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The Influence of Environmental, Social and Governance (ESG) on Investment Decisions: The Bangladesh Perspective

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ABSTRACT

This paper develops a research model based on the feedback of individual stock market investors in Bangladesh regarding Environmental, Social and Governance (ESG) issues. By applying Theory of Planned Behaviour (TPB) and the positivistic paradigm, this study contributes to the literature on ESG adapting the ESG dimensions from the United Nations Global Compact (UNGC) and Thomson Reuters Corporate Responsibility Index (TRCRI). Preliminary findings from Structural Equation Modelling (SEM) analysis indicates that ESG issues influence investment decisions, while governance issues provide the most remarkable influence on respondents' investment decisions, followed by social and environmental issues. The study has important theoretical contributions and vast practical implications for regulators, business organisations, and most importantly, for stock market investors from developing countries. This study indicates investors' preference for ESG and it may proceed towards the formulation of rules and regulations to improve ESG performance of companies, ESG reporting, and the ultimate introduction of ESG index in Bangladesh, which can ensure stable stock markets as well as overall sustainable growth of the country.

Keywords: Bangladesh, Environmental, Social and Governance (ESG), investment decision, Theory of Planned Behaviour (TPB)

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INTRODUCTION

Investment decisions based on Environmental, Social and Governance (ESG) issues among the stock market investors is gaining attention around the world. Investment that considers ESG issues has broadened its asset base from $3.74

trillion in 2012 to $6.57 trillion in 2014 with a 76% growth rate (The Forum for Sustainable and Responsible Investment [SIF], 2015). The ESG-based investing emphasises different nonfinancial dimensions, such as companies' environmental, social and governance practices into the investment decision-making processes of the stock market investors. The greater focus on ESG issues for social change is apparent from the post-Enron period and the Global Financial Crisis (GFC) that weakened the confidence of investors (Arjalies, 2010; Galbreath, 2013). Shareholders are becoming more concerned about ESG issues because socially irresponsible firms may face potential litigation costs or a loss of reputation and thus destroy long-term shareholder value. Investors can play an important role to safeguard their assets while contributing towards social change by investing in companies with good track records in ESG.

Integration of non-financial criteria, such as environmental, social, ethical, governance, in investment decisions has become a widespread phenomenon, especially in the developed countries (Berry & Junkus, 2013; Crifo, Forget, & Teyssier, 2015; Nakamura, 2013; Perez-Gladish, Benson, & Faff, 2012). In recent years, there have been many studies on this topic focusing on developing countries (Adam & Shauki, 2014; Brimble, 2011; Nair & Ladha, 2014). But, in the context of Bangladesh, research on ESG is relatively scarce.

Bangladesh, with GDP growth rate of 6.6% (World Bank, 2017), is predicted to be the 23rd largest economy in the world by 2050 according to Pricewaterhouse Coopers (PwC) (Islam, 2015). Stock markets in Bangladesh have attracted the attention of investors locally and abroad. Net foreign investment in stocks increased by 93% in 2015 (Chowdhury, 2016). In fact, USA and UK based multinational titans Morgan Stanley, JP Morgan, Goldman Sachs, and Black Rock are investing in the stock markets of Bangladesh (Chowdhury, 2014). Despite such tremendous growth, the country faces problems pertaining to ESG issues. The stock market investors of Bangladesh faced a stock market crash in 2010-2011, where more than 3.5 million investors lost their investments (Tahera, 2014). It was found that there were irregularities in valuations of shares, operating expenses, gross profit and agency commission, anomalies in the revenues and tax (Khaled, Chowdhury, Chowdhury, & Kabir, 2011), which relates to corporate governance issues. Furthermore, Sonali Bank's loan scandal involving US$460 million in 2012 (Sabet & Ishtiaque, 2013) adversely affected the confidence of stock market investors in Bangladesh. In the Environmental Performance Index [EPI] (2016), Bangladesh ranked 172th out of 180 countries for its environmental condition. This is an alarming indicator that illustrates the environmental degradation of the country. As Belal, Copper and Khan (2015) argue, Bangladesh is enjoying tremendous economic growth through its exports but it comes at a price where the natural environment faces degradation due to pollution. Therefore, it is important

every community plays it role to protect the environment. In this regard, investors can also play a dominant role in protecting the environment by investing in companies that are concerned about environmental protection and at the same time secure their long-term investment returns. In addition, after the tragic collapse of Rana Plaza in 2013, which caused death of 1,129 people and injuring 2,515 others (Butler, 2013), different stakeholders have begun to ask relevant questions about health and safety issues of workers and employees and how they relate to social practices of the companies. Investors were more pressured after this collapse because they had to bear financial losses, mental agony for the demise of more than a thousand people and which also affected the lives and dreams of thousand more. At the same time, they were accused of seeking profits at the expense of social and community well-being. Therefore, ESG malpractices could affect the investors' sustainable returns which would force them to fulfil their ethical responsibilities.

A number of studies have examined the influence of non-financial criteria, such as ethical, religious, social, environmental and governance in investment decisions (Dorfleitner & Utz, 2014; Nair & Ladha, 2014). Still, little is known about the effect of behavioural factors including attitude, norms and perceptions on individual investors' investment decision making (Pellinen, Tormakangas, Uusitalo, & Munnukka, 2015). This is especially true as ESG cannot be treated separately (Fin, 2012). Renneboog, Ter Horst and Zhang (2008) state corporate responsibility towards the stakeholders is prized by the stock market but it is still an unexplored field of research. Due to divergent philosophies, institutions and cultural values between East and West, many researchers argue for the need of conducting research on ESG issues from different cultural contexts, especially from emerging countries like Bangladesh where there is mounting evidence of ESG malpractices (Diouf, Hebb, & Toure, 2014). The ESG consideration in investment decisions in Bangladesh has vast implications. As Brown (2014) asserts, a remarkably powerful long-term sustainable business model can be created in Bangladesh with sustainable and responsible investment. What is more, globally, there is increased awareness of the role of investors in ensuring good ethical, social and environmental outcomes when conducting business (Escrig-Olmedo, Munoz-Torres, & Fernandez-Izquierdo, 2013). Therefore, the present study aims to fill the gap in the ESG literature through evaluating the individual stock market investors' ESG consideration on investment decisions in Bangladesh.

LITERATURE REVIEW

Environmental, social and governance considerations are paramount for business and investment decision making, especially in the context of long term overall firm performance and risk evaluation (Derwall, 2007). Investors are becoming more concerned with the importance of ESG in achieving sustainable return from their

investments (The International Federation of Accountants, 2012). According to Association for Sustainable & Responsible Investment in Asia, (The Association for Sustainable & Responsible Investment in Asia [ASrIA], 2015), sustainable investment assets grew by 22% per year since 2011 and the most commonly adopted sustainable investment strategy in Asia appears to be integration of ESG issues. Therefore, ESG concerns in stock market investment has become significant globally.

Environmental, Social and Governance (ESG) Issues

Environmental issues are subjects associated with the functioning and quality of the natural systems and environment. These include: greenhouse gas (GHG) emissions; waste management; climate changes; stratospheric ozone depletion; energy efficiency; renewable energy; air, water or resource pollution; biodiversity loss; changes to the nitrogen and phosphorus cycles; ocean acidification and changes in land use (United Nations Principles of Responsible Investment [UN PRI], 2015). Environmental issues have been ranked as one of the important aspects to be considered when making investment decisions. These were documented in several prior studies in Japan, India, France and Australia. For example, Nair and Ladha (2014) found that Indian investors voted environmental issues as the most influential element when considering non-economic goals in their investment decision. Nakamura (2013) also reported most of the shareholders in Japan are mainly concerned with the environmental policies of an organisation, which is similar to the findings of Zwaan, Brimble and Stewart (2015) in Australia regarding superannuation fund members' perception of ESG issues. According to Crifo et al. (2015), companies' irresponsible practices or policies regarding the environment reduce investment likelihood by 30.8% among private equity investors in France. In the context of Bangladesh, Belal et al. (2015) mentioned that negligent industrial behaviour contributes towards environmental pollution there. With the heightened awareness of investors around the world regarding environmental issues when making investment decisions, it is of interest to investigate the way investors in Bangladesh consider environmental issues in their investment decision making. This leads to the development of the first hypothesis of the study.

H1: Environmental issues influence investment decisions among stock market investors in Bangladesh.

Social issues are themes pertaining to the well-being, rights and interests of people and communities. These include workplace health and safety; labour standards in the supply chain; human rights; slave, child, and bonded labour; freedom of expression and freedom of association; diversity; employee relations and human capital management; health and access to medicine; relations with local communities; HIV/AIDS; activities

in conflict zones; controversial weapons and consumer protection (UN PRI, 2015). Apart from environmental issues, social issues also influence investment decisions (Crifo et al., 2015). Social issues have been one of the dominant parts of ESG consideration by investors in the Australian superannuation fund (Zwaan et al., 2015). Perez-Gladish et al. (2012) found that social issues are preferred over environmental and governance issues in Australia. Among the highlights of social issues are community employee relations, worker and product safety and human rights (Berry & Junkus, 2013; Rakotomavo, 2011). Globally, there is an increasing trend among stock market investors to consider the social issues of companies, especially in developed countries (Zwaan et al., 2015). Therefore, to provide evidence from the developing countries' perspective, this study explores whether investors in Bangladesh consider social issues of companies in investment decision making. Therefore, this leads to the construction of the second hypothesis.

H2: Social issues influence investment decisions among stock market investors in Bangladesh.

Governance issues involve the governance of firms and other investee entities. These include executive pay; board structure, size, diversity, skills and independence; disclosure of information; shareholder rights; business ethics; stakeholder interaction; internal controls and risk management; bribery and corruption; and, in general, issues relating to the relationship between a company's management and other stakeholders (UN PRI, 2015). Corporate governance is an important indicator of investors' economic rationality and they consider corporate governance practice of the companies when making investment decisions (Crifo et al., 2015). Giannetti and Simonov (2006) emphasise that investors restrain themselves from investing in companies that are weak in terms of corporate governance. Zwaan et al. (2015) find that corporate governance is preferred by 64% of the respondents while making their investment decisions. Perez-Gladish et al. (2012) conclude that although socially responsible investors have special consideration for social issues, they are also concerned about their financial returns, which indicates their preference for governance issues of the company. Corporate governance scandals of Enron and Tyco, among others, accelerated the demand for better corporate governance of companies and investors are getting more concerned with incorporating governance issues in their investment decisions. When factoring the importance of governance issues in investor investment decision making around the world to safeguard their investment as well as recent issues on corporate governance in Bangladesh, the third hypothesis of the present study is proposed.

H3: Governance issues influence investment decisions among stock market investors in Bangladesh.

Investment Horizon

Investment horizon refers to the short (less than 1 year), medium (1 to 5 years) or long term (more than 5 years) investment strategy of investors to indicate the target time frame of an investment (Dorfleitner & Utz, 2014). Investment horizon of socially responsible investors significantly affects the percentage of socially responsible investment (SRI) in their portfolio and investor willingness to sacrifice the return from SRI funds, which affects their overall investment decision (Dorfleitner & Utz, 2014). Perez-Gladish et al. (2012) noted that in Australia, if the return is good, the long-term investors are ready to accept a short-term fall in their investment. Non-financial practices (environmental, social and governance) of companies affect the investment values in the long-time horizon (Fin, 2012) and the attention towards these issues depends on the investment horizon of the investors (Sorensen & Pfeifer, 2011). Ironically, socially responsible investment is partly unable to be a driver of social and environmental change because of the poor matches between short term shareholder value and long-term SRI values (Wagemans, van Koppen, & Mol, 2013). To evaluate overall long-term firm performance and risk, ESG issues are intensely important in investment decision making (Derwall, 2007). Therefore, investment horizon plays a significant role in this regard. Using investment horizon as a moderator can be an important addition in the ESG literature and thus, the fourth hypothesis is developed.

H4: Investment horizon moderates the relationship between ESG issues and investment decision.

Investment Decision

Investors invest in stocks mainly for future higher returns. Hirt and Block (1999) define investment as a commitment of the current funds to produce larger future flow of funds. Jagongo and Mutswenje (2014) explain that investors usually conduct fundamental analysis, technical analysis and judgment as tools for investment analysis. Therefore, investment decision is an outcome of investment analysis and involves considering different factors that the investor find essential. As long as ESG investing is concerned, it takes into account the divergent nonfinancial qualitative dimensions (environmental, social and governance) of the firms in investment portfolios (Sairally, 2015). The present research explores the ESG investment decision that is related to the investors' intention to invest in the companies with vigorous environmental, social and governance practices.

METHODS

Theoretical Underpinning

The current study uses Theory of Planned Behaviour (TPB) of Isec Ajzen in that human 'intention' depends on 'attitude toward behaviour', 'subjective norm' and 'perceived behavioural control'; and 'intention' ultimately leads to 'actual

behaviour' Ajzen (1985). Two components from TPB, *'attitude*' and '*intention*', are adopted to explain the theoretical model of the present study. To operationalise TPB, the study considers the '*attitudes*' of the stock market investors about ESG issues and ultimately focuses on the '*intention'* towards ESG investing by considering investment decisions. Fishbein and Ajzen (1975) define attitude as an underlying variable which guides or influences behaviour. Investors' attitude is important in making investment decision (Alleyne & Broome, 2011). Intention signifies a person's subjective probability that he or she will perform some behaviour (Fishbein & Ajzen, 1975). Attitude among other constructs can foretell investment decision (East, 1993). Gopi and Ramayah (2007) point out that among the Malaysian investors, attitude has a notable positive relationship towards behavioural intention. Partial adoption of TPB can be noticed from the study of Yang and Jolly (2009) where they examined the effects of consumer perceived value and subjective norm on the adoption of mobile data. In addition, Warsame and Ireri (2016) revealed that attitude has noteworthy impact on behavioural intention among the Islamic bonds investors in Qatar. Jafarkarimi, Saadatdoost, Sim, & Hee (2016) provide additional evidence on the influence of attitude on intention in a study that identifies the salient factors impacting individuals' ethical decision making in social networking sites (SNSs). Attitude toward green products and environmental concern among individuals are the main determinants of purchase intention of green products (Yadav & Pathak, 2016). Hence, TPB is successfully used either wholly or partially by various researchers in diverse fields but there is a significant gap in understanding stock market investor attitude and intention towards ESG investing by using TPB. Furthermore, the theoretical framework is enhanced by injecting the idea of investment horizon in ascertaining the investment decision of Bangladeshi investors. Figure 1 shows the theoretical framework of the study.

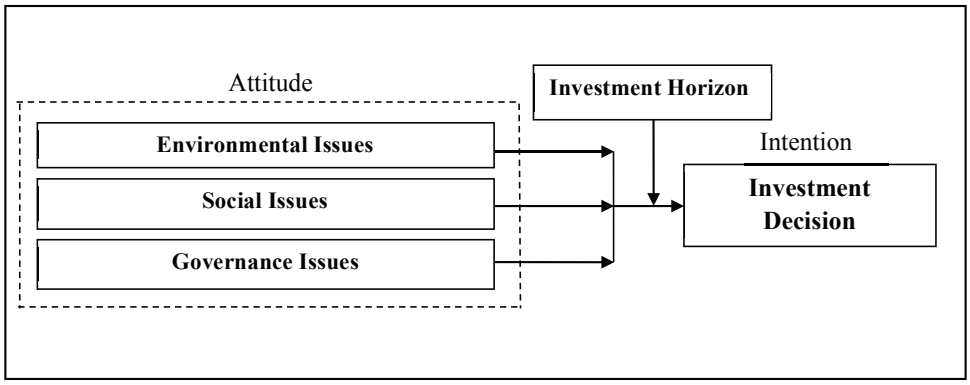

Figure 1. Theoretical framework of the study

Research Paradigm and Method

To gain comprehensive insight into the objectives of the study, a questionnaire survey with individual investors of the stock markets of Bangladesh (Dhaka Stock Exchange, DSE and Chittagong Stock Exchange, CSE) is conducted (Wilson & McLean, 1994). The present study uses the positivist paradigm because this approach to accounting research seeks mainly to reveal law-like regularities that are testable and falsifiable by empirical data sets (Lukka, 2010). Positivism is an epistemological position that describes the goal of knowledge is to describe phenomena that we encounter (Wahyuni, 2012). Positivism in general refers to philosophical positions that emphasise empirical data and scientific methods. Subsequently, this study uses scientific methods to test the hypotheses which are quantitative in manner for the rational explanation of the problem raised in the study.

Research Instrument

The questionnaire contains closed ended questions because this type of question results in a higher response rate and data that are easy to code and analyse (Rowley, 2014). Seven-point Likert scale (ranging from 'strongly disagree' to 'strongly agree') is used and the format is helpful where respondents are asked for accurate mapping of neutral, moderate or extreme attitudes (Krosnick & Presser, 2010). This study uses the dimensions of ESG adapted from UNGC (2004) and from TRCRI (2013) to find out what factors are considered by stock market investors in Bangladesh in relation to ESG issues and practices. UNGC (2004) is considered for the study because United Nations is an internationally recognised body. Moreover, there are 53 participants in the UNGC (2004) from Bangladesh (Bangladesh Investment Climate Statement, 2015). Furthermore, TRCRI (2013) is considered to be recent as well as highly accepted for scoring the companies' ESG practices. More than 4,600 public companies worldwide have already used this index for ESG ratings and rankings (Thomson Reuters, 2015). To measure the investment decision of the investors, percentage of ESG investment in the portfolio is evaluated with one item ordinal scale, taking on from Dorfleitner and Utz (2014); Nilsson (2008); Perez-Gladish et al. (2012).

Preliminary Survey

The questionnaire is first tested with a group of respondents to eliminate errors in content or design (Saunders, Lwis, & Thornhill, 2012) as well as to find out whether the questions are easy and straightforward (Rowley, 2014). Dorfleitner and Utz (2014); Zwaan et al. (2015) initially tested their questionnaire to attain validity and reliability. The preliminary study is conducted among the individual stock market investors and academicians in Bangladesh. In total, 65 questionnaires were distributed among the individual stock market investors and the academicians from Accounting and Finance departments of

two eminent universities in Bangladesh. In one-month time, 34 responses were collected. The objective to involve the academicians (Aspara & Tikkanen, 2010) in the preliminary survey was to attain face validity of the questionnaire because ESG research is relatively new in the context of Bangladesh. The demographic background of the respondents is shown in Table 1.

Table 1
Demographic profile of the respondents

Items	Characteristics	Response (%)
Gender	Male	94.10
	Female	5.90
Age	Less or equal 20 years	-
	21 to 30 years	2.90
	31 to 40 years	38.20
	41 to 50 years	44.10
	Above 50 years	14.70
Experience	Less than 5 years	28.10
	5 to 10 years	43.80
	More than 10 years	28.10
Education	Below Secondary School Certificate (S.S.C)	-
	Secondary School Certificate (S.S.C)	-
	Higher Secondary School Certificate (H.S.C)	-
	Bachelor's degree	8.80
	Master's degree	32.40
	PhD	41.20
	Professional Degree	17.60

RESULTS AND ANALYSIS

To analyse data, Structural Equation Modelling (SEM) involving Partial Least Squares (PLS) is used with Warp PLS Version 5.0. In this section, the data from the preliminary survey is analysed as the final survey data is yet to be fully collected, involving a sample size of 384 (Krejcie & Morgan, 1970) with simple random sampling of individual stock market investors from Bangladesh. Kock (2014) states that Warp PLS Version 5.0 is a software for SEM to present PLS algorithms along with factor-based PLS algorithms. Hair, Black, Babin, & Anderson (2010a, p. 643) state that, minimum sample size should be 34 or 35 for SEM. This study runs the software with 34 observations, which also supports the five times per variable requirement of minimum sample size calculation (Hair et al., 2010a, p. 102) excluding the moderating variable. Moderating variable impact is not depicted here due to the small size of observations, which may lead to unreliable analysis if included. Table 2 shows the descriptive analysis: mean minimum, maximum and standard deviation (SD) of the independent variables. In addition, response percentages of the dependent and moderating variables are depicted in Table 3.

Table 2
Descriptive analysis of research indicators (Independent variables)

Independent Variable: Environmental Issues *(E)*		Mean	Min	Max	SD
Items	I wish to invest in the companies that care about:				
E1	The risk of climate changing issues like global warming, greenhouse effect etc.	6.47	5	7	.71
E2	Proper waste management of harmful wastes from the production process.	6.59	4	7	.66
E3	Optimum use of materials, energy or water, and to find more environment-friendly solutions like solar power.	6.56	5	7	.61
E4	Reducing harmful gases (carbon dioxide and chlorofluorocarbons) from the production process.	6.44	4	7	0.96
E5	Producing environment-friendly and durable products.	6.29	3	7	.91
E6	Creating new market opportunities through new environmental technologies and processes.	6.09	4	7	.93
E7	The pressure from civil society to improve performance, transparency and accountability on environmental practices.	5.94	3	7	1.01
Independent Variable: Social Issues *(S)*		Mean	Min	Max	SD
Items	I wish to invest in the companies that care about:				
S1	Workplace health and safety of the employees and workers.	6.59	5	7	.61
S2	Providing higher employment benefits.	6.35	5	7	.65
S3	Main¬taining good relation with the government and general community (local, national and global) by donating cash, goods etc.	5.68	3	7	1.12
S4	Respecting the fundamental human rights conventions (not using child, forced or compulsory labour etc.).	6.47	5	7	.62
S5	Developing the employees' skills, competencies, employability and careers by arranging training and education.	6.29	4	7	.76
S6	Increasing employee loyalty and productivity (by promoting an effective life-work balance, a family friendly environment and equal opportunities regardless of gender, age, ethnicity or religion).	6.29	4	7	.80
S7	Producing quality goods and services considering the customers' health and safety, and providing accurate product information and labelling.	6.38	5	7	.74
S8	The pressure from civil society to improve performance, transparency and accountability on social practices.	5.85	2	7	1.08
Independent Variable: Governance Issues (G)		Mean	Min	Max	SD
Items	I wish to invest in the companies that care about:				
G1	The independence and accountability of board of directors.	6.53	5	7	.62
G2	Setting up an effective board with allocated duties and responsibilities.	6.44	5	7	.71

Table 2 *(continue)*

Independent Variable: Governance Issues (G)		Mean	Min	Max	SD
G3	Financial reporting requirements.	6.44	5	7	.75
G4	Audit committee structure and its functions.	6.38	5	7	.65
G5	Independence of auditors.	6.76	6	7	.43
G6	Attracting and retaining executives with the necessary skills by linking their compensation to individual and/or company-wide financial or extra-financial targets.	6.06	4	7	.81
G7	Taking necessary actions to control corruption and bribery issues in the organisation.	6.65	5	7	.65
G8	Ensuring equal rights and privileges of the shareholders including minority shareholders.	6.65	6	7	.49
G9	Creating and communicating an appropriate vision and strategy into its day-to-day decision-making processes.	6.21	5	7	.73

Table 3
Descriptive analysis of research indicators (Dependent and moderating variables)

Dependent Variable: Investment decision *(Invest)*	Response (%)
The percentage of investment I want to make in the companies that have a comprehensive strategy and practice towards ESG issues and practices is:	
0%	-
1-20%	2.90
21-40%	8.80
41-60%	17.60
61-80%	29.40
81-100%.	41.20
Moderating Variable: Investment Horizon	Response (%)
In which investment horizon you actually invest in the stocks?	
Short term (Less than 1 year)	17.60
Mid-term (1 to 5 years)	52.90
Long term (More than 5 years)	29.40

Reliability and Validity Tests

Cronbach's Alpha, Average Variance Extracted (AVE), Indicator Loadings and Composite Reliability (CR) are important measures to access the reliability and validity of the constructs (Hair, Black, Babin, & Anderson, 2010b). Table 4 shows all these measures of the constructs. In addition, Full Collinearity VIF is also indicated to know whether the constructs have multicollinearity or not.

Table 4
Reliability, validity and multicollinearity test results

Constructs	Items	Factor Loading (FL)	Composite Reliability (CR)	Cronbach's Alpha	Average Variance Extracted (AVE)	Full Collinearity VIF
Environmental Issues (E)	E1	0.888	0.87	0.82	0.50	2.44
	E2	0.677				
	E3	0.235				
	E4	0.800				
	E5	0.680				
	E6	0.715				
	E7	0.785				
Social Issues (S)	S1	0.701	0.86	0.81	0.44	2.48
	S2	0.527				
	S3	0.445				
	S4	0.776				
	S5	0.658				
	S6	0.788				
	S7	0.663				
	S8	0.667				
Governance Issues (G)	G1	0.874	0.89	0.86	0.49	3.04
	G2	0.741				
	G3	0.635				
	G4	0.761				
	G5	0.455				
	G6	0.743				
	G7	0.728				
	G8	0.539				
	G9	0.747				
Investment Decision (Invest)	Invest	1.00	1.00	1.00	1.00	1.43

Convergent Validity

Table 4 shows the factor loading of most of the items are above the minimum acceptance range of 0.50 (Hair, Black, Babin, & Anderson, 2009). Item E3, S3 and G5 have factor loadings below 0.50. However, according to Hair, Hult, Ringle and Sarstedt (2016, p.113) items with weak factor loading can be retained in some cases as benefaction to content validity.

Discriminant Validity

Average Variance Extracted (AVE) should be greater than 0.50 to attain discriminant validity (Hair et al., 2016, p. 115). In this study, Environmental issues fulfils

the stipulated value (AVE: 0.50), while Governance issues (AVE: 0.49) and Social Issues (AVE: 0.44) have slightly lower AVE. The small sample size used in this study may have resulted in lower AVE. Hair et al. (2010a) highlight the sensitivity of SEM to sample size, whereby, a small sample size might affect the reflective indicators' average error variance. Therefore, the results from the final study might show stronger discriminant validity due to sample size.

Reliability

Composite Reliability (CR) and Cronbach's Alpha of all scales of the study are above 0.80, which indicates that the scales are sufficiently reliable (Fornell & Larcker, 1981; Nunnally, 1978).

The CR, Cronbach's Alpha and AVE of 'Investment decision' shows 1.00 as the dependent variable being measured by a one item ordinal scale. Full Collinearity VIF values for all constructs are less than 3.3, which indicate there is no multicollinearity in the model (Kock, 2015).

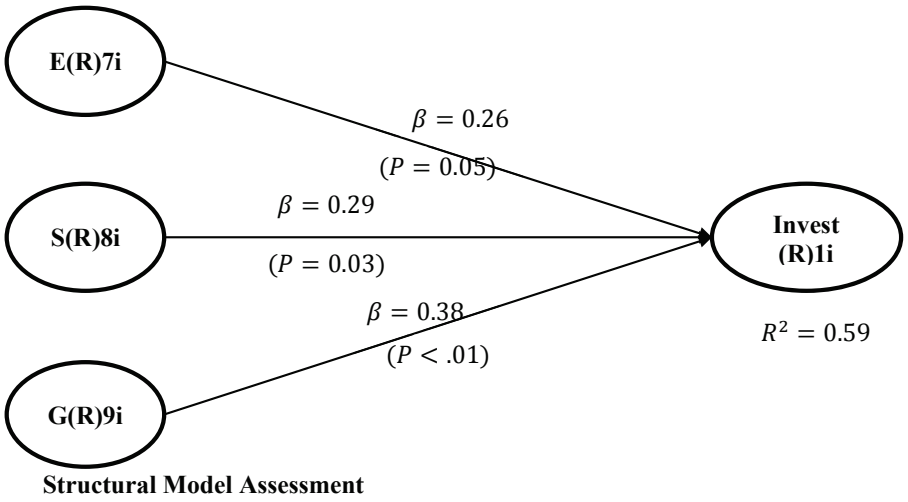

Figure 2. Summary of the research model

Figure 2 shows the causal relationships among independent and dependent variables of the study. Path coefficient (β) describes the hypothesised relationship among the variables. P value assesses the significance level and coefficient of determination (R^2 value) is the measure of the research model's predictive power (Hair et al., 2016). Figure 2 also shows Hypothesis 2 and Hypothesis 3 are supported with P values less than 0.05, meaning Social and Governance issues have significant influence on the investment decision of the stock market investors in Bangladesh. Hypothesis 1 has P value of 0.048 or 0.05 which also means Environmental Issues have an effect

on investment decisions. From the path coefficient results, it can be stated that Governance issues has the most significant effect on investment decision (β=0.38), Social issues also affect investment decisions (β=0.29) and interestingly Environmental issues also impact on investment decisions (β=0.26). The R^2 value (0.59) of the model shows this model moderately (Hair et al., 2016) explains the effect of ESG on investment decisions among Bangladeshi investors.

Evaluation of Model Fit and Quality Indices

The Average path coefficient (APC) of the research model is 0.309, P=0.011; Average R-squared (ARS) is 0.593, P<0.001 and Average adjusted R-squared (AARS) is 0.552, P<0.001.

The required fit of PLS-SEM model (Kock, 2015), the model fit and quality indices of the present study model are listed below in Table 5, which indicates acceptability of the model considering the thresholds.

Table 5
Model fit and quality indices

Model Fit Indices	Recommendation	Sources
Average block VIF (AVIF)=1.586	Acceptable if <= 5, ideally <= 3.3	Kock (2015)
Average full collinearity VIF (AFVIF)=2.349	Acceptable if <= 5, ideally <= 3.3	Kock (2015)
Tenenhaus GoF (GoF)=0.601	Small >= 0.1, Medium >= 0.25, Large >= 0.36	Wetzels, Odekerken-Schroder and van Oppen (2009)
Sympson's paradox ratio (SPR)=1.000	Acceptable if >= 0.7, ideally = 1	Kock (2015)
R-squared contribution ratio (RSCR)=1.000	Acceptable if >= 0.9, ideally = 1	Kock (2015)
Statistical suppression ratio (SSR)=1.000	Acceptable if >= 0.7	Kock (2015)
Nonlinear bivariate causality direction ratio (NLBCDR)=1.000	Acceptable if >= 0.7	Kock (2015)

DISCUSSION

Despite the small sample size, the study highlights the concerns for ESG issues on investment decisions. Preference of the respondents towards governance issues indicates their economic rationality to secure their investment return. This finding is consistent with that of Crifo et al. (2015) who looked at investors in France. Inclination towards Social and Environmental issues relate to accountability towards the environment and the society as well as ensuring their sustainable financial returns. Although among ESG aspects, relatively less concern for Environmental issues found in the present study contrasts with the findings of Nakamura (2013). Nakamura

(2013) conducts a study on the investors in Japan which establishes that environmental issues are most influential factor while considering corporate social responsibilities of the companies in the investment decision. In terms of social issues, results of this study are consistent with the findings of Zwaan et al. (2015) where they state that social issues are considered by the superannuation fund investors of Australia. In this study, 'Attitude' has notable effect on 'Intention' with R^2 value of 0.59.

Future research can test the variable 'Investment Horizon'. A larger sample size may enable the findings to be generalised.

CONCLUSION

This study contributes to the ESG literature such as the effect of 'ESG attitude' on 'ESG intention' of Theory of Planned Behaviour (TPB). Methodological contribution of the study is the adaption of the measurement scales from UNGC (2004) and TRCRI (2013) that are rarely used in previous studies on ESG and represent the ESG dimensions from internationally recognised bodies. The study also contributes to ESG literature through proposing investment horizon as a moderating variable. Furthermore, investors' preference for ESG might pave the way in the formulation of rules and regulations to improve ESG performance and ESG reporting and the ultimate introduction of the ESG index in Bangladesh. This is hoped to attract more Foreign Direct Investment (FDI) and foreign stock investors. Therefore, the integrated ESG aspects in investment decisions can contribute to stable stock markets as well as overall sustainable growth of the country with similar cultural settings.

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REFERENCES

Adam, A. A., & Shaulu, E. R., (2014). Socially responsible investment in Malaysia: Behavioral framework in evaluating investors' decision making process. *Journal of Cleaner Production, 80*, 224-240.

Ajzen, I. (1985). From intentions to actions: A theory of planned behavior. In J. Kuhl & J. Beckmann (Eds.), *Action control: From cognition to behavior* (pp. 11-39). Berlin, Heidelberg: Springer Berlin Heidelberg.

Alleyne, P., & Broome, T. (2011). Using theory of planned behavior and risk propensity to measure investment intentions among future investors. *Journal of Eastern Caribbean Studies, 36*(1), 1-20.

Arjalies, D. L. (2010). A social movement perspective on finance: How socially responsible investment mattered. *Journal of Business Ethics, 92*, 57-78. doi: http://dx.doi.org/10.1007/s10551-010-0634-7

Aspara, J., & Tikkanen, H. (2010). Consumers' stock preferences beyond expected financial returns: The influence of product and brand evaluations. *International Journal of Bank Marketing, 28*(3), 193-221. doi:10.1108/02652321011036468

Association for Sustainable & Responsible Investment in Asia. (2015). *Asia sustainable investment review 2014*. Retrieved July 2, 2015, from http://asria.org/wp-content/uploads/2014/12/2014-Asia-Sustainable-Investment-Review1.pdf

Bangladesh Investment Climate Statement. (2015). *Department of State, United States of America.* Retrieved August 16, 2016, from http://www.state.gov/docu-ments/organization/241687.pdf

Belal, A. R., Cooper, S. M., & Khan, N. A. (2015). Corporate environmental responsibility and accountability: What chance in vulnerable Bangladesh? *Critical Perspectives on Accounting, 33*, 44-58. doi: 10.1016/j.cpa.2015.01.005

Berry, T. C., & Junkus, J. C. (2013). Socially responsible investing: An investor perspective. *Journal of Business Ethics, 112*, 707-720. doi:10.1007/s10551-012-1567-0

Brimble, I. T. M. (2011). Islamic investment behavior. *International Journal of Islamic and Middle Eastern Finance and Management,* 4(2), 116 -130. doi.org/10.1108/17538391111144515

Brown, N. (2014). *The Investor trip to Bangladesh, is a race to the top underway? And if so, who will win?* Retrieved May 26, 2015, from http://www.alliancetrustinvestments.com/sri-hub/posts/51638/July/Bangladesh-Investor-Trip

Butler, S. (2013). *Bangladeshi factory deaths spark action among high street clothing chains*. Retrieved August 26, 2015, from http://www.theguardian.com/world/2013/jun/23/rana-plaza-factory-disaster-bangladesh-primark

Chowdhury, S. A. (2014). Foreign funds in stocks hit record Tk 426cr. Retrieved December 13, 2015, from http://www.thedailystar.net/foreign-funds-in-stocks-hit-record-tk-426cr-44236

Chowdhury, S. A. (2016). *Foreign investment in stocks trebles*. Retrieved February 1, 2017, from http://www.thedailystar.net/business/foreign-investment-stocks-trebles-1282360

Crifo, P., Forget, V. D., & Teyssier, S. (2015). The price of environmental, social and governance practice disclosure: An experiment with professional private equity investors. *Journal of Corporate Finance, 30*,168–194. doi:10.1016/j.jcorpfin.2014.12.006

Derwall, J. (2007). *The economic virtues of SRI and CSR* (Doctoral thesis, Erasmus University, Rotterdam). Retrieved from repub.eur.nl/pub/8986/ESP2007101F&A9058921328DERWALL.pdf

Diouf, D., Hebb, T., & Toure, E. (2014). Exploring factors that influence social retail investors' decisions: Evidence from Desjardins fund. *Journal of Business Ethics, 34*(1), 45-67. doi: 10.1007/s10551-014-2307-4

Dorfleitner, G., & Utz, S. (2014). Profiling German-speaking socially responsible investors. *Qualitative Research in Financial Markets, 6*(2), 118-156. doi:10.1108/QRFM-07-2012-0024

East, R. (1993). Investment decisions and the theory of planned behaviour. *Journal of Economic Psychology, 14*(2), 337-375. doi: 10.1016/0167-4870(93)90006-7

EPI. (2016). *Environmental Performance Index*. Retrieved January 31, 2017, from https://issuu.com/2016yaleepi/docs/epi2016_final

Escrig-Olmedo, E., Munoz-Torres, M. J., & Fernandez-Izquierdo, M. A. (2013). Sustainable development and the financial system: Society's perceptions about socially responsible investing. *Business Strategy and the Environment, 22*(6), 410-428. doi:10.1002/bse.1755

Fin, R. F. F. (2012). Environmental, social and governance investing from an idea to getting it done. *In Finance, 126*(2), 42.

Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: An introduction to theory and research.* Reading, MA: Addison-Wesley

Fornell, C., & Larcker, D.F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research, 18*(1), 39-50.

Galbreath, J. (2013). ESG in focus: The Australian evidence. *Journal of Business Ethics, 118*(3), 529-541. doi:10.1007/s10551-012-1607-9

Giannetti, M., & Simonov, A. (2006). Which investors fear expropriation? Evidence from investors' portfolio choices. *The Journal of Finance, 61*(3), 1507-1547. doi: 10.2307/3699330

Gopi, M., & Ramayah, T. (2007). Applicability of theory of planned behavior in predicting intention to trade online: Some evidence from a developing country. *International Journal of Emerging Markets, 2*(4), 348-360. doi: 10.1108/17468800710824509

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R .E. (2009). *Multivariate data analysis.* Upper Saddle River, NJ: Prentice Hall

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010a). *Multivariate data analysis* (7th ed.). Englewood Cliffs: Prentice Hall.

Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2010b). *Multivariate data analysis: A global perspective* (7th ed.). Upper Saddle River, NJ: Pearson Education.

Hair, J. F. J., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2016). *A primer on partial least squares structural equation Modelling (PLS-SEM)* (2nd ed.). Los Angles, USA: Sage.

Hirt, G. A. & Block S. B. (1999). *Fundamentals of Investment Management* (6th ed.). Singapore: McGraw-Hill/Irwin.

Islam, A. (2015). Bangladesh going to be the 23rd largest economy. *Prothom Alo*, p. 13.

Jafarkarimi, H., Saadatdoost, R., Sim, A. T. H., & Hee, J. M. (2016). Behavioral intention in social networking sites ethical dilemmas: An extended model based on theory of planned behavior. *Computers in Human Behavior, 62*, 545-561. doi: 10.1016/j.chb.2016.04.024

Jagongo, A., & Mutswenje, V. S. (2014). A survey of the factors influencing investment decisions: The case of individual investors at the NSE. *International Journal of Humanities and Social Science, 4*(4), 92-102.

Khaled, K. I., Chowdhury, T. A., Chowdhury, M. A. B., & Kabir, N. (2011). *Share market inquiry report.* Dhaka, Bangladesh. Ministry of Finance. Retrieved from http://www.mof.gov.bd/en/index.php?option=com_content&view=article&id=169&Itemid=1

Kock, N. (2014). *A note on how to conduct a factor-based PLS-SEM*. Laredo, TX: ScriptWarp Systems.

Kock, N. (2015). *WarpPLS 5.0 User Manual*. USA: ScriptWarp System.

Krejcie, V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement, 30*, 607-610.

Krosnick, J. A., & Presser, S. (2010). Question and questionnaire design handbook of survey research. In P. V. Marsden & D. W. James (2nd ed.), *Handbook of Survey Research* (pp. 263-313). Bingley, UK: Emerald Group Publishing Limited.

Lukka, K. (2010). The roles and effects of paradigms in accounting research. *Management Accounting Research, 21*(2), 110-115.

Nair, A. S., & Ladha, R. (2014). Determinants of non-economic investment goals among Indian investors. *Corporate Governance: The International Journal of Business in Society, 14*(5), 714-727. doi: 10.1108/CG-09-2014-0102

Nakamura, E. (2013). The impact of shareholders' types on corporate social responsibility: Evidence from Japanese firms. *Journal of Global Responsibility, 4*(1), 113-130. doi:10.1108/20412561311324104

Nilsson, J. (2008). Investment with a conscience: Examining the impact of pro-social attitudes and perceived financial performance on socially responsible investment behavior. *Journal of Business Ethics, 83*(2), 307-325. doi: 10.1007/s10551-007-9621-z

Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). New York: McGraw-Hill.

Pellinen, A., Tormakangas, K., Uusitalo, O., & Munnukka, J. (2015). Beliefs affecting additional investment intentions of mutual fund clients. *Journal of Financial Services Marketing, 20*(1), 62-73. doi: 10.1057/fsm.2014.32

Perez-Gladish, B., Benson, K., & Faff, R. (2012). Profiling socially responsible investors: Australian evidence. *Australian Journal of Management, 37*(2), 189-209. doi: 10.1177/0312896211429158

Rakotomavo, M.T. J. (2011). Preferences of retail investors and institutions for corporate social performance. *Journal of Sustainable Finance and Investment, 1*, 93-102.

Renneboog, L., Ter Horst, J., & Zhang, C. (2008). Socially responsible investments: Institutional aspects, performance, and investor behavior. *Journal of Banking and Finance, 32*(9), 1723-1742. doi: 10.1016/j.jbankfin.2007.12.039

Rowley, J. (2014). Designing and using research questionnaires. *Management Research Review, 37*(3), 308-330. doi:10.1108/MRR-02-2013-0027

Sabet, D., & Ishtiaque, A. S. (2013). *Understanding the Hallmark-Sonali bank loan scandal.* Retrieved June 1, 2015, from http://www.ulab.edu.bd/CES/documents/Hallmark_Sonali_Jan_13%28lg%29.pdf

Sairally, B. S. (2015). Integrating Environmental, Social and Governance (ESG) factors in Islamic finance: Towards the realisation of Maqasid Al-Shari'ah. *ISRA International Journal of Islamic Finance*, 183.

Saunders, M., Lewis, P., & Thornhill, A. (2012). *Research methods for business students* (5th ed.). India: Pearson

Sorensen, O. B., & Pfeifer, S. (2011). Climate change issues in fund investment practices. *International Social Security Review, 64*(4), 57-71. doi: 10.1111/j.1468-246X.2011.01411.x

Tahera, K. T. (2014). Share market in Bangladesh: Its impulsive attitude towards investors and reasons behind these spontaneous changes. *International Journal of Social Science and Humanities Research, 2*(4). 284-290.

The Forum for Sustainable and Responsible Investment. (2015). *Forum for sustainable and responsible investment.* Retrieved July 5, 2015, from http://www.ussif.org/blog_home.asp?Display=55

The International Federation of Accountants. (2012). *Investor demand for environmental, social, and governance disclosures: Implications for professional accountants in business*. Retrieved April 25, 2015, from https://www.ifac.org/publications-resources/investor-demand-environmental-social-and-governance-disclosures.

Thomson Reuters Corporate Responsibility Index. Retrieved May 26, 2015, from http://thomsonreuters.com/en/productservices/financial/market- indices/corporateresponsibility-indices.html

United Nations Global Compact (UNCG).(2004). *Who care wins.* Retrieved April 23, 2015, from www.unglobalcompact.org/docs/issues_doc/Financial_markets/who_cares_who_wins.pdf

United Nations Principles of Responsible Investment. (2015). Retrieved July 18, 2015, from http://www.unpri.org/wp-content/uploads/201314_PRI_RF_maindefinitions.pdf

Wagemans, F. A. J., van Koppen, C. S. A., & Mol, A. P. J. (2013). The effectiveness of socially responsible investment: A review. *Journal of Integrative Environmental Sciences, 10*(3-4), 235-252. doi: 10.1080/1943815x.2013.844169

Wahyuni, D. (2012). The research design maze: Understanding paradigms, cases, methods and methodologies. *Journal of Applied Management Accounting Research, 10*(1), 69-80.

Warsame, M. H., & Ireri, E. M. (2016). Does the theory of planned behaviour (TPB) matter in Sukuk investment decisions? *Journal of Behavioral and Experimental Finance, 12*, 93-100. doi: 10.1016/j.jbef.2016.10.002

Wetzels, M., Odekerken-Schroder, G., & van Oppen, C. (2009). Using PLS path modeling for assessing hierarchical construct models: Guidelines and empirical illustration. *MIS Quarterly, 33*(1), 177-196.

Wilson, N., & McLean, S. (1994). *Questionnaire design: A practical introduction*. Newtown Abbey, Co. Antrim: University of Ulster Press.

World Bank (2017). *The World Bank in Bangladesh.* Retrieved January 19, 2017, from http://www.worldbank.org/en/country/bangladesh

Yadav, R., & Pathak, G. S. (2016). Young consumers' intention towards buying green products in a developing nation: Extending the theory of planned behavior. *Journal of Cleaner Production, 135*, 732-739. doi: http://dx.doi.org/10.1016/j.jclepro.2016.06.120

Yang, K., & Jolly, L. D. (2009). The effects of consumer perceived value and subjective norm on mobile data service adoption between American and Korean consumers. *Journal of Retailing and Consumer Services, 16*(6), 502-508. doi: 10.1016/j.jretconser.2009.08.005

Zwaan, L. D, Brimble, M., & Stewart, J. (2015). Member perceptions of ESG investing through superannuation. *Sustainability Accounting, Management and Policy Journal, 6*(1), 79-102. doi: 10.1108/SAMPJ-03-2014-0017