DETERMINANTS OF TRUST AND LEVEL OF AWARENESS OF RETAIL INVESTORS IN STOCK MARKET OF PAKISTAN

Hamza Ahmad Qureshi, Sidra Mehmood, Aamir Sarwar
Institute of Business & Information Technology, University of the Punjab, Lahore, Pakistan.
Tel: 92-042-99230826 Ext 108 E-mail: hamza.aq@ibitpu.edu.pk
Tel: 92-042-99230826 Ext 114 E-mail: asarwar@gmail.com
*Corresponding Author: Dr. Aamir Sarwar: asarwar@ibitpu.edu.pk

ABSTRACT: *The purpose of the study is to examine the level of retail investor's trust and awareness in stock market of Pakistan. The research investigates several dimensions necessary to build trust and awareness of investors in stock market. To examine level of trust and awareness, the study used primary data and later analyzed it using the statistical package for social sciences to generate descriptive statistics, inferential statistics, correlation, regression and factor analysis. The main determinants that contribute 46% variation in awareness of investor were financial literacy and social learning, whereas the main determinants that contribute 68% variation in trust of investor were regulations and supervision, disclosure of reliable information, willingness, convenient, getting returns, interpersonal trust and perceived risk. The findings also revealed a moderate positive correlation between awareness and trust among the investing public.*

Keywords: *Investor, Trust, Awareness, Stock market, Pakistan*

1. INTRODUCTION

Over the past decade, investors have suffered a crisis of trust and awareness. The central issue in stock market, now days, is how it creates trust and control opportunism in the market. Under these conditions, trust has been considered as an important element in stock market performance and economic efficiency. Stock market plays a significant role in the development and growth of economy [1]. Stock market corrections have affected the trust of investor. When stock market become unreliable people get doubtful about information they receive that affect stock market participation [2]. The decision to participate in the stock exchange also requires awareness of the available financial instruments, an assessment of the risk-return tradeoff as an act of trust, and the overall fairness of the system [3]. Many potential investors do not invest in the stock market because of their limited information on stocks; they do not understand the operations and different pricing strategies of the stock market [4]. Trust and awareness affect stock market participation via two different channels. Awareness serves to reduce barrier of knowledge of the available assets whereas trust enhances the confidence level of investors in the stock market.

1.1 Objectives

- Determine the level of general awareness of investors
- Determine relationship between awareness and trust in stock market
- Explore the determinants that will help building trust and awareness in stock market.
- Identify different financial reporting issues in firms to strengthen the investor trust.
- Identify the role of government in setting standards and regulations for ensuring trust in stock market.

2. LITERATURE REVIEW

Trust

Trust plays an important role in financial services organization [5], and this is particularly apparent in stock markets. Customers have less trust in institutions where they are about to deal with financial service provider through a broker. Trust is a significant indicator of whether or not people decide to participate in the stock market. In most economic transactions, people decide to participate depending on their expectation about how trustworthy other people are [6]. Trust among investors is very important for building long term and strengthen relationship, particularly in stock market, where investors could believe that their investment is in safe hands. The main difficulty for investor connected to stock market is their lack of ability to judge how well the investment will perform in the future. Different accounting scandals have affected trust level of investors in the stock markets as an institution [7].

Investing in stock market is clearly risky and individuals on regular basis have to make different choices under uncertain conditions due to lack of sufficient available information. Trust plays a significant role in reducing the risk level of investors [8]. Risk perception of investors influences their decision to invest and hold a particular investment [9]. The perception of investor to invest in risky asset depends on his level of trust in the market [10]. Different factors in financial markets inherent risk with them and cause serious threats to the investors so government should play his role in setting standards and regulations [11]. Self-regulation is an important component of any securities to protect itself from any exploitation thereby promoting investor trust. To make legislation for investor protection is easy, but to achieve effective enforcement is a very difficult task [12].

Awareness

Financial literacy and awareness are critical elements for the healthy development of the financial market. The word investor awareness has been used in investor communities regularly. It explains the investor literacy and information about the investment environment or about the financial market [13]. The level of awareness generally measures the investors′ exposure and information about the industry.

In the capital market, the first step in confidence building is creating a critical mass of informed investors. Majority of investors in stock market utilize a very small proportion of information [14]. In reality, investors receive a lot of information and usually not all of this information is accurate and useful, so they have to decide which information is important for them [15]. This bulk of information creates uncertainty and ambiguity for investors and affects their awareness level. If investors are aware of the various investments on the stock exchange, it will boost their trust in the market. Social interaction is also considered

very important aspect in creating awareness among people and influencing their financial decisions. Investors who participate in investment activities usually ask their friends to give them opinion regarding investment [16]. Awareness in society about the capital market and nature of risk and return can be increased through advertisements, conferences, publications, and programs in FM/TV etc. [17]. Increases in investor awareness campaigns leads to reduce in financial crime [18].

3. RESEARCH METHODOLOGY

The purpose of this research was to explore different determinants affecting trust and awareness in stock market of Pakistan and to observe the behavior of Pakistani investors towards the stock market. The type of research used in the study was exploratory and descriptive in nature and the type of investigation was correlation. Exploratory research was conducted to get an understanding of variables and sense of direction to carry out further research and descriptive research was conducted to explore the characteristics of the variables.

Lahore Stock Exchange was selected for the site of the research. The population of study was comprised of key players in the stock market, which includes investors, brokers and employees working in stock market. The sample size for study was 140 and convenience-sampling technique was used as respondents were selected because of their convenient accessibility. The data was collected through questionnaire. All questions employed 5-point Likert scales. First section of questionnaire included questions related to demographic information like age, gender, income, years of participation etc. The second section included questions related to awareness of investors regarding stock exchange and the last section comprised of questions regarding trust of investors in stock market.

In this study, we utilized four different instruments. These instruments were adapted from different sources. Different statistical techniques were used for analyzing data, which includes reliability test, descriptive analysis, independent t-test, ANOVA, correlation, regression and factor analysis.

4. ANALYSIS AND INTERPRETATION OF DATA

4.1 Reliability

Table 1. Reliability Statistics

Factors	*Cronbach's Alpha*	*No. of Items*
Awareness	0.882	17
Trust	0.923	32
Overall	0.940	49

After inputting the answers from 140 questionnaires into SPSS, the alpha coefficient was examined to test the reliability of the scale, shown in Table 1. The overall Cronbach's α value of Trust and Awareness scale was 0.94, which means highly acceptable data.

Descriptive Statistics

By using the Descriptive statistics in SPSS, the demographic data is presented in Table 2, summarizing the data in this study. The primary data analysis show that 95.7% respondents were male and only 4.3% females participated in the survey. From 140 respondents, majority of respondents (36.9%) were from the age group of 31-40 years. A large percentage of respondents (48.9%) have obtained a graduation degree. Most of them were employed for wages (44.7%) and 61% have monthly income less than 100,000 PKR.A small number of investors (36.9%) have some training course work related to stock market. 47.5% respondents have income from stock less than 20,000 PKR and majority of respondents (34.8%) have value of portfolio greater than 250,000 PKR whereas 33.3% respondents have 4-6 companies in their portfolio. Most of respondents (56%) were associated with stock market as investors and 60.3% trade in stock market on daily basis.

In the study, majority of respondents invested in more than one sector. 47.8% invested in oil and gas sector, 40% invested in cements, 31.4% invested in commercial banks, 28.5% invested in chemicals, 14.3% invested in telecommunication, 13.6% invested in financial services and electricity and 12.9% invested in consumer goods sector.

Inferential Statistics: Tests for Significant Mean Differences

The main purpose of these tests was to identify the influence of socio-demographic variables on level of trust and awareness of investors in stock market. Independent sample t-test (two sample mean) and one-way ANOVA (multiple sample mean) at $\alpha = 0.05$ level of significance were used accordingly as shown in Table 3.

Independent T-test

The results in table 3 show that p value for gender and training course against trust is 0.39 and 0.55 which is greater than 0.05. Therefore, we have enough evidence to state that gender and training course have no significant relationship with trust of investor in stock market.

The p value for gender and awareness is 0.14 (>0.05) indicating an insignificant relationship between gender and awareness of investor in stock market. P value for training course and awareness is 0.01, which is less than 0.05. Therefore, we have enough evidence to state that there is a significant relationship between training course and awareness of investor in stock market.

One-way ANOVA

The results in table 3 show that p value for age, education, occupation and monthly income against trust is 0.16, 0.06, 0.12 and 0.5 (>0.05) which indicates that age, education, occupation and monthly income have no significant relationship with trust of investor in stock market. P value for companies in portfolio and trust is 0.01, which is less than 0.05. Therefore, we have enough evidence to state that there is a significant relationship between companies in portfolio and trust of investor in stock market. P value for income from stocks, years of participation, association with stock market, value of portfolio and interaction with stock market against trust is 0.76, 0.49, 0.55, 0.37 and 0.42 (>0.05) indicating an insignificant relationship with trust of investor in stock market.

The results in table 3 show that p value for age, education, occupation and monthly income against awareness is 0.82, 0.82, 0.09 and 0.17 (>0.05) which show that age, education, occupation and monthly income have no significant relationship with awareness of investor in stock market. P value for years of participation and awareness is 0.04, which is less than 0.05. Therefore, we have enough evidence to state that there is a significant relationship between years of

participation and awareness of investor in stock market. P value for income from stocks, association with stock market, companies in portfolio and interaction with stock market against awareness is 0.77, 0.48, 0.13 and 0.14 (>0.05) indicating an insignificant relationship. P value for value of portfolio and awareness is 0.01, which is less than 0.05. Therefore, we have enough evidence to state that there is a significant relationship between value of portfolio and awareness of investor in stock market.

Table 2. Descriptive Statistics

Demo-graphics	*Categories*	*Frequencies*	*Percent*
Gender	Male	135	95.7
	Female	6	4.3
Age	< 21	9	6.4
	21 to 30	41	29.1
	31 to 40 years	52	36.9
	> 40	39	27.7
Education	Matriculation	8	5.7
	Intermediate	21	14.9
	Graduation	69	48.9
	Masters/MPhil	43	30.5
Occupation	Self Employed	48	34
	Employed for Wages	63	44.7
	Retired	20	14.2
	Student	10	7.1
Training Course	Yes	52	36.9
	No	89	63.1
Monthly Income	< Rs.100,000	86	61
	Rs.100,000 to Rs. 250,000	36	25.5
	> Rs. 250,000 to Rs. 500,000	9	6.4
	> Rs. 500,000	10	7.1
Income from Stocks	< Rs.20,000	67	47.5
	Rs. 20,000 to Rs. 50,000	46	32.6
	> Rs. 50,000 to Rs.100,000	18	12.8
	> Rs.100,000	10	7.1
Association with Stock market	Investor	79	56
	Broker	12	8.5
	Trader	41	29.1
	Other	9	6.4
Value of Portfolio	< Rs.50,000	27	19.1
	Rs. 50,000 to Rs.100,000	29	20.6
	> Rs.100,000 to Rs.250,000	36	25.5
	> Rs.250,000	49	34.8
Companies in Portfolio	1 to 3	35	24.8
	4 to 6	47	33.3
	7 to 9	22	15.6
	10 to 12	25	17.7
	>12	12	8.5
Sectors	Commercial Banks	44	31.4
	Chemical	40	28.5
	Cements	56	40.0
	Textile	38	27.1
	Telecommunication	20	14.3
	Consumer Goods	18	12.9
	Financial Services	19	13.6
	Electricity	19	13.6
	Oil & Gas	67	47.8
	Others	17	12.1

Table 3. Inferential Statistics

Test variable	*Grouping Variable*	*P value*	*Test*
Trust	Gender	0.393	Ind. T-test
Awareness		0.143	
Trust	Training course	0.55	Ind. T-test
Awareness		0.016	
Trust	Age	0.163	ANOVA
Awareness		0.825	
Trust	Education	0.065	ANOVA
Awareness		0.823	
Trust	Occupation	0.122	ANOVA
Awareness		0.09	
Trust	Monthly Income	0.504	ANOVA
Awareness		0.177	
Trust	Income from Stocks	0.767	ANOVA
Awareness		0.771	
Trust	Years of Participation	0.49	ANOVA
Awareness		0.043	
Trust	Associated to Stock Market	0.551	ANOVA
Awareness		0.48	
Trust	Value of Portfolio	0.374	ANOVA
Awareness		0.016	
Trust	Companies in Portfolio	0.014	ANOVA
Awareness		0.139	
Trust	Interaction with Stock Market	0.426	ANOVA
Awareness		0.144	

Regression

Linear regression analysis was used to determine relationship between awareness and trust of investors. With trust as dependent variable and awareness as independent variable, a regression equation was computed to represent this relationship.

From table 4 value of r is 0.629 (R <0.7) shows a positive and moderate relationship between trust and awareness. "R square" is 39.5% shows that 39.5% variation in trust is

because of awareness. The numeric figure for constant is 1.557, which is known as intercept and value for awareness (independent variable) is 0.571, which is called as slope.

Regression Equation

Trust = Intercept + (Slope * Awareness)

Trust = 1.557 + (0.571 * Awareness)

A one unit increase in Awareness is associated with a 0.571 unit increase in the average Trust of investor.

Table 4. Regression

Variable	*B*	*Sig.*	*R*	*R Square*
(Constant)	1.557	0.00		
Awareness	0.571	0.00	0.629	0. 395

Factor Analysis

Exploratory factor analysis was used in this study to determine those common factors that influence different variables and to determine the strength of relationship between factor and variable.

KMO and Bartlett Test

As a requirement to carry out factor analysis, first we perform KMO and Bartlett test. From table 5 value of KMO for awareness and trust is 0.853 and 0.825 (>0.6) indicating sufficient inter-correlation to proceed with factor analysis. P value for both awareness and trust is 0.00 (< 0.001) so, factor analysis is appropriate.

Table 5. KMO and Bartlett's Test

Variable	*Kaiser-Meyer-Olkin Measure of Sampling Adequacy*	*Bartlett's Test of Sphericity*		
		Approx. Chi-Square	*Df*	*Sig.*
Awareness	0.853	957.452	136	0.00
Trust	0.825	2462.883	496	0.00

Total Variance Explained

Total variance shows the total variability (in all of the variables together) accounted for by each of the factors. In case of awareness, factor 1 account for 28.912 % of the variability and factor 2 accounts for 17.737% of variability in all 17 variables. Therefore, the first two factors contribute **46.648%** variance as shown in table 6. In case of trust, the first eight factors together contribute **68.153%** of the total variance shown in table 7.

Rotated Component Matrix

Table 6 for awareness and Table 7 for trust show the Rotated Component Matrix contains factor loadings to show how the variables are weighted for each factor and inter-correlation between the variables and the factor.

Awareness

In case of awareness, the questions that loaded on factor one and factor two all seems to be highly correlated. Therefore we label this factor "financial literacy" and label factor 2 as "social learning" (table 6). Factors with their corresponding questions and variance after rotation are:

1. Financial Literacy (Variance (%) = 28.912)

Q1. Knowledgeable about stock market activities

Q2. Aware of how the stock exchange operates

Q3. Aware of various financial instruments on stock exchange

Q4. Clearly understand the role of brokerage firms in stock exchange

Table 6. Rotated Component Matrix (Awareness)

Question	*FACTOR*	
	1	*2*
Total variance explained (%)	**28.91**	**46.64**
Q1	0.69	
Q2	0.767	
Q3	0.603	
Q4	0.667	
Q5	0.592	
Q6	0.713	
Q7	0.73	
Q8	0.66	
Q9	0.681	
Q11	0.494	
Q13	0.258	
Q15	0.542	
Q10		0.506
Q12		0.721
Q14		0.651
Q16		0.761
Q17		0.696

Q5. Know necessary requirements for listing of companies on the stock exchange

Q6. Know the procedure of trading on the exchange

Q7. Know the major requirements for subscribing for an IPO

Q8. Aware of the functioning of different stock indexes

Q9. Aware of tax liabilities arising due to stock trading

Q11. Usually visit stock exchange website

Q15. Usually read the financial sections of newspapers

2. Social Learning (Variance (%) = 17.737)

Q10. Usually attend seminars, conferences & workshops hosted by the exchange

Q12. Participate in discussions related to stock market on the internet

Q13. My friends invest in stock market

Q14. Members of my family invest in stock market

Q16. When seeking financial advice I coordinate with brokers or intermediaries

Q17. When seeking financial advice I coordinate with research houses

Trust

Factors with their corresponding questions and variance after rotation are given below. It must be stated that Factor 7 and 8 separately did not make any good judgment so we grouped their questions under one factor and named it as perceived risk (table 7).

Table 7. Rotated Component Matrix (Trust)

Question	***FACTOR***							
	1	***2***	***3***	***4***	***5***	***6***	***7***	***8***
Total variance explained (%)	**14.71**	**27.11**	**35.60**	**42.67**	**49.52**	**56.04**	**62.48**	**68.15**
Q31	0.57							
Q32	0.599							
Q33	0.714							
Q34	0.653							
Q35	0.685							
Q36	0.68							
Q37	0.744							
Q38	0.734							
Q39	0.645							
Q43		0.649						
Q44		0.651						
Q45		0.669						
Q46		0.657						
Q47		0.815						
Q48		0.631						
Q49		0.481						
Q18			0.61					
Q19			0.732					
Q20			0.801					
Q40				0.78				
Q41				0.71				
Q42				0.43				
Q21					0.768			
Q22					0.745			
Q23					0.5			
Q24						0.774		
Q25						0.705		
Q26						0.524		
Q29							0.798	
Q30							0.72	
Q27								0.685
Q28								0.815

1. Regulation and Supervision of Markets (Variance (%) = 14.715)

Q31. Establishment of Market Trading Rules

Q32. Enforcement of Market Trading Rules

Q33. Enforcement of Financial Responsibility Regulations

Q34. Establishment of Conduct of Business or Fair Dealing Standards

Q35. Enforcement of Conduct of Business Rules

Q36. Establishment of Listing Standards

Q37. Establishment of Disclosure Standards

Q38. Monitoring of Ongoing Annual and Periodic Disclosure
Q39. Monitoring of Money Laundering Regulations

2. Helpful Financial Information (Variance (%) 12.399)
Q43. Provides primary information to help investors in making investment decisions
Q44. Helps to evaluate company's performance over time
Q45. Helps to predict income of the company
Q46. Helps to predict earnings per share of the company
Q48. Helps to predict dividends of the company
Q49. Helps to make comparisons between companies' performance

3. Willingness (Variance (%) = 8.491)
Q18. I trust the transactions of the stock exchange as transparent
Q19. I am willing to invest on the stock exchange
Q20. It is profitable to invest on the stock exchange

4. Easy to use financial data (Variance (%) = 7.071)
Financial information provided by companies
Q40. Is user friendly?
Q41. Highlights important information
Q42. Is written in language I understand

5. Return Expectations (Variance (%) = 6.848)
Q21. It is convenient to raise funds from the stock exchange than other sources like banks
Q22. It is financially economical to raise funds from the stock exchange than other sources like banks
Q23. The returns on the stock exchange are higher than those from other investments

6. Interpersonal Trust (Variance (%) = 6.521)
Q24. I trust the advice that is given to me by the brokers of the stock exchange
Q25. I trust the advice that is given to me by other traders of the stock exchange
Q26. The agents of the stock exchange are well trained and know what they are doing

7. Perceived Risk (Variance (%) = 5.673)
Q27. I usually fear to invest in stocks that have a sure gain
Q28. I am hopeful even when undertaking investment in stocks that have exhibited a loss
Q29. I am cautious about stocks which show sudden changes in price or trading activity
Q30. I usually fear investing in stocks that have had a past negative performance in trading

5. CONCLUSION

The study was conducted to identify different factors and aspects that could play a significant and crucial role to determine level of trust and awareness in stock market. From the findings of the study, we concluded that:

- Majority of respondents were male (95.7%), indicating the need to bring more women to participate in Stock Exchange. The primary data analysis shows that stock market attracts middle age investors as the majority of the stock investors were from the age group of 31-40 years. The proportion of educated investors is high in the market, most of them are employed for wages and small number of investors have some training course work related to stock market. Oil and gas, cements and commercial banks sector were the most popular investment sector among the investors. Majority of respondents have value of portfolio greater than 250,000 PKR and have 4-6 companies in their portfolio. Most of respondents (60.3%) trade in stock market on daily basis, which implies that the stock market is dominated by proactive investors.
- From t-test and ANOVA it was concluded that there was no significant relationship found between gender, training course, age, education, occupation, monthly income, income from stocks, years of participation, association to stock market, value of portfolio, trade in stock market against level of investor trust in stock market. Only companies in portfolio have a significant relationship with trust of investor in stock market.
- Training course, years of participation and value of portfolio have a significant relationship with awareness of investor in stock market. Whereas there is no significant relationship found between gender, age, education, occupation, monthly income, income from stocks, association to stock market, and trade in stock market against awareness of investor in stock market.
- From regression analysis it was found that there was a moderate relationship between awareness and investor trust in stock market. This means that if investors are well aware of stock exchange and have more financial literacy, they will trust the market activities and then this will influence their behavior in terms of whether to invest or not.
- From factor analysis we found that two factors (financial literacy and social learning) together contribute 46.648% variance in case of investor awareness. Whereas eight factors (regulation and supervision, disclosure of information, willingness, convenient, getting returns, interpersonal trust and perceived risk) together accounts for 68.153% of the total variance in case of investor trust.

Recommendations

From the findings of the study, the following are recommended.

- Individuals should be made financially aware and educate them about the stock market activities and its function. This calls for holding awareness programs that should be evenly distributed in the society.
- There is need to improve trust of investors in the stock market. The stock market regulations should be reviewed with a view to make them stronger. The government should provide strong regulatory supervision in order to check that the stock market meets all standards.
- The regulatory authorities like SECP must provide essential information about the firms listed on stock exchange that they are well managed, fulfilling their regulatory requirements, their earnings are properly announced and also that whether their books are accurately audited or not.
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