little extent range (Mean = 2.24, proportion of none, little and moderate cases is 32.0%, 29.8% and 22.4%). Therefore, it is deduced that the investors in the sample is found to have used both fundamental and technical analysis for making investments in capital market only at little extent.

Table 6 Results of Canonical Correlation Eliciting the Relationship between Type of Analysis Used and Socio-Economic Status of Investors

Canonicl Function	Canonica I R	Canonical R² (Eigenvalu e)	Chi- Square	df	p- Value	Wilks Lambda
0	0.2861	0.0819	59.23	16	0.0000	0.8869
1	0.1845	0.0340	17.08	7	0.0169	0.9660

Source: Primary Data

As per the table 6, there are two functions with canonical correlation of 0.2861 for first function and 0.1845 for second function and both functions are fitted significantly, first one at 1 per cent level and second one at 5 per cent level. However, the correlation between first pairs of canonical variate has been at sufficient level (near to 0.30, the required norm) whereas that of second canonical variate pairs is much less than required norm. Moreover, shared variance (canonical R2) is even below 5 per cent for the second function. Hence, the first function is considered as valid function for further interpretation on canonical loadings of the variables in the dependent and independent sets.

Table: 7 Loadings of Analysis Type Variables and Socio-Economic Status Variables with Significant First Canonical Function

Variables	First Canonical Function						
CRITERION VARIABLES							
Analysis Type							
Fundamental Analysis	-0.6727						
Technical Analysis	0.6715						
Variance Extracted	0.4517						
Redundancy Index	0.0370						
PREDICT	PREDICTOR VARIABLES						
Socio-Ec	conomic Status						
Sex	-0.5803						
Age	0.0607						
Location	0.2475						
Education	0.6007						
Occupation	-0.5138						
Family Size	-0.3426						
Earning Members	0.0171						
Family Income	0.0745						
Variance Extracted	0.1437						
Redundancy Index	0.0118						

Source: Primary Data (Note: Canonical loadings of 0.40 & above are considered).

An observation of the table 7 shows that the first canonical variate of the dependent (type of analysis) is loaded by both fundamental analysis and technical analysis resulting in shared variance of 0.4517 but with opposite signs. With high loadings and opposite signs, it is understood there is inverse relationship between two type of analysis. That is, investors who tend to use fundamental analysis are less likely to use technical analysis and those who tend to use technical analysis are less likely to use fundamental analysis. In the

independent canonical variate of the first function, the loading of education is high followed by that of sex and occupation (both with negative sign). Positive sign of education and negative sign of sex and occupation shows that highly educated male investors with occupational status of either self-employed / business or salaried in private, public and government sector tend to use technical analysis and vice versa (i.e., less educated investors with occupational status as either professional or retired pensioners are likely to use fundamental analysis).

Table: 8 Results of Canonical Correlation Eliciting the Relationship between Extent of Investments and Type of Analysis

Canonicl Function	Canonica I R	Canonical R ² (Eigenvalu e)	Chi- Square	df	p- Value	Wilks Lambda
0	0.1657	0.0275	15.68	12	0.2066	0.9688
1	0.0620	0.0038	1.90	5	0.8621	0.9962

Source: Primary Data

From the table 8 revealed that there are two canonical correlation functions with correlation of 0.1657 for the first and 0.0620 for second. The correlation is much lower than the required norm of 0.30. Moreover, both functions are fitted insignificantly. Therefore, it is concluded that there is no significant relationship between extent of investment in capital market and type of analysis.

MAJOR FINDINGS

- (1) The purpose of investment is tax benefit for 26.4 per cent of the respondents followed by higher return for 25.4 per cent while speculative profit and regular return is the purpose of investment in capital market for 24.2 per cent and 24.0 per cent of the respondents respectively.
- (2) The purpose of investment in capital market is significantly related to sex, age, occupational status and family size but it is independent of the area of domicile, educational levels, number of earning members in family and family income levels of the investors.
- (3) The preference to second market has slight edge over preference to primary market. Preferring capital market between primary and secondary is significantly associated with sex, age, area of residence, education, occupation, family size and family income of the investors.
- (4) There is significant relationship between preferred capital market between primary and secondary and purpose of investment among investors.
- $(5)\,$ The investment amount has been up to Rs.50000 and above Rs.100000 for each 33.8 per cent while amount of investment range between Rs.50000 and Rs.100000 for 32.4 per cent of the investors in the sample.

SUGGESTIONS

- (1) The volatility in the stock market should be minimized to increase investors' confidence and reduce the loss from investment in order to attract more investors to the capital market.
- (2) Before entering into capital market and making investments, the investors need to do fundamental analysis and get clear picture of the company they intend to invest.

CONCLUSION

It is concluded that the purpose of the investment of the investors in stock market is to get tax benefit apart from getting regular, higher and speculative return. However, the purpose of investment in the market varies between male and female investors, by age levels, occupational status and family size of the investors. As far as the type of market for making investments is concerned, the investors have preferred secondary market over primary market. At the same time, preferring between primary and secondary market is related to socio-economic status of the investors as well as to purpose of investment.

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