An Evaluation of the Factors Influencing Investors' Perception in Bangladesh Stock Market

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Abstract

Behavioral finance deals with the influence of psychology on the behavior of financial practitioners and its subsequent impact on stock markets. Unlike the developed part of the globe, very limited research attempts have been undergone so far in the field of investors' behavior in the growing stock markets. However, the decisions of investors in an emergent market are generally influenced by behavioral finance rather than conventional finance. Thus, this study aims at analyzing the general behavior of individual investors in Bangladesh in terms of the factors affecting their stock market perception. The study is mainly based on primary data, collected particularly in the context of Bangladesh. In exposing the factors affecting the perception of individual investors, a number of statistical techniques under univartate, bivariate and multivariate analysis have been applied using SPSS. According to the study, Accounting Information is the most important factor influencing investors' decision, whereas Company Specific Attributes or Reputation is the least important factor. The findings of the study may offer important implications to the concerned parties, especially to the actual and potential investors, corporations' management, investment managers, regulatory body, etc.

Keywords: general investment behavior, individual investors, influencing factors

1. Introduction

"People in standard finance are rational. People in behavioral finance are normal" Statman (2008) Investors' absurdity is an unpredictable veracity that has been the center of attention of researchers all over the world. As stated by Sewell (2010), behavioral finance is concerned with the impact of psychology on the perception of investors, which has ultimate impact on stock markets. Rational expectations theory assumes investors to behave rationally and in their self-interest, with intent to earn maximum returns at a given risk level. Nonetheless, the reality is that investors make imperfect investment decisions and tend to make the same mistakes repeatedly, such as, buying and selling frequently; going after the herd; having preference for the familiar; selling the winning positions and holding onto losing positions; short-term thinking, and being overconfident. Advocates of behavioral finance focus on the social, cognitive, and emotional factors that motivate investors to behave in a manner different from the rational behavior suggested by standard economic theory (Aregbeyen & Mbadiugha, 2011; Barber & Odean, 1999; Elan, 2010; Kahneman & Tversky, 1979; Mohacsy & Lefer, 2007; Shefrin & Statman, 1985). Jagongo and Mutswenje (2014) assumed both information structure as well as the factors in the market to have systematic influence on individual's investment decisions and overall market results. These factors tend to spot light on how investors differ in interpreting and acting on information while making their investment decisions.

In the recent years, numerous research works have been attempted in the area of investors' perception about equity market and their stock investment decisions. These studies mostly focused on the financial markets of individual countries as well as particular regions of the globe. Nevertheless, inadequate research attempts have been endured so far in the field of investors' behavior focusing on the stock market of developing countries.

This study aimed at analyzing the factors affecting the investment decisions of individual investors in the stock market of Bangladesh. In view of that, the venture of this study was to find out the features influencing investment decision of individual investors that can fundamentally account for a number of scrutinized variables. Moreover, attempts were made to categorize the variables precisely into a few principal factors and recognize the

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relative significance of each of the factors. Further, the study also investigated the influence of investors' general investment behavior on each of the principle factors (variables). By combining all these aspects of investors' behavior, this research crafts exceptional appeal to the existing literature of behavioral finance in developing countries, especially in the context of Bangladesh.

The research was based mainly on primary data gathered and processed through questionnaire survey. It covers an exploratory study involving purposive sampling. A number of statistical tools such as frequencies, mean scores, standard deviations, percentages, and one way Analysis of Variance (ANOVA) were used in the data analysis process employing the statistical software SPSS. Initially the study explicitly researched on the general investment behavior of retail investors using frequency distribution. In addition, a number of variables have been examined using a five point Likert scale to check their influence on the investment decision of individual investors and thus, ranked according to investors' preference. The variables are then categorized into five leading factors named company specific attributes, accounting information, reliability of information, influence of others (peer) and investors' action in specific situations. In order to analyze the comparative importance of each of the factors, a ranking table of the key factors has been derived on the basis of mean scores of the factors as well as individual items included in each factor category. Finally, using one way Analysis of Variance (ANOVA), the relative significance of each of these principal factors have been examined in relation to the general investment characteristics of investors such as their trading experiences with Dhaka Stock Exchange (DSE), investment frequencies, sources of fund, investment thoughts, and expected gain from investments.

2. Problem Statement

The stock market of Bangladesh, specifically DSE has been observing instability since its commencement (Hossain and Uddin, 2011). The indices attained the peak in its history in November, 1996 and ultimately the market collapsed. The consequential lack of confidence of investors on the stock market directed regulators to attempt for restructuring the market through automated operation in 1998. Further, stock market collapse of 2010-11 has been a national, political and social concern of the country. The crash swabbed out a huge amount of money from the market where fresh, unaware individual investors were the major losers. According to the research recently carried out by Centre for Policy Dialogue (CPD) (2011 cited in Faruqui and Rahman, 2013, p.141), most of these fresh investors didn't have enough knowledge about the stock market. Still, they invested more or less all of their savings in the market. Even after a number of years since the crash had transpired; the market is still struggling to salvage its losses. In fact, such malfunctioning of Bangladesh stock market time and again affects mostly individual investors.

One of the most important reasons for high instability in Bangladesh stock market may be irrational behavior of retail investors who are the major players in capital market (Hossain and Nasrin, 2012). In this scenario, recognizing the decision making criteria of investors have become crucial. However, the decisions of retail investors in an emerging market are typically affected by behavioral finance rather than conventional finance. Therefore, it is important to ascertain the general behavior of investors and also the factors that influence investor's sentiment in trading equity shares. If financial planners have detailed understanding of these behavioral issues related to investors' insight in the investment decisions, they can attempt to control these influencing factors to such an extent that brings stability in the market. Thus, this study proceeded with the following research questions:

- 1) How does the general investment behavior of retail investors enlighten their stock market investment situations?
- 2) What are the factors affecting the investment decisions of individual investors and how does each of these factors persuade such decisions?
- 3) Are general investment aspects of retail investors related to the factors influencing their investment decisions? If yes, how?

3. Rationale for the Study

The endeavor of this study was to understand the general behavior of investors in the capital market of Bangladesh, especially the stock market, and examine the factors which affect decisions of investors. Very few studies have been conducted so far concerning individual investors' behavior in Bangladesh. Thus, the study is expected to enrich the existing behavioral finance literature by presenting evidence on the behavioral issues of stock market investors. Investors with similar characteristics in the country and elsewhere in the world can follow the findings and recommendations offered in this study in planning their investments. Besides, corporations can update their future policies and strategies in accordance with their knowledge of the factors

influencing their investors' decisions. Moreover, findings of this research will also be useful to stock market dealers and brokers in understanding investors' inclination and thus, enabling them in improving their services. Further, the research can also have important practical implications for government regulators in the capital market of Bangladesh.

4. Literature Review

Numerous research have been done so far in the area of individual investors' behavior in the capital market (Baker & Wurgler, 2007; Baker, Wurgler, & Yuan, 2012; Barber & Odean, 2000; Barber & Odean, 2008; Conrad, Kapadia & Xing, 2014; Grinblatt & Keloharju, 2000; Jariwala, 2015; Odean, 1998 [a], [b]; Ovat, O.O., 2012; Stambaugh, Yu, & Yuan, 2012; Viswanadham et. al., 2014; Yu & Yuan, 2011).

Empirical studies focused on the behavioral aspects of investors in different countries of the world like Finland (Grinblatt & Keloharju, 2000); Greece (Merikas et al., 2004), Nigeria (Aregbeyen & Mbadiugha, 2011; Ovat, O.O., 2011); Nairobi (Jagongo & Mutswenje, 2014); Tanzania (Viswanadham, et. al., 2014); Ghana (Bennet et. al., 2011); United States (Kumar, 2009; Elan, 2010; Shiller, 2000). Research has also been conducted focusing on the investors of a particular region of the world (Mobarek, Mollah, & Keasey, 2014; Kamstra, Kramer, & Levi, 2003). Besides, a number of studies have been conducted so far on investors in the stock market of Asian region specifically; China (Shumway & Wu, 2006); India (Prosad, 2014; Rakesh, 2014; Bhatt, 2013; Joshi, Khusboo & Desai, 2011; Jains and Dashora, 2012; Mohanta & Debasish, 2011); Japan (Kamesaka, Nofsinger & Kawakita, 2003); Malaysia (Chong & Lai, 2011); Pakistan (Iqbal & Usmani, 2009; Lodhi, 2014); UAE (Al-Tamimi, 2006).

Over the past decades numerous studies spotted light on the factors having influence on individual investors' investment behavior. Al-Tamimi (2006) attempted to examine investors' behavior in UAE financial markets by categorizing 34 variables under five principal factors. His study concluded that expected earnings, desire to get rich quickly, marketability of stock, preceding stock performance, government holdings, and structured financial market are the most influential individual factors according to investors.

Joshi, Khusboo and Desai (2011) found that investors are typically influenced by factors like a company's financial performance, performance trend of the stock in the long term, attitude towards stock market, expectations from the company in terms of cash dividend, bonus share, etc, company repute, movement of stock market, and affordability of share price.

The research of Mills, Steven and Warren (1994) launched that financial factors have considerable influence on investment decisions, and a firm's balance sheet and monetary policy influence the investment decision of the equity market investors. According to Sehgal and Tripathi (2007), company specific factors, such as firm size, book to market equity, price earnings ratio, leverage, etc. have considerable influence on stock prices. Merikas et al. (2004) revealed that investors make their investment decision based on the price indices, latest stock price movement firms, and existing economic pointers. In another study, Merikas et al. (2004) investigated 150 individual investors in the stock market of Greece, and concluded that investors mostly emphasize expected earnings, financial statement conditions and status of particular firms in the industry in taking their investment decisions. Chong and Lai (2011) examined Malaysian customers and found that they place much importance on the past performance of a firm's stock, latest price movements, and firm's status in the pertinent industry. As stated by Bennet, et al. (2011), return on equity (ROE), management quality, return on investment (ROI) and price to earnings (P/E) ratio influence the decision makers. The research of Aregbeyen and Mbadiugha (2011) revealed that investment decisions of Nigerian investors are persuaded by economic, social, cultural and psychological aspects.

A few studies attempted by researchers, especially on Bangladeshi investors, recognize several factors (variables) that influence their investment decisions such as analysis of investment, simplicity of transaction, information management, risk management, advice of brokers, friends and family, affordability of price, availability of borrowed fund and prior performance (Rashid & Nishat, 2009; Akhter & Ahmed, 2013; Hossain & Nasrin, 2012; Faruqui & Rahman, 2013; Farzana, Rahman, & Mazumder, 2012). The study of Jannatunnesa (2015) spotted light on demographic and general investment characteristics of retail investors, particularly investing in Dhaka Stock Exchange (DSE). However, most of the studies in Bangladesh involve very small sample size compared to the overall market. Besides, very inadequate focus has been given so far on detailed analysis of the factors with respect to the demographic features as well as general behavior of retail investors.

Hence, this study intends to contribute to the financial literature of Bangladesh by evaluating the factors that have influence on the investment decision of individual investors, and the relative importance of each of the factors with respect to their general investment features. The present research will be an endeavor to bestow in

this area through an investigation of some relevant variables and their impact on retail investors' investment decisions.

5. Methodology

The study is an exploratory one comprising of both primary and secondary data, especially in the milieu of Bangladesh. Primary data has been assembled through a survey conducted on 150 retail investors trading in different brokerage houses in Dhaka Stock Exchange and Chittagong Stock Exchange. Besides, secondary data has been collected from pertinent newspapers, magazines, research articles, websites, etc.

While conducting the survey, questionnaire has been distributed using online platform and offline platform through individual brokers. Data has been collected from the respondents following purposive sampling technique. The survey questionnaire has been organized in three sections. The first part of the questionnaire includes demographic information of the respondents characterized by their gender, age, level of education, occupation, income, etc. The second section of the questionnaire consists of information related to general stock market investment behavior of respondents such as their trading experiences in stock market, expected gain, sources of fund, types of trading account, etc. The third section of the questionnaire asked respondents to rate the relative importance of a number of variables (items), which are taken into account by them in making their stock market investment decisions. The first and second sections consist of multiple choice questions. However, the variables, in the third section, have been measured on a five point Likert-type scale of performance ranging from 1 (most preferred) to 5 (least preferred).

The survey data were analyzed in SPSS using a number of statistical tools. Basic descriptive statistics such as frequency distribution was used to quantify the general investment features of the respondents. In this regard, multiple answers of the survey respondents were addressed separately as multiple response variables in SPSS and analyzed in view of that. Besides, a number of variables have been selected and examined in terms of their comparative importance to investors based on their descriptive statistics. The variables were then categorized under a number of prime factors, and the relative importance of each of these main factors is shown using a ranking table. Such ranking has been developed on the basis of the mean scores of factors as well as the mean score of individual variables included in those factors. Finally, the study employed one way ANOVA test to observe the influence of each of the key factors on the investment decisions of retail investors in terms of their general investment behavior.

6. Empirical Analysis

The study sought to explore the behavior of investors in terms of the factors affecting their investment decisions in the stock market of Bangladesh. A number of statistical tools, such as frequency distribution, ranking table based on mean values, and ANOVA (one way) have been employed using SPSS to evaluate the primary data obtained from the survey.

6.1 Analysis of General Investment Behavior of Retail Investors

Table 1 presents the frequency distribution of general investment characteristics of retail investors in Bangladeshi stock market.

Stock market of Bangladesh is mostly compacted by experienced investors. Among the investors, 37.3% have investment experience of 5-10 years and 27.3% are investing for more than 10 years. Besides, 33% of the investors have been involved in stock market investment for 1-5 years. However, only 2% investors have less than 1 year of experience.

Investors mostly perform very frequent (0-3 months) investment in stock market. Additionally, 30.8% of them invest every 3-12 months, 20% of the investors invest within 1-3 years and very few (only 5.3%) invest after every 3 years.

Greater part (72.7%) of the investors prefer to buy securities in bullish market, whereas, only 27.3% would like to buy shares in an underpriced market. None of them want to buy shares in a bearish or over priced market.

Before making an investment, emphasize is given mostly (44.7%) on investors' security of investment in terms of their risk-return trade off. Secondly, 41.3% investors focus on potential gain. Yet, 13.3% think about both potential gain and loss.

Investors' own financing has preponderance as the source of fund for stock market investment. 56% investors invest their own fund in stocks and 42% use both their own and borrowed fund.

Most of the investors (64%) invest between BDT 0.2-2 million. 15.3% investors comprise investment size of BDT 2-10 million and 14.7% invest more than BDT 110 million However, only 6% investors invest less than BDT 0.2 million.

38% investors have expectation for an average annual return of 20%-30% from their investment. Besides, 30% investors expect 30%-50% gain and 14.7% expect more than 50% gain per annum. On the other hand, 17.3% investors have return target of 10%-20%.

78% investors stay away from stock market investment in different situations. However, 22% of the investors have uninterrupted presence in the market.

Table 1. Frequency distribution of general investment behavior of the respondents

Variable	Category	Frequency	Percent
Investment experience	Less than 1 year	3	2
	1-3 years	26	17.3
	3-5 years	24	16
	5-10 years	56	37.3
	Above 10 years	41	27.3
Investment frequency	Every 0-3 months	46	30.7
	Every 3-12 months	66	44
	Every 12-36 months	30	20
	Every 36 months or more	8	5.3
Preferred market condition	Buy in bullish market (rising price)	109	72.7
	Buy in underpriced market	41	27.3
Investment focus (thought)	Mostly about the potential gain	62	41.3
	Mostly about potential loss	1	0.7
	Both potential gain and loss	20	13.3
	Security of investment (i.e. risk v/s return)	67	44.7
Form (Source) of financing	Own fund	84	56
	Borrowed fund	3	2
	Own and borrowed fund	63	42
Investment size ¹	Below BDT 0.2 million	9	6
	BDT 0.2-BDT 0.5 million	51	34
	BDT 0.5-BDT 2.0 million	45	30
	BDT 2.0-BDT 10 million	23	15.3
	Above BDT 10 million	22	14.7
Expected gain	10%-20%	26	17.3
	20%-30%	57	38
	30%-50%	45	30
	Above 50%	22	14.7
Staying away from investment	Yes	117	78
	No	33	22

6.2 Analysis of General Investment Behavior of Retail Investors (Multiple Responses)

While carrying out the survey for assembling data, multiple responses were received from investors to a number of questions. Such multiple responses were defined and scrutinized statistically as multiple response variables for analysis in SPSS. Table 2 depicts frequency distribution based on the investors' multiple responses representing

their general investment behavior.

- *Investment Purpose:* Investors have a number of purposes for investing in stock market. 56.7% of them invest for multiple purposes. Specifically, most (32.3%) of the investors invest for their personal interest in stock market. 23.8% want to meet their family needs in future, 27.2% go to stock market seeing others making profit and 11% want to earn abnormal return in the short run. It is interesting that very few people (5.5%) go there to earn their day to day expenditure.
- Reasons for Staying Away From Investment: Political instability and abnormal market fluctuation play vital role keeping 58.1% and 56.4% investors (respectively) away from the market. More to the point, 34.7% and 33.7% investors emphasize particularly on these two reasons. In addition, 17.9% and 13.8% investors stay away from market for unavailability of fund and regulatory policy reforms respectively.
- Responses to Share Price Decrease: Investors address the decrease in stock prices in various manners. When the price of stocks decrease immediately after they buy those, 38% investors ignore temporary changes and hold on the stock for long term growth. Conversely, 28.4% investors discuss this situation with their fellow traders before taking decision. However, 17.8% investors get rid of the worries by selling those stocks, and try something else. Still 15.9% attempt to reduce the average cost by adding more of the shares to their portfolios.
- Responses to Share Price Increase: In response to a jump in the price of shares after purchase, about 35% investors hold on the stocks expecting more gains, and 30.4% lock in the gains by selling the stocks. In contrast, 27.1% investors discuss this situation with fellow traders and take decision accordingly.

Table 2. Frequency distribution (multiple responses) of general investment behavior of respondents

		Respon	Responses	
Variable	Category	Frequency	%	Cases
Investment Purposes	Meet family needs in future	56	23.8	37.3
	Personal interest about stock market	76	32.3	50.7
	Seeing others make profit	64	27.2	42.7
	Earn abnormal gain in short run	26	11.1	17.3
	Earn day-to-day family expenditures	13	5.5	8.7
	Total	235	100	156.7
	Political instability	68	34.7	58.1
Reasons for Staying	Abnormal fluctuation in the market	66	33.7	56.4
Away from Investment	Unavailability of fund	35	17.9	29.9
	Policy reform by SEC or DSE/CSE	27	13.8	23.1
	Total	196	100	167.5
	Ignore temporary changes and hold on stocks for long term	79	38	52.7
Responses to Price	Buy more to reduce the average cost	33	15.9	22
Decreases	Sell it to avoid further worries and try something else	37	17.8	24.7
	Do what the fellow traders are doing	59	28.4	39.3
	Total	208	100	138.7
	Hold on the stock and hope for more gains	72	34.8	48
Responses to Price	Buy more as the price could go higher	16	7.7	10.7
Jumps	Sell it and lock in the gains	63	30.4	42
	Do what the fellow traders are doing.	56	27.1	37.3
	Total	207	100	138

6.3 Analysis of Factor Influencing Investment Behavior of Individual Investors

A total of 24 variables have been examined which are assumed to direct the investment decision of individual

investors in stock market. The variables include (1) company size, (2) age of the company, (3) company reputation, (4) status of the firm in industry, (5) Earnings Per Share (EPS), (6) Return on Equity (ROE), (7) dividend paid by the firm, (8) expected non-cash dividends, (9) growth of the firm, (10) firm's Debt to Equity ratio, (11) information obtained from internet, (12) fluctuations in stock indices, (13) information from newspapers, articles, etc., (14) brokers' analysis, (15) market movement (rumor), (16) family members, (17) friends, (18) brokers' influence, (19) financial Consultant, (20) analysts' forecasts in news media, (21) buy/sell shares with market price changes (22) willingness to purchase different types of stocks to reduce risk, (23) increase in investment with availability of borrowed fund and (24) willingness to take high risk for high returns. These variables are selected based on the relevant literature (Al-Tamimi, 2006; Kaleem, Wajid, and Hussain, 2009; Merikas et al., 2004; Nagy and Obenberger, 1994), personal know-how, and interviews with investors. Respondents were asked to indicate the degree of influence of each of the items on a five point Likert scale ranging from 'most preferred' to 'least preferred' ranked as 1=most preferred, 2= preferred, 3= neutral, 4= less preferred and 5= Least preferred.

The items are then categorized into five leading factors such as company specific attributes, accounting information, reliability of information, influence of others (peer) and investors' action in specific situations. Here, Company Specific Attributes include size, age, reputation, and status of the firm in the industry. Accounting Information consists of variables such as EPS, ROE, dividend paid, expected non-cash dividends, firm growth and firm's Debt/Equity ratio. The factor Reliability of Information comprises of information obtained from internet, stock indices fluctuations, information from newspapers, articles, etc., brokers' analysis, and market movement. Influence of Others (peer) contains family members, friends, brokers' influence, financial consultants, and analysts' forecasts in news media. Investors' Action in Specific Situations is another factor which includes items such as trading of shares with market price changes, willingness to purchase different types of stocks to reduce risk, increase in investment with availability of borrowed fund, and compliance with high risk for high returns.

6.3.1. Ranking of Variables and Factors Influencing Stock Investment Decisions

Ranking of the mean values of importance has been used to find out which of the examined variables is given the highest importance by the respondents. For this purpose, the mean level of importance of each item on the Likert scale has been calculated.

Table 3. Descriptive statistics of variables influencing investors' decisions

Serial	Variable Name	Frequency	Max	Variable	Variable	Variable
No.		(Mode)	(%)	Mode	Mean	SD
1	Firm's Debt to Equity ratio	91	60.7	3	3.62	.988
2	Information obtained from internet	65	43.3	4	3.57	.814
3	Analysts forecasts in News media	42	28.0	3	3.41	1.112
4	Return on Equity	85	56.7	3	3.35	.898
5	Financial Consultant	99	66.0	3	2.97	.789
6	Growth of the firm	40	26.7	1	2.79	1.398
7	Expected non-cash dividends	72	48.0	3	2.74	.772
8	Newspapers, articles, etc.	63	42.0	2	2.66	1.128
9	Willing to take high risk for high returns	85	56.7	3	2.65	.770
10	Dividend paid by the firm	94	62.7	3	2.59	.779
11	Friends	70	46.7	3	2.44	.839
12	Family members	69	46.0	3	2.32	.951
13	Buy different types of stocks to reduce risk	76	50.7	2	2.18	.927
14	Buy/sell shares with market price changes	60	40.0	1	2.11	1.232
15	Brokers' Influence	83	55.3	2	2.09	.777
16	Fluctuations in the stock index	61	40.7	1	2.00	.962
17	Market movement (rumor)	98	65.3	1	1.67	1.120
18	Earnings per share	84	56.0	2	1.61	.577
19	Brokers' Analysis	91	60.7	1	1.56	.781
20	Status of the firm in industry	108	72.0	1	1.41	.724
21	Age of the company	113	75.3	1	1.29	.550
22	Size of the company	122	81.3	1	1.27	.620

23	Increase investment when borrowed fund is easily available	125	83.3	1	1.23	.545
24	Reputation of the company	127	84.7	1	1.17	.424

First, the descriptive statistics are calculated and an overall ranking is conducted for all the items based on their mean values. As presented in Table 3, all the 24 variables somehow affect the investment decision of Bangladeshi investors. However, firm's Debt/Equity ratio, information obtained from internet, and analysts' forecasts in news media can be recognized as the three most important variables manipulating investment decision of individual investors. On the other hand, company reputation, increase in investment with easily available borrowed fund, and company size are the factors that investors consider least important in making their investment decisions.

Next, the mean values of items classified into each factor group are consolidated to get a single value for each category as shown in Table 4.

Table 4. Descriptive Statistics of the Factor Categories Comprising of the Variables Influencing Investors' Decisions

No.	Items	Factor Categories	Mean	Median	Mode	SD
1	Size of the company	Company Specific Attributes	1.28	1.25	1	0.2743
2	Age of the company					
3	Reputation of the company					
4	Status of the firm in industry					
5	Earnings per share	Accounting Information	2.78	2.67	2.5	0.5184
6	Return on Equity					
7	Dividend paid by the firm					
8	Expected non-cash dividends					
9	Growth of the firm					
10	Firm's Debt to Equity ratio					
11	Information obtained from internet	Reliability of Information	2.29	2.2	2	0.4175
12	Fluctuations in the stock index					
13	Newspapers, articles, etc.					
14	Brokers					
15	Market movement (rumor)					
16	Family members	Influence of Others (Peer)	2.65	2.6	2.6	0.3538
17	Friends					
18	Brokers					
19	Financial Consultant					
20	Analysts forecasts in News media					
21	Buy/sell shares when price changes in the market	Investors Action in Specific Situations	2.04	2	2	0.4336
22	Willing to buy different types of stocks to reduce					
22	risk					
23	Increase investment when borrowed fund is easily					
23	available					
24	Willing to take high risk for high returns					

Then ranking is done by leveling rank 1 to the factor with the highest mean and so on. Summary of the descriptive statistics of the prime factors and their ranking is presented in Table 5. According to this study, among the principal factors influencing retail investors, the most important is Accounting Information with a mean value of 2.78 followed by Influence of peer (mean=2.65), Reliability of Information (mean=2.29), Investors' Action in Specific Situations (mean=2.04), and Company Specific Attributes or Reputation (mean=1.28).

Table 5. Summary of Descriptive Statistics of the Factors and Ranking

Factor Categories	Mean	Median	Mode	SD	Rank
Accounting Information	2.78	2.67	2.50	0.5184	1
Influence of Others (Peer)	2.65	2.60	2.60	0.3538	2
Reliability of Information	2.29	2.20	2.00	0.4175	3
Investors' Action in Specific Situations	2.04	2.00	2.00	0.4336	4
Company Specific Attributes (Reputation)	1.28	1.25	1.00	0.2743	5

6.4 One Way Analysis of Variance (ANOVA)

Finally one way ANOVA test has been performed to verify whether factors influencing investment decisions of retail investors have significant deviation among investors having different levels of stock trading experience, investment frequency, sources of fund, investment focus, and gain expectation from their investments. To enhance the understanding of the factors influencing the equity selection decision, the following null hypotheses have been tested for the principal factors:

- 1) There is no significant difference between investors' experience and the factors influencing their investment decisions.
- 2) There is no significant difference between investors' investment frequency and the factors influencing their investment decisions.
- 3) There is no significant difference between investors' sources of fund and the factors influencing their investment decisions.
- 4) There is no significant difference between investors' investment focus and the factors influencing their investment decisions.
- 5) There is no significant difference between investors' expected gain and the factors influencing their investment decisions.

The results of the ANOVA tests have been presented in a number of tables (Table 6-10). Table 6 depicts the results of the one way ANOVA test of investors having different level of investment experiences and the factors influencing their stock market investment decisions. Here factors like *Company reputation*, *Accounting Information*, and *Investors' Action in Specific Situations* have significance values of less than .05. Thus the influences of these factors significantly vary based on investors' experience level. However, *Reliability of Information* and *Influence of Others (Peer)* have significance values of more than .05, indicating that these factors have similar impact on investors having different investment experiences.

Table 6. One Way ANOVA Test of Investors Having Different Levels of Investment Experience

Experience (Investment Duration)		Sum of Squares	df	Mean Square	F	Sig.
Company Specific Attributes (Reputation)	Between Groups	.950	4	.237	3.355	.012
	Within Groups	10.259	145	.071		
	Total	11.208	149			
Accounting Information	Between Groups	3.120	4	.780	3.063	.019
	Within Groups	36.922	145	.255		
	Total	40.042	149			
Reliability of Information	Between Groups	.722	4	.180	1.036	.391
	Within Groups	25.249	145	.174		
	Total	25.970	149			
Influence of Others (Peer)	Between Groups	.812	4	.203	1.650	.165
	Within Groups	17.839	145	.123		
	Total	18.652	149			
Investors' Action in Specific Situations	Between Groups	2.938	4	.734	4.247	.003
	Within Groups	25.072	145	.173		
	Total	28.010	149			

Table 7 shows that there is no significant difference in factors like *Reliability of information*, *Influence of others*, and *Investors' action in specific situations* among investors having different investment frequencies. Nonetheless,

there is a significant difference among such investors in the case of factors like *Company Reputation* and *Accounting Information*.

Table 7. One Way ANOVA Test of Investors Investing in Different Investment Frequencies

				Mean		
Investment Frequency		Sum of Squares	df	Square	F	Sig.
Company Specific Attributes (Reputation)	Between Groups	.625	3	.208	2.874	.038
	Within Groups	10.583	146	.072		
	Total	11.208	149			
Accounting Information	Between Groups	2.941	3	.980	3.857	.011
	Within Groups	37.101	146	.254		
	Total	40.042	149			
Reliability of Information	Between Groups	.231	3	.077	.436	.727
	Within Groups	25.740	146	.176		
	Total	25.970	149			
Influence of Others (Peer)	Between Groups	.067	3	.022	.175	.913
	Within Groups	18.585	146	.127		
	Total	18.652	149			
Investors' Action in Specific Situations	Between Groups	.057	3	.019	.099	.961
	Within Groups	27.953	146	.191		
	Total	28.010	149			

As presented in Table 8, investors having different forms or sources of fund for stock market investment are influenced in similar way by *Company reputation*, *Peer Influence*, and also they act *similarly in specific situations*. Conversely, *Accounting information* and *Reliability of information* are the factors that significantly differ in influencing such investors having different fund sources.

Table 8. One Way ANOVA Test of Investors Having Different Sources of Fund

				Mean		
Sources of Finance		Sum of Squares	df	Square	F	Sig.
Company Specific Attributes (Reputation)	Between Groups	.447	2	.224	3.056	.050
	Within Groups	10.761	147	.073		
	Total	11.208	149			
Accounting Information	Between Groups	13.620	2	6.810	37.889	.000
	Within Groups	26.422	147	.180		
	Total	40.042	149			
Reliability of Information	Between Groups	2.040	2	1.020	6.265	.002
	Within Groups	23.931	147	.163		
	Total	25.970	149			
Influence of Others (Peer)	Between Groups	.703	2	.352	2.879	.059
	Within Groups	17.949	147	.122		
	Total	18.652	149			
Investors' Action in Specific Situations	Between Groups	.423	2	.212	1.127	.327
	Within Groups	27.587	147	.188		
	Total	28.010	149			

According to Table 9, investors having diverse investment focuses differ significantly in their reliance on factors like *Company attributes*, *Accounting information*, and *Reliability of information*. On the other hand, such investors identically depend on *Others' influence* and also *act in specific situations* irrespective of their differences in investment thoughts.

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Table 9. One Way ANOVA Test of Investors Having Different Investment Focuses

		Sum of		Mean		
Investment Thought		Squares	df	Square	F	Sig.
Company Specific Attributes (Reputation)	Between Groups	.890	3	.297	4.200	.007
	Within Groups	10.318	146	.071		
	Total	11.208	149			
Accounting Information	Between Groups	3.954	3	1.318	5.332	.002
	Within Groups	36.088	146	.247		
	Total	40.042	149			
Reliability of Information	Between Groups	1.855	3	.618	3.743	.013
	Within Groups	24.116	146	.165		
	Total	25.970	149			
Influence of Others (Peer)	Between Groups	.374	3	.125	.996	.396
	Within Groups	18.277	146	.125		
	Total	18.652	149			
Investors' Action in Specific Situations	Between Groups	1.042	3	.347	1.881	.135
	Within Groups	26.968	146	.185		
	Total	28.010	149			

Following the results of Table 10, it can be said that *Accounting information* and *Investors' action in specific situations* are the controlling factors that differ significantly among investors having diverse gain expectations from their stock investments. Nevertheless, *Company Specific Attributes (Reputation)*, *Reliability of Information*, and *Influence of Others* are the factors that have identical impact on investors regardless of their distinctly different return anticipations.

Table 10. One Way ANOVA Test of Investors Having Different Gain Expectations

		Sum of				_
Expected Gain		Squares	df	Mean Square	F	Sig.
Company Specific Attributes (Reputation)	Between Groups	.365	3	.122	1.640	.183
	Within Groups	10.843	146	.074		
	Total	11.208	149			
Accounting Information	Between Groups	11.091	3	3.697	18.644	.000
	Within Groups	28.951	146	.198		
	Total	40.042	149			
Reliability of Information	Between Groups	.967	3	.322	1.881	.135
	Within Groups	25.004	146	.171		
	Total	25.970	149			
Influence of Others (Peer)	Between Groups	.297	3	.099	.787	.503
	Within Groups	18.355	146	.126		
	Total	18.652	149			
Investors' Action in Specific Situations	Between Groups	2.497	3	.832	4.763	.003
	Within Groups	25.513	146	.175		
	Total	28.010	149			

7. Findings and Recommendations

The most important factor influencing retail investors' stock market investment decision is *Accounting Information* which consists of variables such as company EPS, ROE, dividend paid, expected non-cash dividends, growth and debt-equity ratio. Having a significant portion of investor with extensive investment experience, it is logical to get *Accounting Information* as the most important factor considered by investors in planning their investment. However, the least preferred factor by the investors is *Company Specific Attributes*. That is investors are least concerned about Individual Corporation's size, age, reputation, industry status, etc.

The study also tried to reveal the relative importance of each of these influencing factors with respect to a number of general stock market behavior of investors. It is evident here that *accounting information*, the most prominent

influencing factor, differs significantly among investors with respect to their general investment behavior. Thus, the relative importance of this factor significantly varies among investors having different investment experiences, financing forms, investment hubs or focuses, investment frequencies and gain expectations.

The second influencing factor is *influence of others (peer)*, which does not differ significantly among investors having different investment behavior. That is, all investors are influenced by this factor irrespective of their divergent experiences, sources of fund, investment thoughts, investment frequencies and gain expectations. Therefore, the market is likely to be affected by rumor.

Reliability of information is the third factor that has impact on investment decisions of retail investors. Investors having different financing forms and focal points of investment do not uniformly depend on information obtained from various sources such as internet, stock indices, brokers, market movement, etc. However, most of the investors depend on their own fund for stock investment. Besides, majority of the investors focus on the security of their investment in terms of their risk-return trade off as well as potential gain from investment.

Investors' action in specific situations differs significantly depending on their differences in experience and expected gain from investment. However, such actions do not markedly vary for their differences in investment frequencies, financing sources and focuses of investment. It is worth reinstating here that most of the investors are experienced in stock market investment. Moreover, maximum investors' expected gain range from 20% to 50% of their stock investments.

Company Specific Attributes is the least influencing factor and the relative importance of this factor depends particularly on investors' experience and investment frequency.

The findings of the study may offer important implications to the concerned parties and thus, proposes recommendations:

- For investors: It is evident from the study that different group of investors behave differently under a certain circumstance. However, investors are recommended to educate themselves on the factors discussed and findings yielded in the study, and make informed decisions while trading.
- For corporations: Companies having their stocks listed in the stock market of Bangladesh should concentrate carefully on those manipulating factors in order to satisfy the requirements of their existing investors, and also to draw the attention of prospective investors in their stocks. General investors face problems in understanding financial reporting by corporations (Lee and Tweedie, 1975a; 1975b; 1976). Corporations should address such problems by maintaining proper disclosure and ensuring transparency in their financial statements.
- For regulators: Regulators of stock market of Bangladesh should update their guidelines, policies and strategies keeping this decision making variables of investors in view so that they can maintain coordination between investors' preference and their efforts to stabilize the market. In this regard, they should launch different awareness programs for the actual and potential investors in stock market.
- For investment managers: Investment decisions are generally taken by investors and/or their investment managers on their behalf. Thus, investment companies, stock brokers and dealers should also be aware of the factors so that they can educate the unaware investors based on these issues, and help manage their stock portfolios.

8. Conclusion

This study was an endeavor to recognize the factors influencing the buying behavior of investors in the equity market of Bangladesh. The results divulged by the respondents endorse that there are a number of individual variables that are considered important by average equity investors. Those variables as well as the factors comprising of the variables affect the general investment behavior of active investors in Bangladesh. The literature summarized the view that accounting information, peer influence and dependability of information are the top three factors that significantly impact the equity investment decisions here. The study findings expose the basic channel to all the companies listed in the stock market of Bangladesh as well as other concerned parties, and thus, direct them to pay attention to the factors accordingly.

The research emerges with a fairly precise view of the average equity investor in Bangladesh stock market. However, experienced and knowledgeable investors would readily acknowledge the composition and relative weights of the scrutinized factor categories to reflect a very basic and unripe investors' profile. Further study can be attempted including institutional investors along with individuals in order to elaborate the understanding of factors influencing investors' behavior, on the whole, in stock market.

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Note

Note 1. 1 US Dollar = Bangladeshi Taka (BDT) 79.95 (as of January 13, 2017 as in Universal Currency Converter)

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