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# Project Work On Factors Influencing Individual Investment Behavior of Bangladeshi Investors

# Prepared for:

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August 23, 2009

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Subject: Submission of Project Work

Dear Sir.

It is of great honor and delight to me to present you my research paper prepared as a part of the BUS-498 (Project Work). The entire duration of preparing this report has been immensely helpful to me, giving us a golden opportunity to look outside the regular classroom and move to the real world. A lot of lessons were learnt and a vast amount experience was gained. Developing interpersonal skills, taking formal interviews and of course handling each and every detail with a professional attitude were just to name a few. Truly this will help us in my future life, solving more complex situations and problems and also building a Business structure to be a business executive.

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I would once again like to express my sense of gratitude towards you for giving me this opportunity, and sincerely hope that my report would give you immense satisfaction. I will always be available to respond to any queries that you may have in this regard.

Thank you.

Sincerely yours,

Md. Rifat-Uz-Zaman

Rifal-UZ-ZROTEN

(2006-2-10-220)

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# **Abstract**

This paper aims at identifying the most and the least influencing factors on the Bangladeshi investor behavior. It develops a modified questionnaire. The questionnaire included thirty-three factors that belong to six variables: firm image, accounting information, authenticity or reliability, expert's advice, personal financial needs and demand of common stock. The main findings: (i) firm image, accounting information and authenticity or reliability are the most influencing variables on the Bangladeshi investor behavior; (ii) experts advice & personal financial need are the least influencing variables for the Bangladeshi investors.

## 1.1 Background of the Study

Research in behavioral finance is relatively new. Within behavioral finance it is assumed that information structure and the characteristics of market participants systematically influence individuals' investment decisions as well as market outcomes. According to behavioral finance, investor market behavior derives from psychological principles of decision making to explain why people buy or sell stocks. Behavioral finance focuses upon how investors interpret and act on information to make investment decisions. In addition, behavioral finance places an emphasis upon investor behavior leading to various market anomalies. Behavioral finance is defined by Shefrin (1999) as "a rapidly growing area that deals with the influence of psychology on the behavior of financial practitioners". Behavioral finance research is developing rapidly and now beginning to answer such questions as (see Taffler 2002). Why, when all the evidence shows investors cannot beat the market on any systematic basis, they still resolutely do; how can we explain the stock market "bubbles"; why is the volume of trading in financial markets so excessive and why is the stock market so volatile; why do investment analysts have so much difficulty in identifying under- and over-valued stocks; why do stock prices appear to under-react to bad news; why do acquisitions on average turn out to be unsuccessful; why do corporate managers find it so difficult to terminate lossmaking projects; why do most boards believe their companies are undervalued by the stock market; why should new issues exhibit short-run stock market outperformance and then long run under-performance. A better understanding of behavioral processes and outcomes is important for financial planners because an understanding of how investors generally respond to market movements should help investment advisors devise appropriate asset allocation strategies for their clients. This study aims at exploring the Bangladeshi investor's behavior, representing the first attempt to be undertaken in the Bangladesh. The study is important for individual investors, companies listed in Dhaka Stock Exchange and Chittagong Stock Exchange and Government. For both local and international investors, the most influencing influential factor(s) on their investment decisions is crucial because this would affect their future financial plans. Foreign investors might

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also need to know the most influencing factors on the Bangladeshi investor behavior because they are allowed to hold shares of the listed companies. For companies, identifying the most influencing factors on their investors' behavior would affect their future policies and strategies. Finally, for government, identifying the most influencing factors on investors' behavior would affect the required legislations and the additional procedures needed in order to satisfy investors' desires and also to give more support to market efficiency.

## 1.2 Objective

Fluctuations in trading volume and overall index indicate the abnormal behavior of the Bangladeshi investors; this behavior needs to be investigated and this is the motivation behind the current study. It is worth mentioning here that there was no substantial change in securities law and financial policy of the Bangladesh.

## 1.3 Scope:

The scope of this investment behavior research is limited because almost all the respondents were from Dhaka city.

#### 1.4 Methodology:

Frequency distribution, correlation, reliability, regression and hypothetical analysis were done using SPSS.

#### 1.5 Limitation:

Due to limited time, only 70 (seventy) active investors of DSE were surveyed for the hypothetical analysis, which is insignificant. There was response biasness among the respondents.

#### 2.1 Literature Review

A comprehensive literature review about behavioral finance in general is beyond the scope of this paper. Instead, the results of some empirical studies about individual investor behavior will be highlighted. A substantial amount of attention has been given by researchers to institutional investor behavior, whereas less attention has been given to the individual investor behavior that is the emphasis of this paper. However, almost all the previous studies have dealt with investors' behavior in industrialized countries (e.g. USA, UK, Canada). Kadiyala and Rau(2004) investigated investor reaction to corporate event announcements. They concluded that investors appear to under-react to prior information as well as to information conveyed by the event, leading to different patterns: return continuations and return reveals, both documented in long-horizon return. They found no support for the overreaction hypothesis. Merikas et al., (2003) adopted a modified questionnaire to analyze factors influencing Greek investor behavior on the Athens Stock Exchange. The results indicated that individuals base their stock purchase decisions on economic criteria combined with other diverse variables. The authors did not rely on a single integrated approach, but rather on many categories of factors. The results also revealed that there is a certain degree of correlation between the factors that behavioral finance theory and previous empirical evidence identify as the influencing factors for the average equity investor, and the individual behavior of active investors in the Athens Stock Exchange (ASE) influencing by the overall trends prevailing at the time of the survey in the ASE.

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Malmendier and Shanthikumar (2003) tried to answer the question: Are small investors naïve?. They found that large investors generate abnormal volumes of buyer-initiated trades after a positive recommendation only if the analyst is unaffiliated. Small traders exert abnormal buy pressure after all positive recommendations, including those of affiliated analysts. Hodge (2003) analyzed investors' perceptions of earnings quality, auditor independence, and the usefulness of audited financial information. He concluded that lower perceptions of

earnings quality are associated with greater reliance on a firm's audited financial statements and fundamental analysis of those statements when making investment decisions. Krishnan and Booker (2002) analyzed the factors influencing the decisions of investor who use analysts' recommendations to arrive at a short-term decision to hold or sell a stock. The results indicate that a strong form of the analyst summary recommendation report, i.e., one with additional information supporting the analysts' position further, reduces the disposition error for gains and also reduces the disposition error for losses.

Nagy and Obenberger (1994) examined factors influencing investor behavior. They developed a questionnaire that included (34) questions. Their findings suggested that classical wealth – maximization criteria are important to investors, even though investors employ diverse criteria when choosing stocks.

Contemporary concerns such as local or international operations, environmental track record and the firm's ethical posture appear to be given only cursory consideration. The recommendations of brokerage houses, individual stock brokers, family members and co-workers go largely unheeded. Many individual investors discount the benefits of valuation models when evaluating stocks.

Epstein (1994) examined the demand for social information by individual investors. The results indicate the usefulness of annual reports to corporate shareholders. The results also indicate a strong demand for information about product safety and quality, and about the company's environmental activities. Furthermore, a majority of the shareholders surveyed also want the company to report on corporate ethics, employee relations and community involvement.

De Bondt et al.,(1985) published a paper about behavioral finance in which they asked the following question: "Does the stock market overreact?", the article gave evidence to support the hypothesis that cognitive bias (investor over-reaction to a long series of bad news) could produce predictable mis-pricing of stocks traded on the NYSE.

The main findings of the above studies can be summarized as follows:

- There is no support for the over reaction hypothesis.
- Investor over-reaction to a long series of bad news could produce predictable mis-pricing of stocks
- Classical wealth maximization criteria are important to investors.
- The recommendations of brokerage houses, individual stock brokers, family members and co-workers go largely unheeded.
- Investors exhibit a strong demand for information about product safety and quality, and about the company's environmental activities.
- 6. There exist strong forms of the analyst summary recommendation report, i.e., one with additional information supporting the analysts' position further, reduces the disposition error for gains and also reduces the disposition error for losses.

## 3.1 The Questionnaire

This paper developed a modified questionnaire (see Appendix) to examine the behavior of the investors Bangladesh. The questionnaire items represent six variables: firm-image, accounting information, authenticity or reliability, experts advice, personal financial needs and demand of common stock. Based on this questionnaire, the most important factor and the most important variable will be identified. The developed questionnaire includes thirty-three factors where eight factors correspond to firm-image variable; six factors correspond to accounting information variable, six factors correspond to authenticity or reliability variable, three factors to experts advice variable, five factors to personal financial needs variable which are independent variable and five factors to demand of common stock variable, which is the dependent variable. Respondents were asked to indicate their degree of agreement with each of the items on five-point Likert scale. If summarize all this things then it will be shown like below-

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Table-1: Variable chart

Variables	Variables name	No of factors
	Firm image	8
Independent	Accounting information	6
variable	Authenticity or Reliability	6
	Experts advice	3
	Personal financial needs	5
Dependent variable	Demand of common stock	5

The current study considers two factors not previously considered by published studies, namely the religious reasons and the creation of the organized financial markets (i.e. DSE & CSE). For the first factor, it is assumed that religious reasons should have a strong effect on the behavior of the investors of Bangladesh because

of the vital role of this factor in Bangladesh as a Muslim and conservative country. It is also hypothesized that the creation of the two organized financial markets in this country would have a positive effect on the behavior of the investors of Bangladesh.

#### 3.2 Data Collection

In order to get responses on the research questions, one questionnaire which included 33 questions were randomly distributed to 70 individual investors in Dhaka as local investors constitute a large proportion of total investors. The high proportion of local investors is mainly attributed to the current regulations under which foreign investors are not allowed to hold shares of certain local companies (i.e. the most popular and well-known companies). The data provided were then examined using SPSS.

## 3.3 Research Questions

This study intends to answer the following questions:

QUESTION 1: Does the firm-image have an effect on the behavior of the Bangladeshi investors?

QUESTION 2: Does the accounting information have an effect on the behavior of the Bangladeshi investors?

**QUESTION 3:** Does the authenticity or reliability have an effect on the behavior of the Bangladeshi investors?

QUESTION 4: Does the expert's advice have an effect on the behavior of the Bangladeshi investors?

QUESTION 5: Does the personal financial needs have an effect on the behavior of the Bangladeshi investor?

## 3.4 Hypotheses

Based on the above research questions and the stated purpose of the study, the following hypotheses are formulated-

H1: Firm's market share and reputation affect demand on common stock in the financial markets of Bangladesh.

H2: The desired accounting information affects demand on common stock in the financial markets of Bangladesh.

H3: Authenticity or reliability of the firm affects demand on common stock in the financial markets of Bangladesh.

H4: Experts advice affects demand on common stock in the financial markets of Bangladesh.

**H5:** Personal financial needs affect demand on common stock in the financial markets of Bangladesh.

## 3.5 Analytical Techniques

Once the reliability analysis was done, we excluded one factor from the first, second and third independent variable (firm image, accounting information and authenticity or reliability) that ultimately improved the alpha value. We also calculated the frequency distribution of dependent variables and independent variables. Finally, we completed the analysis part through regression analysis.

# 4.1 Analysis of Behavioral Finance

In order to identify the most and the least influencing factors on the Bangladesh investor behavior, the effect of each factor of the 33 factors will be examined bellow:

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Table 2: Frequency Distribution table of factors that influence the investor's behavior

No.	Dimensions	Frequency	Percentage
		(Agree &	
		strongly	
		agree)	
1	Earning per share	68	97.1
2	Reputation of the firm	66	94.3
3	High return	64	91.4
4	Dividends paid	64	91.4
5	Expected dividends	64	90
6	Past performance of the firms stock	60	85.8
7	Recent price movement in a firms stock	60	85.7
8	Minimizing risk	60	85.7
9	Firm status in industry	58	82.8
10	Affordable share price	56	80
11	Current economic indicators	56	80
12	Fluctuations/developments in the stock	55	78.5
	index		
13	You prefer to invest in common stock	54	77.2
14	You would like to buy common stock in	54	77.2
	bearish market		
15	You would like to buy common stock in	54	77.2
	under priced market		
16	Diversification needs	53	75.8

17	Information obtained from the internet	53	75.7
18	The creation if the organized financial market	48	68.6
19	Opinions of the firms majority stockholder	48	68.6
20	Ease of obtained borrowing fund	45	64.2
21	Broker recommendation	44	62.8
22	Family, friends or coworkers opinions	43	61.4
23	Expected losses in other local investment stockholders	40	57.2
24	Perceived ethics of the firm	39	55.7
25	Attractiveness of non-stock investment	27	52.8
26	Feelings of a firms products and services	35	50
27	Increase of the firms involvement in solving community problems	34	48.6
28	Coverage in the press	32	45.7
29	You would like to buy common stock in bullish market	5	7.1
30	You would like to buy common stock in over priced market	5	7.1

Here, it is clearly showed that most influencing factor is earning per share. Other factors also significantly affected the investor behavior. For example, around 90 to 97 percent of the respondents think that their investment behavior is affected by reputation of the firm, high return, dividends paid and expected dividends.

Moreover, around 80 to 86 percent respondent thinks that their investment behavior is influenced by past performance of the firms stock, recent price movement in a firms stock, minimizing risk, firm status in industry, affordable share price and current economic indicators.

On the other hand, almost 78 percent of the total respondent would like to buy common stock in bearish & under priced market. But only 7 percent of the total respondent would like to buy common stock in bullish & over priced market.

Some factors unexpectedly had least influence on the investment behavior of Bangladeshi investors. Such as expected losses in other local investment stockholders, perceived ethics of the firm, attractiveness of non-stock investment, feelings of a firms products and services, increase of the firms involvement in solving community problems, coverage in the press etc. Moreover, Bangladeshi investors rarely change their investment decision based on the situation of international markets, such as New York stock exchange, Tokyo stock exchange, NASDAQ and so on.

## 4.2 Most Influential Group:

The most influencing group was, by order of importance: accounting information, authenticity or reliability, firm image, personal financial needs and advocate recommendation.

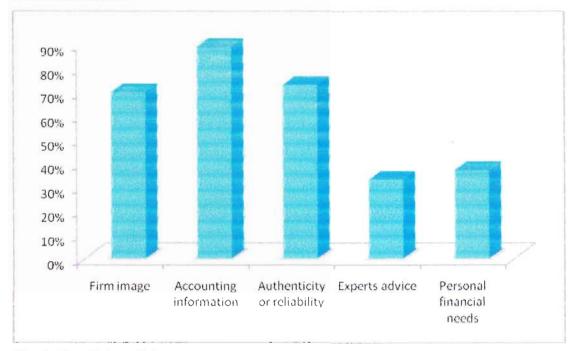


Fig-1: Most influential group

## 4.3 Correlation Analysis

Correlation (often measured as a correlation coefficient, p) indicates the strength and direction of a linear relationship between two random variables. The objective of this procedure is to examine the amount of variance explained in the dependent variable by independent variables and to assess their importance and incorporation into the regression equation. The model has of the following form-

DEMOS = f(FI, ACTIN, AUTHEN, EXP, PERFN)

Where- DEMOS: Demand of common stocks;

FI: Firm image:

ACTIN: Accounting information;

AUTHEN: Authenticity or reliability,

EXP: Experts advice;

PERFN: Personal financial needs

Table-3: Correlation chart

	Demand	Image	Information	Authenticity	Expert	Personal
Demand	1	0.123	-0.029	0.262	-0.196	-0.074
image	0.123	1	0.162	0.499	0.194	0.425
Information	-0,029	0.162	1	0.401	0.234	0.275
Authenticity	0.262	0.499	0.401	Ī	0.23	0.368
Expert	-0.196	0.194	0.234	0.23	1	0.341
Personal	-0.074	0.425	0.275	0.368	0.341	1

## 4.4 Reliability Test

Reliability of the measures was assessed with the use of Cronbach's alpha. Cronbach's alpha allows us to measure the reliability of the different categories. It consists of estimates of how much variation in scores of different variables is attributable to chance or random errors (Selltzm, et al., 1976). As a general rule, a coefficient greater than or equal to 0.5 is considered acceptable and a good indication of construct reliability (Nunnally, 1976). The overall Cronbach's alpha for the five independent variables is 0.6136. The Cronbach's alpha for the five variables namely firm-image, accounting information, authenticity or reliability, experts advice and personal financial needs is (0.690), (0.626), (0.551), (0.512), (0.689), respectively. Cronbach's alpha shows that these variables are reliable. Coefficient alpha values were computed for each construct separately which ranged from point 0.512 to 0.69.

Table 3: Reliability Results

Independent variables	No. of factors	Alpha Value
Firm-image	7	0.69(excluding question
		no. 3)
Accounting information	5	0.626 (excluding question
		no. 10)
Neutral information	5	0.551(excluding question
		no. 15)
Experts advice	3	0.512
Personal financial	5	0.689

## 4.5 Regression Analysis:

Table 3: Regression model

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.664(a)	.442	.096	52436

From the regression analysis, we have found that the Value of R Square is .442. That means, independent variable (firm image, accounting information, authenticity or reliability, expert's advice, personal financial needs) has 44.2% impact over the dependent variable (Demand of common stock). In other words, the dependent variable (Demand of common stock) can be influenced 44.2% by the independent variable (Image, accounting information, authenticity or reliability, expert's advice, personal financial needs).

## 4.6 Hypothesis Analysis:

In this section hypothesis based on the five factors that influence the demand of common stock are being analyzed.

H1: Firm's market share and reputation affect demand on common stock in the financial markets of Bangladesh.

 $\alpha = 0.05$ 

Independent	Standardized	t value	Р	,,,,
Variables	Regression			
	Coefficient (β)			
Firm image	0.050	.362	0.018	

#### Decision:

The observed table shows that firm-Image has a positive influence on the common stock demand and we can see that P value (0.018) is less than alpha value (0.05) so H1 is accepted.

**H2:** The desired accounting information affects demand on common stock in the financial markets of Bangladesh.

$$\alpha = 0.05$$

Independent	Standardized	t value	P	
Variables	Regression Coefficient (β)			
Accounting information	0.100	0.782	0.037	

## Decision:

The observed table shows that accounting information has a positive influence on the demand of common stock and we can see that P value (0.037) is less than alpha value (0.05) so H2 is accepted.

**H3:** Authenticity or reliability of the firm affects demand on common stock in the financial markets of Bangladesh.

$$\alpha = 0.05$$

Independent	Standardized	t value	P	
Variables	Regression Coefficient (β)			
Authenticity or reliability	0.377	2.621	0.011	

#### Decision:

The observed table shows authenticity or reliability has a positive influence on the demand of common stock and we can see that P value (0.011) is less than alpha value (0.05) so H3 is accepted.

H4: Experts advice affects demand on common stock in the financial markets of Bangladesh.

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$$\alpha = 0.05$$

Independent	Standardized	t value	Р	
Variables	Regression			
	Coefficient (β)			
Experts advice	-0.225	-1.822	0.073	

## Decision:

The observed table shows that advocate recommendation has negative influence on the demand of common stock and we can see that P value (0.073) is larger than alpha value (0.05) so H4 is rejected.

**H5:** Personal financial needs affect demand on common stock in the financial markets of Bangladesh.

$$\alpha = 0.05$$

Independent	Standardized	t value	P	
Variables	Regression			
	Coefficient (β)			
Personal financial needs	-0.130	-0.962	0.340	

## Decision:

The observed table shows that personal financial needs has a negative influence on the demand of common stock and we can see that P value (0.340) is larger than alpha value (0.05) so H5 is rejected.

# 4.7 Limitation of this Particular Research:

In this particular research, I have got R<sup>2</sup> =44.2 %, which is insignificant for a good research. It indicates that there might be some response biasness and error, which opens the scope of even more research. May be that is why H4 and H5 were rejected earlier. Moreover, scope of this investment behavior research is limited because almost all the respondents were from Dhaka city.

## 5.1 Conclusion:

In this paper, factors influencing the Bangladeshi investor behavior were examined. The paper develops a modified questionnaire. The questionnaire included thirty-three items that belong to six variables namely firm image, accounting information, authenticity or reliability, expert's advice, personal financial needs and demand of common stock. Five factors were found to be the most influencing factors, where more than 90% of total respondents consider these factors as the most affecting factors on their behavior. The most influencing factor was by order of importance; earning per share, reputation of the firm, high return, dividends paid and expected dividends. Moreover, around 80 to 86 percent respondent thinks that their investment behavior is influenced by past performance of the firms stock, recent price movement in a firms stock, minimizing risk, firm status in industry, affordable share price and current economic indicators. On the other hand, almost 78 percent of the total respondent would like to buy common stock in bearish & under priced market. But only 7 percent of the total respondent would like to buy common stock in bullish & over priced market. Some factors unexpectedly had least influence on the investment behavior of Bangladeshi investors. Such as expected losses in other local investment stockholders, perceived ethics of the firm, attractiveness of non-stock investment, feelings of a firms products and services, increase of the firms involvement in solving community problems, coverage in the press etc. The most influencing group was, by order of importance: accounting information, authenticity or reliability, firm image, personal financial needs and experts advice.

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## 5.2 Recommendations

Since the hypotheses of experts advice and personal financial needs have been rejected so more focus should put on this sectors. Some are discussed below:

 To minimize the chance of insider trading, legal provisions should be made that no DSE member would becoming director of any listed company.

- A system has to be evolved by which small investors are not thrown out of the market. In fact, it is the group of small investors who really provide a base to the market. In order to protect the interest of small investors, SEC must provide shelter to small investors.
- Market surveillance has to be made responsive in nature rather than restrictive. This includes ensuring the market information at large. The average investor must have access to all information that might help the right investment decision.
- SEC can institutes a set up or to encourage the formation of investors associations under its umbrella. SEC must encourage competition among stock market and the operators. There should be more players on the market and the fight to grab business would automatically discourage cartel like behavior of brokers, protection of vested interest by exchanges and the company broker nexus.
- Adequate credit rating agency is not available in Bangladesh stock market.
   Credit rating enables the investors to judge the viability of the company for investment. It also helps the companies to attract investors by getting better rating. SEC can accommodate some more credit agencies.
- SEC must encourage and promote publicity. Stock Exchanges and companies must be asked to publicizes or notify any decision which might have bearing on markets investment. A publicly listed company can not have a private policy matter.
- The government through its regulatory power can do much to reduce uncertainty and infuse investors confidence in securities by increasing the information flows through other related measures.



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# 7.1 Questionnaire

Dear Sir/Madam,

I am from East West University doing a research on factors influencing investment behavior of Bangladeshi Investors as a requirement of my final project (BUS-498). To serve that purpose, I need some information from you. It would highly appreciate it if you provide me the information regarding your investment behavior. Moreover I ensure you that all the data will be used only for academic purposes and will be kept confidential.

Researcher:	Md. Rifat-Uz-Zaman
Supervisor:	Dr.Tanbir Ahmed Chowdhury
Name:	Date:

		1.Fin	m-Image	<u> </u>		
No.	What do you consider before investing in stock of a firm	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		(1)	(2)	(3)	(4)	(5)
1	Reputation of the firm					
2	High return					
3	Religious reasons					
4	Firm status in industry					
5	The creation of the organized financial markets					
6	Perceived ethics of firm					
7	Feelings for a firm's products and services					
8	Increase of the firm's involvement in solving community problems					

	I i a m		ng Informati	7	1	-
No.	What do you consider before investing in stock of a firm	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		(1)	(2)	(3)	(4)	(5)
9	Earning per Share					
10	Condition of financial statements	-				
11	Dividends paid					
12	Affordable share price					
13	Expected Dividends					
14	Past performance of the firm's stock					

		3.Authentic	ity or Reliab	ility		
No.	What do you consider before investing in stock of a firm	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		(1)	(2)	(3)	(4)	(5)
15	Government holdings					
16	Information obtained from the internet					
17	Fluctuation/developments in the stock index					
18	Coverage in the press					
19	Current economic indicators					
20	Recent price movement in a firm's stock					

2000		4. Expe	erts advice			
No.	What do you consider before investing in stock of a firm	Strongly Agree (1)	Agree (2)	Neutral (3)	Disagree (4)	Strongly Disagree (5)
21	Broker recommendation		3.00			
22	Family, friends or coworkers opinions					
23	Opinions of the firm's majority stockholders					

	5.Personal Financial Needs						
No.	What do you consider before investing in stock of a firm	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree	
		(1)	(2)	(3)	(4)	(5)	
24	Attractiveness of non-stock investment		_				
25	Diversification needs						
26	Ease of obtaining borrowed funds						
27	Minimizing risk						
28	Expected Losses in other local investments stockholders						

	6.	Demand of	Common S	Stock		
No.	What do you consider before investing in stock of a firm	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
		(1)	(2)	(3)	(4)	(5)
29	You prefer to invest in common stock					
30	You would like to buy common stock in bullish market			_		
31	You would like to buy common stock in bearish market					
32	You would like to buy common stock in under priced market					
33	You would like to buy common stock in over priced market					

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# Test of internal consistency

# Reliability for firm image:

#### **Case Processing Summary**

		N	%
Cases	Valid	70	100.0
	Excluded (a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

#### **Reliability Statistics**

Cronbach's Alpha	N of Items
.690	7

#### Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Reputation of the firm	12.97	10.492	.247	.689
High return	12.81	10.182	.284	.682
Firm status in industry	12.51	9.732	.299	.681
The creation of organized financial markets	12.14	9.168	.374	.662
Perceived ethics of firm	12.03	7.970	.617	.590
Feelings for a firms products and services	11.77	7.860	.522	.617
Increase of the firms involvement in solving community problems	11.81	8.385	.436	.646

# Reliability for accounting information:

## **Case Processing Summary**

		N	%
Cases	Valid	70	100.0
	Excluded (a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

## Reliability Statistics

Cronbach's Alpha
.626

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Earning per share	7.03	3.854	.283	.614
Dividends paid	6.74	3.382	.392	.566
Affordable share price	6.41	3.608	.255	.631
Expected dividends	6.66	3.156	.448	.537
Past performance of the firms stock	6.59	2.536	.537	.476

# Reliability for authenticity or reliability:

**Case Processing Summary** 

		N	%
Cases	Valid	70	100.0
	Excluded (a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	N of Items
.551	5

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Information obtained from the internet	8.50	4.428	.269	.519
Fluctuation or developments in the stock index	8.50	4.486	.284	.513
Coverage in the press	7.93	3.922	.294	.510
Current economic indicators	8.57	3.640	.420	.425
Recent price movement in a firms stock	8.79	4.113	.305	.500



# Reliability for experts advice:

## **Case Processing Summary**

			+2
		N	%
Cases	Valid	70	100.0
	Excluded (a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

## **Reliability Statistics**

Cronbach's Alpha	N of Items
.512	3

## **Item-Total Statistics**

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Broker recommendation	4.49	2.051	.266	.482
Family, friends or coworkers opinions	4.53	2.514	.141	.413
Opinions of the firms majority stockholders	4.70	1.952	.245	.471

# Reliability for personal financial needs:

## **Case Processing Summary**

		N	%
Cases	Valid	70	100.0
	Excluded (a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

## Reliability Statistics

Cronbach's Alpha	N of Items
.689	5

Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
Attractiveness of non- stock investment	8.49	6.311	.426	.647
Diversification needs	8.87	6.085	.535	.608
Ease of obtaining borrowed funds	8.71	5.308	.502	.612
Minimizing risk	9.07	6.473	.350	.677
Expected losses in other local investments stockholders	8.51	5.587	.434	.647

# Reliability for demand of common stock:

# **Case Processing Summary**

		N	%
Cases	Valid	70	100.0
	Excluded (a)	0	.0
	Total	70	100.0

a Listwise deletion based on all variables in the procedure.

## Reliability Statistics

Cronbach's Alpha	N of Items
.711	5

## Item-Total Statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
You prefer to invest in common stock	11.60	5.171	.582	.622
You would like to buy common stock in bullish market	9.80	5.293	.341	.723
You would like to buy common stock in bearish market	11.60	5.171	.582	.622
You would like to buy common stock in under priced market	11.60	5.171	.582	.622
You would like to buy common stock in over priced market	9.80	5.293	.341	.723

# Frequency Table

Reputation of the firm

-7

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree Agree Neutral Total	48	68.6	68.6	68.6	
		18	25.7	25.7	94.3
	Neutral	4	5.7	5.7	100.0
	Total	70	100.0	100.0	

# High return

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree Agree		39	55.7	55.7	55.7
	25	35.7	35.7	91.4	
	Neutral	6	8.6	8.6	100.0
	Total	70	100.0	100.0	

## Religious reason

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	4	5.7	5.7	5.7
	Agree	8	11.4	11.4	17.1
	Neutral	29	41.4	41.4	58.6
	Disagree	13	18.6	18.6	77.1
	Strongly disagree	16	22.9	22.9	100.0
	Total	70	100.0	100.0	

## Firm status in industry

		Frequency	Percent	Valid Percent	Cumulative Percent
agre Agre Neutr Disagr	Strongly agree	26	37.1	37.1	37.1
	Agree	32	45.7	45.7	82.9
	Neutral	10	14.3	14.3	97.1
	Disagree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

# The creation of organized financial markets

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	13	18.6	18.6	18.6
	Agree	35	50.0	50.0	68.6
	Neutral	18	25.7	25.7	94.3
	Disagree	3	4.3	4.3	98.6
	Strongly disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

## Perceived ethics of firm

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	14	20.0	20.0	20.0
	Agree	25	35.7	35.7	55.7
	Neutral	26	37.1	37.1	92.9
	Disagree	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

# Feelings for a firm's products and services

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	9	12.9	12.9	12.9
	Agree	26	37.1	37.1	50.0
	Neutral	24	34.3	34.3	84.3
	Disagree	8	11.4	11.4	95.7
	Strongly disagree	3	4.3	4.3	100.0
	Total	70	100.0	100.0	

# Increase of the firm's involvement in solving community problems

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	11	15.7	15.7	15.7
	Agree	23	32.9	32.9	48.6
	Neutral	25	35.7	35.7	84.3
	Disagree	10	14.3	14.3	98.6
	Strongly disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

# Earning per share

		Frequency	Percent	Valid Percent	Cumulative Percent
agree Agree Neutra	Strongly agree	49	70.0	70.0	70.0
	Agree	19	27.1	27.1	97.1
	Neutral	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

#### Condition of financial statements

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	37	52.9	52.9	52.9
	Agree	25	35.7	35.7	88.6
	Neutral	6	8.6	8.6	97.1
	Disagree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

## Dividends paid

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree Agree Neutral		33	47.1	47.1	47.1
	31	44.3	44.3	91.4	
	6	8.6	8.6	100.0	
	Total	70	100.0	100.0	

# Affordable share price

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree Agree Neutral		18	25.7	25.7	25.7
	38	54.3	54.3	80.0	
	14	20.0	20.0	100.0	
	Total	70	100.0	100.0	

## **Expected dividends**

		Frequency	Percent	Valid Percent	Cumulative Percent
agree Agree Neutral	Strongly agree	29	41.4	41.4	41.4
	Agree	34	48.6	48.6	90.0
	Neutral	6	8.6	8.6	98.6
	Disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	



## Past performance of the firms stock

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	30	42.9	42.9	42.9
	Agree	30	42.9	42.9	85.7
	Neutral	7	10.0	10.0	95.7
	Disagree	2	2.9	2.9	98.6
	Strongly disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

# Government holdings

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree Agree Neutral Disagree		11	15.7	15.7	15.7
		37	52.9	52.9	68.6
	Neutral	16	22.9	22.9	91.4
	6	8.6	8.6	100.0	
	Total	70	100.0	100.0	

## Information obtained from the internet

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid Strongly agree Agree Neutral Disagree	0,	14	20.0	20.0	20.0
	Agree	39	55.7	55.7	75.7
	Neutral	15	21.4	21.4	97.1
	2	2.9	2.9	100.0	
	Total	70	100.0	100.0	

# Fluctuation or developments in the stock index

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	12	17.1	17.1	17.1
Agree Neutral Disagree	Agree	43	61.4	61.4	78.6
	Neutral	13	18.6	18.6	97.1
	2	2.9	2.9	100.0	
	Total	70	100.0	100.0	

## Coverage in the press

		Frequency	Percent	Valid Percent	Percent
Valid	Strongly agree	6	8.6	8.6	8.6
	Agree	26	37.1	37.1	45.7
	Neutral	26	37.1	37.1	82.9
	Disagree	11	15.7	15.7	98.5
	Strongly	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

## **Current economic indicators**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	27.1	27.1	27.1
	Agree	37	52.9	52.9	80.0
	Neutral	11	15.7	15.7	95.7
	Disagree	1	1.4	1.4	97.1
	Strongly disagree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

## Recent price movement in a firms stock

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	28	40.0	40.0	40.0
	Agree	32	45.7	45.7	85.7
	Neutral	8	11.4	11.4	97.1
	Disagree	1	1.4	1.4	98.6
	Strongly disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

#### **Broker recommendation**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	11	15.7	15.7	15.7
	Agree	33	47.1	47.1	62.9
	Neutral	17	24.3	24.3	87.1
	Disagree	7	10.0	10.0	97.1
	Strongly disagree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

# Family, friends or coworkers opinions

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	11	15.7	15.7	15.7
	Agree	32	45.7	45.7	61.4
	Neutral	22	31.4	31.4	92.9
	Disagree	3	4.3	4.3	97.1
	Strongly	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

# Opinions of the firm's majority stockholders

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	20	28.6	28.6	28.6
	Agree	28	40.0	40.0	68.6
	Neutral	16	22.9	22.9	91.4
	Disagree	3	4.3	4.3	95.7
	Strongly disagree	3	4.3	4.3	100.0
	Total	70	100.0	100.0	

## Attractiveness of non-stock investment

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	8	11.4	11.4	11.4
	Agree	29	41.4	41.4	52.9
	Neutral	28	40.0	40.0	92.9
	Disagree	5	7.1	7.1	100.0
	Total	70	100.0	100.0	

## Diversification needs

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	16	22.9	22.9	22.9
	Agree	37	52.9	52.9	75.7
	Neutral	15	21.4	21.4	97.1
	Disagree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

# Ease of obtaining borrowed funds

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	19	27.1	27.1	27.1
	Agree	26	37.1	37.1	64.3
	neutral	19	27.1	27.1	91.4
	Disagree	4	5.7	5.7	97.1
	Strongly disagree	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

# Minimizing risk

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	25	35.7	35.7	35.7
	Agree	35	50.0	50.0	85.7
	Neutral	7	10.0	10.0	95.7
	Disagree	2	2.9	2.9	98.6
	Strongly disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

## Expected losses in other local investments stockholders

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	13	18.6	18.6	18.6
	Agree	27	38.6	38.6	57.1
	Neutral	21	30.0	30.0	87.1
	Disagree	7	10.0	10.0	97.1
	Strongly	2	2.9	2.9	100.0
	Total	70	100.0	100.0	

# You prefer to invest in common stock

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	17	24.3	24.3	24.3
	Agree	37	52.9	52.9	77.1
	Neutral	15	21.4	21.4	98.6
	Disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

## You would like to buy common stock in bullish market

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	5	7.1	7.1	7.1
	Neutral	23	32.9	32.9	40.0
	Disagree	23	32.9	32.9	72.9
	Strongly disagree	19	27.1	27.1	100.0
	Total	70	100.0	100.0	

# You would like to buy common stock in bearish market

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	17	24.3	24.3	24.3
	Agree	37	52.9	52.9	77.1
	Neutral	15	21.4	21.4	98.6
	Disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

## You would like to buy common stock in under priced market

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Strongly agree	17	24.3	24.3	24.3
	Agree	37	52.9	52.9	77.1
	Neutral	15	21.4	21.4	98.6
	Disagree	1	1.4	1.4	100.0
	Total	70	100.0	100.0	

## You would like to buy common stock in over priced market

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Agree	5	7.1	7.1	7.1
	Neutral	23	32.9	32.9	40.0
	Disagree	23	32.9	32.9	72.9
	Strongly disagree	19	27.1	27.1	100.0
	Total	70	100.0	100.0	