Investors' Awareness About Investment in Stock Market

Dr. K. Banumathy
Assistant Professor,
Department of Management Studies
IFET College of Engineering
(Affiliated to Anna University-
Chennai

Dr. R. Azhagaiah
Associate Professor,
Department of Commerce
Kanchi Mamunivar Centre for
Postgraduate Studies
Pondicherry University
Puducherry

Abstract

The present study aims at to study the awareness of investors on stock market investment. The data were collected from 290 stock market investors of Puducherry using structured questionnaire. The analysis is made using Mann-Whitney U test and Kruskal-Wallis H Test. The study proves that there is a significant difference between male and female investors on awareness of stock market investment; there is a significant difference among the age, educational and occupational groups with respect to awareness; there is also a significant difference among the investors of different age and occupational groups, in respect of awareness.

Keywords: Awareness, behavioural finance, BSE, investment decision, stock market.

JEL Classification: G11, G02 and G10.

Introduction

Creating awareness about the stock market (SM) investment among the people is necessary to create knowledge of investments in shares and other investment. Investors' awareness includes not only the knowledge of various financial products available in the market but also facilitates decision making, particularly among the less educated as well as of those committed to long-term financial decision. Advertising and the agent network played a vital role positively in creating awareness, but not knowledge; hence a coordinated approach is needed to convert the awareness into knowledge.

Indian investors are good savers, but often lose hard-earned money due to lack of knowledge and understanding about the financial products and financial markets. Though the regulatory authorities in the country such as Securities and Exchange Board of India (SEBI) have been taking necessary steps to protect the investors' interest, the investors are still worried about and sceptical of investing in SM and they try to keep themselves always away from the SM participation.

The best form of investor protection is investor awareness and the best way to achieve that is through financial literacy. Hence, the investor should be knowledgeable, cautious and they should know the changing conditions of market scenario well before making an investment in the SM.

Review of Literature

Investors' awareness is the knowledge of investment and about the important investment updates of the market. Many researchers have done research in this area, for instance, Guiso and Japelli (2005) stated that awareness of the investors could be determined by their *income*, *wealth*, *age* and *educational status*. Jain and Thakur (2012),who analysed the relationship between age and investment related characteristics of investors found that there were no significant relationships between the age and the investors' investment strategies, reasons to invest in capital market, fund management strategy, awareness and investors' risk bearing capacity.

Kadariya *Collins et al.* (2012) studied the level of awareness among the investors and found the extent of relationship between investors' awareness and the volume of equity investment in secondary market considering the data collected through structured questionnaire from 65 investors. The study found that the investors' awareness level was found to be affected by *the related work experience*, *understanding of investment environment*, *learning expectation* and *access to market information*; there was a positive relationship between investors' awareness and equity investment; the investors were aware and their level of awareness was high. Further, Basaiah and Priyajka (2012) examined the investors' motives and awareness level on various investment avenues in the SM in Anantapur district in Andra Pradesh and pointed out that investors were aware about the investment in SM and mutual fund, however they were not aware about debenture, gold traded funds, and unit linked funds, futures and options and commodities.

Umamaheswari and **Ashok Kumar (2013)** examined the awareness level of salaried class investors towards the nature of investment using the data collected from 1000 individual investors in Coimbatore district through structured questionnaire. The study predicted that the socio-economic variables viz., *age*, *gender*, *income*, *education* and *occupation* influenced the awareness of investors about investment; however, the investors were not much aware of the concept and working of the investment.

Rakesh (2014) examined the attitude and perception of investors with respect to SM and found out that around 80% of the investors were aware about the investment in SM, but **Murthy** and **Joshi (2012),** who examined the Indian investors' behavior stated that the investors were irrational with different investment options and were overconfident. The previous studies have brought out varied information on individual investors. Hence, the present study made an attempt to study the awareness of the investors about investment in SM.

Objectives of the Study

The main objective of the study is:

To study the awareness (A) of the investors about investment in stock market (SM).

Hypotheses Developed for the Study

The hypotheses developed to achieve the stated objective are:

H_0^1: *There is no significant difference between gender and awareness of investors about investment in stock market.*

H_0^2: *There is no significant difference between age and awareness of investors about investment in stock market.*

H_0^3: *There is no significant difference between educational level and awareness of investors about investment in stock market.*

H_0^4: *There is no significant among various occupation categories in respect of awareness of investors about investment in stock market.*

Research Methodology

To study the investors' awareness about investment in SM, a structured questionnaire was prepared and was administered on the investors of SM in Puducherry. The questionnaire was distributed through personal contacts, the executives of the participating broking agencies and through E-mails. The questionnaires were distributed to the clients of various stock broking agencies in Puducherry and 290 responses were ultimately received.

Research Methods used for Analysis

The study used two major non-parametric tests viz., Mann-Whitney U test and Kruskal-Wallis H test.

Mann-Whitney U Test

The U test is used to study whether there is a significant difference between *gender* and the awareness of investors about investment in SM. **The formula for Mann–Whitney *U* Test:**

$$U = n_1 n_2 + \frac{n_1(n_1+1)}{2} - R_1$$

or

$$U = n_1 n_2 + \frac{n_2(n_2+1)}{2} - R_2$$

Where,

U= Mann-Whitney U test

n_1 = Sample size for sample 1

n_2 = Sample size for sample2

R_i = Rank of the sample size

Kruskal-Wallis H Test

Kruskal-Wallis H Test is used for comparing more than two samples that are independent, or not related. The test is used to study whether awareness of investors vary with age, education and occupation. The H Test formula is:

$$\chi^2 = \frac{12\sum\left(\frac{R^2}{n}\right)}{N(N+1)} - 3(N+1) \sim \chi^2_{k-1\,df}$$

Where,

R = Sum of rank of each group

N = Total number of observations

n = Number of observations in each group

k = Number of groups

Results and Discussion

Table 1shows the demographic characteristics of the sample respondents.The selected variables viz., gender, age, education and occupation are associated with various dimensions of awareness about investment in SM. The results about awareness are presented from *tables 2 to 5*. For testing H_0^1 Mann-Whitney U Test is employed while for testing H_0^2 - H_0^4 Kruskal-Wallis H Test is used.

Demographic Characteristics of Sample Investors

The important variables used in this context are viz., gender, age, marital status, education, occupation, income and savings of the respondents. The study shows that 77.2% of the respondents are male and 22.8% are female, which fact shows that the SM investment is widely preferred by men than that of women. On analysing the distribution of age it is found that 33.8% fall in the age category of 'up to 30 years', 35.9% of the respondents come under the age group of '31-40', 10% of them are in the age group of '41-50 years' and only 20% of the sample respondents fall 'above 50 years' of age.

The analysis over marital status of the sample respondents indicates that 75% of them are married and nearly 25% of them are single. Education determines the individual's mental status and the level of confidence, however it is found that majority of the sample investors (40%) seemed postgraduate degree as the highest education, whereas 13% of them are educated up to school level, 34% of them are graduates, and only 13% of them possessed other educational qualifications.

Table 1: Profile of the Sample Investors

Demographic Characteristics		Frequency	Percentage
Gender	Male	224	77.2
	Female	66	22.8
	Total	**290**	**100.0**
Age	Up to 30	98	33.8
	31-40	104	35.9
	41-50	30	10.3
	Above 50	58	20.0
	Total	**290**	**100.0**
Marital Status	Married	218	75.2
	Single	72	24.8
	Total	**290**	**100.0**
Education	Up to School	38	13.1
	Graduate	99	34.1
	Post Graduate	115	39.7
	Others	38	13.1
	Total	**290**	**100.0**
Occupation	Business	77	26.6
	Professional	41	14.1
	Govt. Employee	25	8.6
	Pvt. Employee	94	32.4
	Home Maker	18	6.2
	Retired	28	9.7
	Others	7	2.4
	Total	**290**	**100.0**
Monthly Income	Up to ₹25000	156	53.8
	₹ 25001-₹ 50,000	94	32.4
	₹ 50001-₹ 75,000	16	5.5
	Above ₹75,000	24	8.3
	Total	**290**	**100.0**
Monthly Saving	Up to ₹10,000	225	77.6
	₹10,001-₹20,000	43	14.8
	₹20,001-₹30,000	13	4.5
	₹30,001-₹40,000	6	2.1
	₹40,001-₹50,000	3	1.0
	Total	**290**	**100.0**

Source: Computed results based on survey data.

The occupation of the investors is also an important variable in SM investment because it directly affects the investors' income, expenses, savings etc. The information pertaining to occupational categories reveals that most of the respondents (32.4%) are employed in private sectors, nearly 27% of them are doing business, only 14% of them are professionals like Doctors, Chartered Accountants etc. 8.6% of the respondents are government employees, 6% of them are housewives, nearly 10% of them are retired and only 2.4% of them belonged to other categories of occupation.

Table 2: Dimensions of Investors' Awareness about Investment in Stock Market

Dimensions of Awareness	Description
A1	I am somewhat knowledgeable about SM
A2	I usually follow the SM through financial news on TV and newspapers every week
A3	I clearly understand the role of brokerage firms in listing on the BSE annually
A4	Stock exchange carries out awareness campaigns for investors
A5	I always have trust when trading on the BSE
A6	When seeking financial advice, I deal with licensed brokers, intermediaries or financial services companies
A7	I usually visit the BSE website
A8	I usually buy shares based on future expectation rather than past performance
A9	Raising funds from the SM is much easier and cheaper than the other sources like banks
A10	The return on investment in SM is higher than those of other investments

With regard to income, it is found that 53.8% of the investors have monthly income up to Rs. 25000, whereas 32.4% of them have income ranging from Rs. 25,001 to Rs.50,000, 5% of them have income range between Rs.50,001 and Rs. 75,000 and only 8% of the sample respondents earns income above Rs.75,000. It is evident from the table 1, that majority of the investors save up to Rs.10,000 per month. Only 4% of them save between Rs. 20,001and Rs.30,000 and only very few of them save more than Rs.30,000.

Dimensions of Investors' Awareness

Various dimensions of investors' awareness about investment in SM are shown in table 2.Mann-Whitney U Test is performed to study the gender difference on various dimensions of awareness and the result of the analysis is shown in table 3.It is inferred from table 2 that the dimension A1 (U=6105, p= 0.013) and A2 (U= 5374, p= 0.000) of awareness between male and female is statistically significant respectively.

Table 3: Results of Mann-Whitney U Test on Gender and Various Dimensions of Awareness about Investment in Stock Market

Dimensions of Awareness	Gender	N	Mean Rank	Mann-Whitney U Test	P value
A1	Male	224	151.25	6105.00	**0.013****
	Female	66	126.00		
A2	Male	224	154.51	5374.00	**0.000***
	Female	66	114.92		
A3	Male	224	147.41	6964.00	0.427
	Female	66	139.02		
A4	Male	224	144.17	7094.00	0.599
	Female	66	150.02		

A5	Male	224	146.40	7190.00	0.722
	Female	66	142.45		
A6	Male	224	149.58	6479.00	0.109
	Female	66	131.67		
A7	Male	224	143.16	6868.00	0.362
	Female	66	153.43		
A8	Male	224	149.56	6482.00	0.106
	Female	66	131.71		
A9	Male	224	148.81	6650.00	0.193
	Female	66	134.26		
A10	Male	224	146.44	7180.00	0.707
	Female	66	142.30		

Source: Computed results based on survey data.
**Significant at 1% level, **Significant at 5% level.*

The p value for the dimensions viz., ***A1*** and ***A2*** is less than 5% level of significance, hence it can be inferred that there is a significant difference between male and female investors in the awarenessdimensions***A1*** and ***A2***. Whereas, for the other dimensions viz., ***A3*** to ***A10*** the p value is more than 0.05, indicating that there is no statistically significant difference between male and female investors in respect of awareness about ***SM in respect of awareness dimensions from A3 to A10***. The Mann-Whitney U test shows insignificant relationship between male and female investors on the dimensions of awareness from ***A3*** to ***A10.*** Hence, H_0^1 *"there is no significant difference between gender and awareness of investors about investment in* SM*"* is rejected for awareness dimensions ***A1*** and ***A2.***

Table 4 shows the results of Kruskal-Wallis H test, which tested the difference between the age and the investors' awareness about investment in SM. It reveals that the investors of different age groups vary significantly with regard to awarenessdimensions***A1***, ***A2***, ***A5***, ***A8*** and ***A10***. From the *table*, it is seen that the investors belonging to '31-40 years' of age have strongly agreed to the statement that they buy shares based on future expectation rather than the past performance***(A8)*** and return on SM investment is higher than that of the other investment avenues***(A10)***. The investors of 'above 50 years' of age have trusts on BSE than the investors ***(A5)*** of other age categories.

Overall, the investors have knowledge on SM, following SM activities regularly through news and television ***(A2)***, have trust while trading ***(A5)***, trade based on future expectation ***(A8)*** and agreed that the return on SM investment is higher than that of any other avenues of investments ***(A10)***, hence H_0^2 *"there is no significant difference between age and awareness of investors about investment in SM"* is rejected at 1% in respect of awareness dimensions ***A1***, ***A8*** and ***A10***and at 5% level in respect of ***A2*** and ***A5***.

Table 4: Results of Kruskal-Wallis H Test on Age and Various Dimensions of Awareness about Investment in Stock Market

Dimensions of Awareness	Age Group	Mean Rank	χ^2 value	Dimensions of Awareness	Age Group	Mean Rank	χ^2 value
A1	Up to 30 years	166.33	**17.556 (0.001*)**	**A6**	Up to 30 years	133.51	5.197 (0.158)
	31-40 years	145.85			31-40 years	155.43	
	41-50 years	122.27			41-50 years	133.45	
	Above 50 years	121.70			Above 50 years	154.19	

A2	Up to 30 years	135.22	**9.291 (0.026**)**	**A7**	Up to 30 years	151.44	4.589 (0.205)
	31-40 years	158.66			31-40 years	147.63	
	41-50 years	162.28			41-50 years	156.47	
	Above 50 years	130.58			Above 50 years	125.97	
A3	Up to 30 years	142.62	3.224 (0.358)	**A8**	Up to 30 years	126.55	**14.976 (0.002*)**
	31-40 years	154.86			31-40 years	165.59	
	41-50 years	145.82			41-50 years	161.23	
	Above 50 years	133.42			Above 50 years	133.36	
A4	Up to 30 years	153.02	2.578 (0.461)	**A9**	Up to 30 years	149.78	2.081 (0.556)
	31-40 years	146.01			31-40 years	150.12	
	41-50 years	127.60			41-50 years	134.30	
	Above 50 years	141.14			Above 50 years	135.78	
A5	Up to 30 years	129.58	**8.421 (0.038**)**	**A10**	Up to 30 years	140.11	**21.449 (0.000*)**
	31-40 years	155.42			31-40 years	169.44	
	41-50 years	133.45			41-50 years	147.60	
	Above 50 years	160.84			Above 50 years	110.59	

Source: Computed results based on survey data.
**Significant at 1% level, **Significant at 5% level.*

The result of Kruskal-Wallis test *(vide table 4)* reveals significant difference among investors belonging to different age groups for the dimensions of awareness ***A1***, ***A2***, ***A5***, ***A8*** and ***A10***. It is observed from *table 4*, the p value for ***A1***, ***A8*** and ***A10*** is less than 0.01 indicating highly significant difference among various age categories of respondents. Hence, H_0^2 *"there is no significant difference between age and awareness of investors about investment in SM"* is rejected. Therefore, it can be concluded that there exists a significant difference among the various age categories of investors with regard to their awareness towards SM investment except for dimensions ***A3***, ***A4***, ***A6***, ***A7*** and ***A9***.

The result of Kruskal-Wallis test is tabulated in *table 5* for each educational category, the respective mean rank for each dimension of awareness and test statistics. From the *table* it is evident that the investors vary significantly with regard to the awareness dimensions ***A6*** and ***A10***. Since the p value for these two dimensions ***A6*** ($\chi^2 = 8.86$, $p = 0.03$) and ***A10*** ($\chi^2 = 7.99$, $p = 0.04$) is significant, the Kruskal-Wallis test shows that the respondents of four educational groups do not perform equally well and hence H_0^3 *"there is no significant difference between educational level and awareness of investors about investment in SM"* is rejected at 5%level and it can be concluded that there exists a significant difference between educational level and the dimensions of awareness about SM investment.

Whereas, the elements of awareness viz., ***A1-A5***, ***A7-A8*** and ***A9*** do not differ significantly with the educational level since

the p values are greater than 5% level of significance and so the H_0^3 *"there is no significant difference between educational level and awareness of investors about investment in SM"* is accepted. The H_0^3 tested by Kruskal - Wallis test showed that the investors of four different educational categories have the same effect on ***A6*** and ***A10***, i.e. the investors seek financial advice from licensed brokers and they visit the BSE website usually. Therefore, H_0^3 *"there is no significant difference between educational level and awareness of investors about investment in SM"* is rejected.

Table 5: Results of Kruskal - Wallis H Test on Educational Level and Various Dimensions of Awareness about Investment in Stock Market

Dimensions of Awareness	Education	Mean Rank	χ^2 value	Dimensions of Awareness	Education	Mean Rank	χ^2 value
A1	Up to School	148.68	6.582 (0.086)	**A6**	Up to School	154.08	**8.865 (0.031******)**
	Graduate	135.39			Graduate	147.06	
	Post Graduate	157.62			Post Graduate	152.95	
	Others	131.97			Others	110.32	
A2	Up to School	131.25	3.636 (0.304)	**A7**	Up to School	126.70	4.042 (0.257)
	Graduate	142.42			Graduate	140.58	
	Post Graduate	147.40			Post Graduate	151.99	
	Others	162.04			Others	157.49	
A3	Up to School	137.34	1.904 (0.593)	**A8**	Up to School	157.32	2.745 (0.433)
	Graduate	152.30			Graduate	151.88	
	Post Graduate	145.62			Post Graduate	138.87	
	Others	135.57			Others	137.11	
A4	Up to School	144.57	1.281 (0.734)	**A9**	Up to School	149.37	4.445 (0.217)
	Graduate	144.17			Graduate	140.40	
	Post Graduate	142.52			Post Graduate	155.09	
	Others	158.93			Others	125.89	
A5	Up to School	151.70	2.868 (0.412)	**A10**	Up to School	115.46	**7.992 (0.046******)**
	Graduate	149.36			Graduate	144.78	
	Post Graduate	146.69			Post Graduate	156.93	
	Others	125.64			Others	142.80	

Source: Computed results based on survey data.
**Significant at 1% level, **Significant at 5% level.*

Table 6 shows the results of Kruskal –Wallis test, which reveals the difference among various occupational categories in respect of awareness of the SM investment. When awareness about SM investment is analysed considering the investors' occupational category, it is found that the investors have strongly agreed with all the dimensions of awareness except for **A2**, **A5** and **A6**, indicating the existence of significant difference among the different occupation categories in respect of awareness about SM. The χ^2values for awareness dimensions **A2**, **A5** and **A6** are insignificant. Whereas, it is significant at 1% level for dimensions **A1**,**A3-A4** and **A7-A10** so it is inferred that there is a significant difference among different occupational categorise in respect of awareness of the investors about SM investment. Hence, $\mathbf{H_0}^4$"there is no significant difference among various occupation categories in respect of awareness of investors about investment in SM" is rejected.

Table 6: Results of Kruskal-Wallis H Test on Occupation and Various Dimensions of Awareness about Investment in Stock Market

Dimensions of Awareness	Mean	Standard Deviation	χ^2 Value	P Value
A1	3.99	0.751	27.768	**0.000****
A2	3.96	0.726	9.770	0.135
A3	3.74	0.748	14.579	**0.024****
A4	3.30	1.127	15.871	**0.014****
A5	3.50	0.964	8.992	0.174
A6	3.61	1.093	10.662	0.099
A7	3.43	1.054	35.251	**0.000***
A8	3.72	0.915	23.437	**0.001***
A9	3.50	1.079	32.315	**0.000***
A10	3.52	1.040	23.348	**0.001***

Source: Computed results based on survey data.
**Significant at 1% level, **Significant at 5% level.*

Concluding Remarks

The objective of the study is to analyse the awareness of the investors towards investment in SM. Hypotheses were framed and tested using the data (290 respondents), which are collected with the help of structured questionnaire. Using Mann-Whitney U test and Kruskal-Wallis H test the study shows that male and female investors differ in their awareness about investment in ***SM;*** there exists a significant difference between age group of investors and the awareness about the investment in SM; majority of the investors of different educational background are equal with regard to awareness and only very few investors differ in the awareness towards SM investment. Besides, the study also reveals that there is a significant difference between occupation and awareness of investors about investment in SM. The study supports the earlier studies of Kadariya *Collins et al.* (2012), Rehman and Kalkundrikar (2011) and Umamaheswari and Ashok Kumar (2013) where the demographic variables like gender, age, marital status, education and income influence the investment behaviour of individuals and their decision making.

Limitations of the Study

The present study aims to identify the awareness of investors about investment in SM. The following are some of the limitations of the study:

- The respondents contacted belong to Puducherry only.
- The primary data has been collected through a structured questionnaire from a sample of 290 investors in Puducherry region who had invested their hard earned money in SM, which may not reflect the opinion of the entire population of the SM investors in the country as a whole.

Scope for Further Study

The study found that the demographic variables viz., age, gender, education and occupation have been influencing the awareness of investors towards investment in SM significantly. Further research can be conducted by

extending the scope of the study to cover other related variables and concentrating on the investors in other regions also. The present study concentrated the investors' who had invested their money only in SM therefore, further studies can also be made on identifying the awareness level of investors about other investment avenues besides SM investment.

References

Basaiah, P. & Priyajka, K. T. Y. (2012). A study on motives and awareness level of stock market investors- A case study with reference to Anatapur district in A. P. International Journal of Research in Commerce & Management, 3(3), 22-30.

Guiso, L. & Japelli, T. (2005).Awareness and stock market participation. Review of Finance, 9(4), 537-67.

Jain, D. & Thakur, P. (2012).Behavior of investors in the Indian capital market - An empirical analysis with respect to Udaipur, Rajasthan.IJRMS's International Journal of Management Science, 1(2), 72-84.

Kadariya, S. Prasad, P. S. Joshi, B. &Prasad, R. N. (2012).Investor awareness and investment on equity in Nepalese capital market.Banking Journal, 2(1), 1-15.

Murthy, P. G. K. & Joshi,D. (2012).A study on retail investors' behaviour.International Journal of Contemporary Business Studies, 3(6), 28-37.

Rehman, A. R. H., & Kalkundrikar. A. B. (2011). Impact on demographic factors on retail investors' investment decisions - An exploratory study. Indian Journal of Finance, 5(9), 35-44.

Rakesh, H. M. (2014). A study on individual investors behavior in stock market of India.International Journal in Management and Social Science, 2(2), 165-74.

Umamaheswari, S. &Ashok Kumar,M. (2013).A study on investment pattern and awareness of salaried class investors in Coimbatore district.PARIPEX-Indian Journal of Research,2(9), 31-4.