

INFLUENCE OF BEHAVIORAL FACTORS, MARKET FACTORS AND STOCK FUNDAMENTALS ON INDIVIDUAL'S INVESTMENT DECISION: A STUDY ON DHAKA STOCK EXCHANGE

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Abstract

The purpose of the study is to explore the effect of Behavioral Factors along with information related to stock fundamentals and Market factors which influence an individual investor's decision while investing in DSE. Using Likert's five scale of measurement, data are collected from investors of DSE. After collecting at first Chi square test was conducted to detect the association ship among all factors. EFA is used for factor analysis and at second level CFA is used to justify the hypotheses. This study used several factors e.g. Stock Fundamentals, Market Factors, while Consultation and Herding variable are used as behavioral factors. The result of the study shows that Stock Fundamentals and Market Factors have direct influence on investment decision. While two behavioral factors influence on investment decision via changing personal attitude towards investment. As there are, a few studies in Bangladesh related to behavioral finance, so this study is supposed to contribute significantly in the field of behavioral finance.

Keywords: Behavioral Factors, DSE, EFA, CFA, Herding Variables, Stock Fundamentals, Market Factors, Investment Decision

1. Introduction

Trend of Capital market is fully dependent on the investors' investment decision. However, decision like capital market investment is an exhaustive task, which requires a complex analysis of facts. Nevertheless, most of the time decision may not be feasible because there are lots of heuristics and psychological factors that play vital role. Investment means commitment of funds into assets for a future period with the expectation of getting return from that. There are two ways to get return form stock one is if market price increase from buying price later one is when dividends are provided to stockholders. (Mishkin & Eakin, 2007). Generally, people raise their money and asset in the form of personal savings and investing those in capital market. Ownership allures an investor to invest in stock, because of ownership investor get Benefits from dividends and augmentation of share price. (Croushore, 2006).

Making a judgement is not an easy task. Several factors and models are used to reach a decision. But in all times the model and factors may not signal the right things, it needs to judge the situation also. Conventionally investors are regarded as rational and want to maximize their wealth by following different rules and policies. But the preference of taking risk of all investors is not same, it varies depending on personal approach to accept risk. Scholars generally talks about the current investors of the stock market and hardly discuss about the potential stock market investors.

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Stock Fundamentals is a factor that impact on the investor's decision to invest on securities. Stock fundamentals basically estimate the health and performance of a company by analysing some key indicators. For the purpose of analysis it uses real and public data .Generally Stock fundamentals include Earnings per Share, Price earnings ratio, Return on equity, Book to Market ratio, Beta and Share volume.

Consultation is another factor which also affects the decision of investors. Generally investors discuss with their near ones who also reside in this area that means that also make investment in capital market when they take any decision to purchase or sale their securities. The person who make an influence here are family member, friends, stock brokers and coworkers.

Herding is another important influential factor which impact on the decision of investors while trading securities. It is the principles where one investor follow the action of other investors. Scholars give much attention here because investors rely on aggregate information more than the private information. Though behavioral factors are not directly involved with the asset pricing model, at present academic scholars are considering behavioral factors specially herding factor because it can influence the price change of stock (Tan, Chiang, Mason & Nelling, 2008, p.61). It includes Selection of stock types, Volume of stock, Buying and Selling nature and Changes of other investment decision.

As investors' behavior can influence the financial market, therefore behavioral finance is consider an important factor (DeBondt and Thaler, 1995). In the stock market, the investor can be influenced by the market factors. Waweru et al. (2008, p.36) Categorized some factors e.g. stock fundamentals, fluctuation of price, available information, investors preference, historical trends, reaction to market price have great influence on investors' decision towards the investment. Generally investors rely on the quality of the information of the stock market when making their investment decision. It includes Available information, Economic condition, and Political condition, Changes of price, Firms status and Firms stability.

2. Rational of the Study

Financial market has positive influence on the economy of a country. This one is very much true for the emerging market like Bangladesh. DSE is one of the key security markets of Bangladesh. So the rise and fall of DSE will surely influence the health of economy of Bangladesh. Investors' decision is the determinants of the capital market's rise and fall. As DSE is one of the key capital market of Bangladesh, so investment decision of DSE plays a vital role in detecting, describing and predict the trends in stock market, which in turn reflects in economy of Bangladesh. Most of the time investor is not able to take feasible decision due to market inefficiency and the nature and qualifications of them. As a developing country majority percent of investor are not well educated regarding capital market investment. As a result cognitive and behavioral and psychological factors play a crucial role for taking decision for investing in capital market. Several scholars already identified some issues that stimulus the investor during investment decision. The purpose of the study is to determine whether:

1. Stock Fundamentals have influence on individual investment Decision at Dhaka stock Exchange.
2. Market Factors have influence on individual investment Decision at Dhaka stock Exchange.
3. Behavioral factors have influence on individual investment attitude at Dhaka stock Exchange.
 - 3.1. Consultation influences individual investment attitude while investing in Dhaka stock Exchange.
 - 3.2. Herding factors influence individual investment attitude while investing in Dhaka stock Exchange.
4. Personal Attitude have influence on individual investment Decision at Dhaka stock Exchange.

3. Theoretical review for behavioral factors impact the process of investors' Decision making

(Heshmat, 2012) concluded that to take an effective decision all of the prospective and current investors must have financial education. Having a sound financial knowledge drive to increase the scope of feasible decision and decrease the biasness. (Porokowski 2011) investigated in Poland during the financial crisis and concluded that most of the investor use technical analysis to find out the best stock before investment. (Hesmat, 2012) listed several factors e.g. EPS, P/E ratio, Volatility of stock, D/P ratio, return on investment that has a significant impact on individual investment. So, fundamental issues before going to invest in stock market comes form corporation as well as from market.

Mojgan and Ali (2011) investigated in Tehran stock market to understand the impact of EPS and Dividend on investment decision. The study founds there is an association among this factors with investment decision specially when investors are intended to buy a stock. Azam and Kumar (2011) studied in Pakistan to find out the influential factors of investment in Karachi stock exchange. The study reviled that EPS, GDP growth, FDI have tremendous effect on stock price. Merikas, Merikas, Vozikis and Prasad (2008) added some other effecting factors e.g. financial statements, expected corporate earnings, firms image in the industry, while investigated in Greek Stock Exchange. So individual rely on financial health of firm as well as the macro economic factors while deciding to invest in capital market.

Academic researchers are curious about herding factor, because there is a backward linkage of herding factor with asset pricing theories. As herding factor plays a significant role to fluctuate the price of stock. These volatility of price influence the risk and return model which affects the theory of assets pricing model (Tan, L., T.C. Chiang, J.R. Mason and E. Nelling, 2008). Herding creates many emotional biases e.g. conventionality, congruity and home bias, representativeness, mental accounting, and conversation. Moreover herding factors can be used to evaluate the professional performance as low –ability investor can imitate the

behavior of the high-ability investors to increase the professional reputation (Kallinterakis, V., N. Munir and M.R. Markovic, 2010). The natural tendency of people to follow others but this is very true when an investor invests a significant amount of money in capital market. Moreover, impact of herding factors in investment decision depends on the type of investors. For instance institutional investors are reluctant to follow the crowds other than individual investors (Goodfellow, C., M.T. Bohland B. Gebka, 2009).

DeBondt and Thaler, (1995) stated that investors normally show their reaction due to fluctuation of price, New information, prediction for future depending on the past trend. There are several factors i.e. information, past trends, fluctuation of price, investors preference, related to market that influence the individual investment decision (Waweru et al, 2008). Moreover many incidents influence investors' decision although investor is not acquainted with that incident and don't know whether this will bring good or bad thing for them (Barber & Odean, 2000)

Herding may influence and create the ground for trading of stocks. As the cost to track the herd increases, at a certain level the impact of herd can be removed. In case of investment decisions of stocks the investors may be influenced by some other factors e.g choice of stocks, the time period of holding a stock, the size of stocks to trade, buying and selling etc. The choice of selling and buying of stocks of an individual heavily depends on the choice of other investors. (Waweru et al., 2008). In case of the choice of stocks, the time period of holding a stock and the size of stocks investors are influenced less by the herding behavior. As the nature of individual investors and institutional investors are quite different, the above assumption may be different for individual investors because they are more influenced by herding behavior than institutional investors.

Shai and Arora (2012) identified the collective bias of the investors and concluded that collective bias influenced the financial behavior of the investors. Beginner of the investment market always make a connection with the financial advisor about the matter of their planning and portfolio management.

When investors try to make any decision, they consider all the available alternatives including negative and positive impacts of those. This decision making process comprises of different steps of critical analysis and processing the substitutes. The judgments of the investors are based on different complex theoretical and practical models which are related to different traditional risk return models of finance including capital asset pricing model (CAPM) which shows the relationship between the expected return and risk of the individual security (Bodie, Kane and Marcus, 2008). Although the complex financial model like CAPM does not consider situational factors, investors cannot ignore those because these factors may affect the investment decision also. All the subjects and problems faced by an investor and the total subject which contains environment where the investor has to make investment decisions is called situational factors. As a result the cognitive psychology should be given preference in making proper decisions (Kengatharan & Kengatharan, 2014).

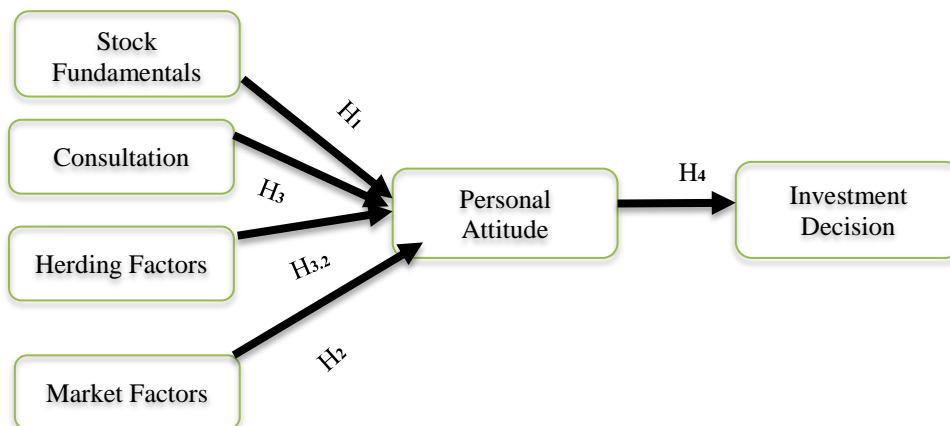
Investment decision is one of the most important decisions to the investors as it reflects to the commitment of funds into one or more assets in order to get future benefit from it (Bodie et al., 2008). Due to several reasons such as inadequate financial information, narrow view and inadequate self-regulation the investors face several problems in making decisions about their investment in various stocks (Winchester, Huston, & Fink, 2011). The decision making in markets about the investment choices becomes more difficult as the information change frequently and it loses its weight over time (Formlet, 2001). Huberman (2001) identified that investors prefer to invest in the stock of the local company rather than foreign company and another research of Hong, Kubik, and Stein (2004) revealed the fact that social interaction is also an important criteria which influence on the participation of stock market.

4. Conceptual Framework and Hypotheses:

Hypotheses of the study are:

- H1: Stock Fundamentals have influence on individual investment Decision at Dhaka stock Exchange.
- H2: Market Factors have influence on individual investment Decision at Dhaka stock Exchange.
- H3: Behavioral factors have influence on individual investment attitude at Dhaka stock Exchange.
- H3.1: Consultation influences individual investment attitude while investing in Dhaka stock Exchange.
- H3.2: Herding factors influence individual investment attitude while investing in Dhaka stock Exchange.
- H4: Personal Attitude have influence on individual investment Decision at Dhaka stock Exchange.

Figure 1: Conceptual framework of the study



Source: authors' own calculation

Stock Fundamental

Investors are very much concerned with the expected earnings from the investment. Lease et al, (1974) concluded that individual investors normally invest for longer period of time than that of institutional investors. Investors depends on the fundamental and technical analysis of firms' financial statement before investing any firm. Before investment rational investors justify the historical records, EPS, dividend payout ratio, ROE and price earnings ration.

Consultation

Social context plays an important role when an investment decision is taken by an investor. Generally the ultimate power to buy an asset rests on the individual but there are some other person who influence on the decision e.g. spouse or friends. The judgments of others are given weight with personal opinion and finally a conclusion is made. (Nathan Kogan and Michael A. Wallach, 1967). According to another researcher (Alleyen and Broome, 2010) referent groups such as peers, families, Stock Brokers, Friends, Coworkers and significant others importantly affect the intention to invest. Recommendation from some near and dear ones is important on individual's investment decision.

Herding Behavior

The tendency to follow the crowds or others is known as herding behavior. Investors prefer herding factor and believe herding factor will help them to extract useful information. Generally herding investors use others buying and selling as a base for their buying and selling. On the contrary rational investors never follow the other footprint rather take decision based on the information available in the market which leads to an efficient market. Lee at al., (2004) concluded that institutional investors are reluctant to follow herding behavior than individual investors. But it is better true that all time facts and figures also are not capable of providing a auspicious signal for investment. That is why behavioral factor are getting priorities in finance specially in the context of investment.

Market Factor

When investors make decision about investing in any stock, influenced by the market factors those include different types of market information, price changes in stocks, past trend of stocks, fundamentals of underlying stocks, over reaction to price change, customer preference and many more (Waren et al., 2008). Over reaction and under reaction may both happen in price change of the stocks due to the change in market information, fundamentals of underlying stocks and customer preference. Another research conducted by (Barber and Odean, 2000) identified that some events those happen in the stocks market take an attention of the investors, although the investors do not certain about the positive effect of those events. However, market information is an important marker factor that influence on the decision of individual investor and past trend of stock is another tool which impact on the decision making of individual investment decisions (Waweru et al., 2008).

Basically, market factors are not the part of behavioral factors, nevertheless it is included along with behavioral factors as it affects the behavioral investors and the

investors who are rational in several customs. So it will be inadequate if the market factors are not considered to determine the influence on individual investment decision (Luu Thi Bich Ngoc, 2013).

Personal Attitude

The judgment of a person about whether a behavior is good or bad is called attitude (Ajzen, & Fishbein, 1980). Personal attitude may influence the individual behavior as past behavior forecast the future manner. Stock with environmental records, stocks support women progress, Stocks support Minorities and Consider Sin stock may influence on the individual's investment decision. If an investor has a good attitude to a behavior, there is a huge chance to conduct the behavior and vice versa.

Investment Decision

Before buying a stock, investors investigate as many stocks as possible but it may not possible to find out the best stock in all times. So in the preliminary stage investors invest in capital markets based on past performance. But investment decisions is not as linier as thought. The selling decisions and purchasing decisions of stocks are totally different in the eye of the investors and as a result they appears to be less influenced by attention grasping stocks (Barberis, N. and R. Thaler, 2003).

5. Data and methodology

Population of the study was individual investor of Dhaka Stock Exchange. A set of questionnaire were sent to targeted investors. To know the characteristics of investor demographic study was conducted. Before conducting SEM at first this report reveals the association among the all variables. To finding out the association among investment decision with stock fundamentals, consultation, Herding factors, Market factors and personal attitude chi square test is conducted. After getting the association ship then SEM model is applied. For finding out the SEM at first data adequacy is judge through the application of KMO and Bartlett's Test. Rotted components matrix ensure which components are under which factors. Through the eigen value and cumulative variance explained it is ensured how much percentage of variability of investment decision are explained by these factors. Finally, factor loading ensures which components are incorporating into the final model and which are dropping out. At last final analysis, CFA is conducted to justify the hypotheses.

5.1 Designing and measurement of questionnaire

To find out the true nature of the investors the whole questionnaires were divided into three sections: Demographic characteristics, Investment objectives and Risk profile, and the factors that affect personal attitude and investment decision while investing in Dhaka Stock Exchange. A 5-points Likert scales, is used to rating the respondents' answer and opinion. (Faisher, 2010, P.214) are applied to inquire the different investors to appraise the point of their with the effects of behavioral factors on their investment decision. The five points is categorized from 5 to 1: Strongly agree, Agree, Neutral, Disagree, Strongly Agree.

Table 1: Factors influencing the investment decision-making

Factors	Variables
Stock Fundamentals	Earnings per Share
	Price earnings ratio
	Return on equity
	Book to Market ratio
	Beta
	Share volume
Consultation	Family Member
	Friends
	Stock Brokers
	Coworkers
Herding	Selection of stock types
	Volume of stock
	Buying and Selling nature
	Changes of other investment decision
Market Factor	Available information
	Economic condition
	Political condition
	Changes of price
	Firms status
	Firms stability
	Nature of firm
	Board of Directors' experiences
Personal Attitude	Stock with environmental records
	stocks support women progress
	Stocks support Minorities
	Consider Sin stock

Source: Authors' own calculation

Factors that affects the investment decision are divided into five groups: Stock Fundamentals, Consultation, Herding factors , Market factors and Personal Attitude; which are presented in the Table: 1, Stock fundamentals and Market factors directly affects investment decision where as two behavioral factors Consultation and Herding factors affects the investment decision via Personal attitude.

6. Data Processing and Analysis

A total 534 questionnaire were collected from respondents. Due to partial fulfillment of the questionnaire, some of the questionnaire were dropped out form analysis. Structural equation Modeling acts double adage sword. Where Exploratory

Factor Analysis (EFA) may well be designated as logical explanation of consistent measures. Possible underlying factors are found out through EFA, without using a predetermined format on result (Child, 1990). So EFA is used to determine the underlying factors of SEM. Without identifying related factors, confirmatory factor analysis may not show the robust result. In the second level, after dictating related factors, CFA is run to justify the structure of all related factors that are identified through the EFA. Researcher can justify the relationship between latent and observed variables (Suhr, D, Daina).

6.1 Demographic and Socio-Economic Characteristics

Table 2: Investors' Socio-Economic Characteristics

Variables	Investors' Grouping	Frequency	Percent
Gender	Male	392	87.1
	Female	58	12.9
Age	Bellow 25	23	5.1
	25 to 40	251	55.8
	41 to 60	163	36.2
	Over 60	13	2.9
Education	Secondary	70	15.6
	Tertiary	185	41.1
	Professional	195	43.3
Profession	Government	51	11.3
	Private	215	47.8
	Business	184	40.9
Experience	5 year or less	146	32.4
	5-10 years	226	50.2
	More than 10 years	78	17.3
Investors type	Speculative	130	28.9
	Capital long	72	16
	Both	248	55.1
Security Type	Shares	357	79.3
	Fixed income securities	53	11.8
	real estate and other	40	8.9

Source: Authors' own calculation

The Table- 2, which is represented in appendix section, shows that 87.1% and 12.9% of the total respondents who participated in the study were male and female respectively. However, sometimes the capital market is measured as a risky place and by nature women are somewhat risk averse. Consequently the result can be regarded as quite good and it supports the findings of Babajide and Adetiloye (2012), who

made comment on his study that most of the security market activities are performed by male performer. The age profile of the participants also shows that most of the respondents is (55.8%) on the age group of 25 to 40, 36.2% were in the age category of 41 to 60 years and 5.1% were in the age bracket of Bellow 25 years. The outcomes of the age distribution illustrate that majority percent of the investors of Dahaka Stock Exchange are in the age group of 25 – 60 years and by the way it matches with the prolific age of the people.

The results show an interesting matter and that is most of the participants in our study are well educated and have a well-known about the structure of the capital market. For example, 43.3% have Professional background. 41.1% have Tertiary background, while only 15.6% have high school education. In terms of professional classification, 47.8% of the respondents belongs to private sector, 40.9% are doing business, while only 11.3% were government employee.

Experience of capital market is recognized as an important characteristics of any investors that can be measured by how many years the investors are involved in capital market. Our study represents that 50.2% of the participants had 5-10 years of experience in capital market and only 17.3% having more than 10 years. Mahmood et al. (2011) stated that investor's knowledge about their previous know-how and financial markets pays an incredible role to assess risk in several products. However the majority of the respondents belongs to both the speculative and capital long 55.1%.

Finally, the distribution for the security type of the respondents 79.3% have invested in Shares, 11.8% have invested in fixed income securities. But only 8.9% have invested in real estate and other.

Table 3 : Mean value range and Standard Deviation of Variables

Variables	Mean	Standard Deviation
Stock Fundamental	3.92	1.04
Consultation	3.48	1.06
Herding Behavior	3.19	1.08
Market Factors	4.14	0.93
Personal Attitude	3.48	1.02

Source: Authors' own calculation

Among the entire variables, market factors mean is greater than 4 and less than 5 shown in table 3. It is the highest value of mean and lowest standard deviation of all variables. Which indicates that most of the investor emphasis on market factors at the time of investment in capital market. After market factor investors rely on stock fundamentals. Stock fundamentals has high impact on investment decision, which is on an average 3.92. Consultation and herding both are from behavioral side. Among these variables, consultation has greater impact than that of herding factor.

6.2 Chi square test

Chi-square test is widely used by the researcher. The prime reasons for using chi-square test is to determine whether there is any significant difference between expected and observed frequencies. The purpose of using chi-square test in this study is to find out association among all variables under study.

Hypothesis:

Ho: There is no association among Investment Decision with Stock Fundamentals, Consultation, Herding Factors, Market Factors and Personal Attitude.

H1: There is an association among Investment Decision with Stock Fundamentals, Consultation, Herding Factors, Market Factors and Personal Attitude.

Table 4: Chi square test

Variables	Pearson Chi-Square	Asymp. Sig. (2-sided)
SF	1035.95 ^a	0
CON	1175.7 ^a	0
HD	1243.58 ^a	0
MF	1812.3 ^a	0
PAT	1109.9 ^a	0

Source: Authors' own calculation

In table 4, ^a Having p value less than (.05) between two variables, this study fails to accept the null hypothesis in each case which means a strong association ship exist between these variables. Based on these chi square test this study asserts that all latent variables have association with investment decision.

6.3 Kaiser-Meyer-Olkin test:

Exploratory factor analysis is conducted for the variables to determine which factors belong to which variables. One of the prime reasons is to reduce the unnecessary variables. After removing unsuitable variables remaining variables are divided into six factors. In table 5, The Bartlett's test of Sphericity and the Kaiser-Meyer-Olkin is conducted for measuring sampling adequacy. A measurement over .6 is considered as the adequacy of sample. Here KMO value is .82, which is above .6 meaning that data are adequate to conduct Factor analysis.

Table 5: KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.821
Bartlett's Test of Sphericity	Approx. Chi-Square	5659.83
	Df	210
	Sig.	.000

Source: Authors' own calculation.

6.4 Factor analysis for investment decision

Factor loadings of the items greater than .5 (with the sample size is 100) justify that EFA is feasible to conduct to analyzed data (Hair et al. 1998, P. 111). Rotated Component Matrix is used (shown in table 6) where a set of variables are correlated with each other, a plausible explanation is that there is some other variable that they are all correlated with.

Table 6: Rotated Component Matrix

	Component					
	1	2	3	4	5	6
SF_2	0.914					
SF_3	0.89					
SF_1	0.878					
SF_5	0.856					
SF_6	0.826					
MF_6		0.857				
MF_5		0.805				
MF_8		0.77				
MF_3		0.724				
HD_1			0.872			
HD_3			0.858			
HD_2			0.856			
PV_2				0.891		
PV_3				0.868		
PV_1				0.775		
CON_2					0.845	
CON_4					0.698	
AB_1					0.536	
ID_5						0.858
ID_7						0.609
ID_8						0.516

Source: Authors' own calculation

6.5 Total Variance explained for factors:

To find out the variance explained by the components Eigenvalues are used. Eigenvalues are the variances of the principal components. Following tables shows that variables of stock fundamentals, Market factors, Herding Factors, Personal attitude, Consultations and Investment decision are grouped into related factor which can predict about 73.86% of total variance.

Table 7: Total Variance explained for factors

	SF (Factor 1)	MF (Factor 2)	HD (Factor 3)	PAT (Factor 4)	CON (Factor 5)	ID (Factor 6)
Eigen Value	5.632	3.795	2.099	1.913	1.123	0.95
Proportion of Variance explained (%)	26.82	18.07	9.996	9.107	5.347	4.522
Cumulative Variance explained (%)	26.82	44.89	54.886	63.34	69.34	73.862

Source: Authors' own calculation

6.6 Confirmatory Factor analysis

Table 8: Confirmatory Factor analysis

Variables	Questions	Factor Loading
Stock Fundamentals	SF_1	0.89
	jSF_2	0.94
	SF_3	0.86
	SF_5	0.83
	SF_6	0.76
Consultation	CON_2	0.56
	CON_4	0.55
	CON_8	0.54
Herding Behavior	HD_1	0.79
	HD_2	0.94
	HD_3	0.85
Market Factor	MF_3	0.54
	MF_5	0.85
	MF_6	0.93
	MF_8	0.69
Personal Attitude	PAT_1	0.6
	PAT_2	0.94
	PAT_3	0.84
Investment Decision	ID_1	0.79
	ID_5	0.5
	ID_7	0.56

Source: Authors' own calculation

Five of the six questions of stock fundamentals are kept for factor analysis; three out of four questions of consultation; three of four questions of herding behavior; four of ten items of market factors; three of four items of personal attitude and finally 3 out of eight original questions of investment decision are accepted for final or confirmation factor analysis. Rest are dropped due to poor factor loading. Following table: 6, Shows the loading for perspective factor.

Questionnaire's reliability is justified through Cronbachs' Alpha Coefficient. The interior uniformity of five items used to quantity each factor was calculated through Cronbach's Alpha value. Cronbach's Alpha for stock fundamentals, consultation, herding factors, Market factors, Personal Attitude and investment decision are presented following table:9 ;TLI, NFI, IFI, CFI indicates the goodness of the model shown in table 10. Value over .80 are considered as the value of goodness of model (hair et al. 2000). Here the values as follows; .89, .875, .902, 902. RMSEA indicates the badness of model. Acceptable range of RMSEA value is between .03 to .08. Value of .08 indicates the model is out of badness.

Table 9: Cronbach's Alpha values

Factors	Cronbach's Alpha
Stock Fundamentals	0.933
Consultation	0.654
Herding Behavior	0.896
Market Factor	0.838
Personal Attitude	0.831
Investment Decision	0.662

Source: Authors' own calculation

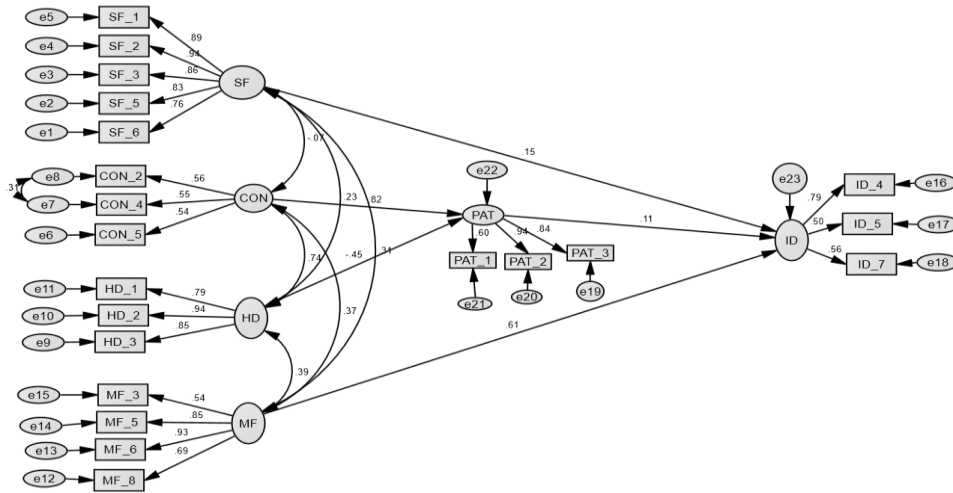
Table 10: Summary of model fit

CMIN	720.06
P	0.00
CFI	0.902
NFI	0.875
IFI	0.902
RMSEA	0.08
TLI	0.89

Source: Authors' own calculation

Structural Equation Modeling (SEM) is a conducted to justifying the relationship between latent and observed variables. OLS model is used to determine only single relationship between variables, whereas SEM combines factor analysis along with multiple regression. In SEM there are two set of models one is inner model which determines the relationship between unobserved or latent variables. The outer model which specifies the relationship between latent variables and their associated perceived or manifest variables (Turkyilmz at. Al, 2007). In final model all factors; SF_2, HD_2, MF_6, PAT_2 have factor loading more than .90. factors like SF_1, SF_3, SF_5, DF_6, HD_1, HD_3, MF_5, PAT_3, ID_1 have loading between .70 to .89. some factors got narrow margin from rejection; CON_2, CON_4, CON_5, MF_3, ID_5, ID_7 as loading between .50 toe .60. No factors are included having loading less than .50.

Figure 2: Structural Equation Modeling



Source: Authors' own calculation

Table 11: Summary of Structural Equation Modeling finding

Hypotheses	Standard Prediction	Critical rate	P-value	Hypothesis result
H1: Stock Fundamentals have influence on individual investment Decision at Dhaka stock Exchange.	0.15	2.76	0.006	Supported
H2: Market Factors have influence on individual investment Decision at Dhaka stock Exchange.	0.61	9.608	0.000	Supported
H3: Behavioral factors have influence on individual investment attitude at Dhaka stock Exchange.				
H3.1: Consultation influences individual investment attitude while investing in Dhaka stock Exchange.	0.82	4.939	0.000	Supported
H3.2: Herding factors influence individual investment attitude while investing in Dhaka stock Exchange.	-0.454	-3.427	0.000	Supported
H4: Personal Attitude have influence on individual investment Decision at Dhaka stock Exchange.	0.11	2.185	0.029	Supported

Source: Authors' own calculation

7. Conclusion and Discussion:

The purpose of this paper is to investigate the effect of behavioral factors, Market factors and stock fundamentals on individual investment decision. Market always provides a signal to the investor whether they should invest or not, but all the

time market's signal does not work. As efficient market hypothesis postulates that, all information will be available to investors and will reflect in market. In Immature capital market like ours are very tough to predict. As a result several abnormal incident happened in DSE. This paper reveals that investors of DSE consider market factors and this is statistically proved.

Most of The respondent used in this study were in the age category of 25– 60 years, which by the way coincides with the most dynamic age of the people. Interestingly, the results display majority of respondents are highly educated, which contradicts with DSE investors. Like others emerging markets most of the investors (51%) invest for both speculative and accumulating capital. They are basically risk averse as a result almost lions share of investor invest in share. Remaining 20 percent invest in fixed income securities, real estate and other sources.

Like as market factors investors also rely on the fundamental indicator of stock where they are intended to invest. CFA ensures that stock fundamentals have significant influence on investment decision. All the time data may not describe everything correctly especially where psychological or behavioral factors are involved. This is very much true for the capital market investment, where investor some time believes other opinion, follow other movement than following data of figure. Sometimes behavioral biasness acts against the market factors and stock fundamentals. That is why behavioral finance is getting more priorities in the field of finance. Behavioral finance postulates that investment decision is influenced by various behavioral biasness and influences the investors to diverge from rational and make ridiculous investment decision. This study founds behavioral factors; consultation and herding factor influence personal attitude, and personal attitude influence the investment decision in DSE.

This is one of the very few studies of factors influencing the stock investment decision using behavioral finance in Bangladesh. This study supports the traditional approach to portfolio theory; portfolio theory to behavioral approach.

Guidelines for further study: This paper brought only two behavioral issues. There is an avenue for incorporating other behavioral factors (overconfidence, prospect theory, mental accounting, and loss aversion) to determine whether they have influence or not in investment decision in DSE. Moreover both direct and indirect relationship between stock fundamentals and market factors with investment decision can be and more interesting.

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