Corporate ESG issues and retail investors’ investment decision: a moral awareness perspective

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A B S T R A C T

The specific goal of this study is to find out how retail investors consider company ESG issues while making investment decisions, with their moral awareness (MA) serving as a moderator. The framework's foundations are the norm activation model (NAM) and the theory of planned behavior (TPB). The report is based on a questionnaire survey that was completed by 599 retail investors in Dhaka and Chattagram, Bangladesh. To examine the data and verify the theories, the PLS path modeling approach is employed. Six hypotheses are investigated using structural equation modeling; five are found to be significant and one to be non-significant. All of the hypotheses are positive. The findings of the research demonstrate that when making investment decisions, investors take a company's social, environmental, and governance issues into account. The moral awareness of investors seems to influence their investment decisions as well. By presenting empirical data on the relationship between business ESG issues and investment decisions with moderating impacts on investors' moral awareness, the paper advances the field of behavioral finance research. It implies that corporate advertising tactics may support global reporting requirements, draw impact investors, and promote moral and environmental education. To safeguard ESG concerns and promote sustainable growth of the capital market and economy, governments should enact laws, rules, and directives.

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Introduction

With aspects such fund safety, capital returns, liquidity, economic growth, and interest rate variations taken into account, investors are becoming more and more worried about choosing the optimal investment portfolio. ESG data is a further resource of knowledge for forecasting future prospects. Since firms that act irresponsibly in the social and environmental spheres run the danger of being sued and having their stock value reduced, shareholders are becoming more conscious of ESG issues.

Corporate governance, social norms, and environmental considerations are all part of ESG initiatives. According to the European SRI Study (2014), socially responsible investment (SRI) is defined as an approach that considers environmental, social, and governance (ESG) factors in an effort to provide long-term financial returns and positive social effect. It is possible to preserve assets and advance social change by making investments in businesses with solid ESG track records. Businesses are putting more effort into cutting carbon emissions, fostering better working conditions, and upholding high standards for customer service.

Studies reveal that firms with high sustainability outperform those with poor sustainability in terms of stock market and financial performance (Eccles et al., 2014), demonstrating the growing relationship between ESG information and economic repercussions. According to Keefe (2007), this shift in strategy prioritizes the financial impact of ESG variables, giving sustainability a competitive
advantage in business and enabling socially responsible investment to increase shareholder returns (Hebb et al., 2012). Studies show that companies excelling in socially responsible metrics like eco-efficiency and employee happiness can outperform rivals financially (Derwall et al., 2005; Edmans, 2011). As investors become more aware of ESG concerns, more corporations report on ESG, leading to increased interest in ESG investments.

Traditional financial models suggest that investors will retain SRI funds if they offer a similar risk-return trade-off as other assets. However, ethical investors prioritize ethical concerns (McLachlan, J., and Gardner, J., 2004), particularly environmental and labor issues (Rosen et al., 1991). Entrepreneurs often make moral decisions involving balancing personal benefit and social standards (Venkataraman, 2002). Despite the potential for positive returns, many institutional investors avoid investing in "sin" stocks and forego financial gain to uphold their beliefs (Hong and Kacperczyk, 2009). Ethical investors also prioritize societal responsibility and compassion, choosing careers in education and health (Cummings, L. S., 2000). Their social preferences, influenced by moral awareness, can lead them to retain ESG funds with reduced returns. Moral awareness is a crucial aspect of ethical decision-making in the ESG market, as it helps individuals self-regulate their investment choices.

In Bangladesh, while making investment decisions, ESG issues and moral awareness are of utmost significance. In effect, ethical and sustainable investments can aid Bangladesh in creating a strong, long-term sustainable corporate strategies (Brown, 2014). However, there is limited evidence on the importance of financial and nonfinancial disclosure in making decisions in developing economies like Bangladesh. Many scholars contend that study on ESG issues should be carried out in various cultural settings, especially in developing countries like Bangladesh. Although ESG investment has expanded, but most research focuses only on performance and have been conducted on developed economies. Until now, moral awareness has been largely disregarded in investment literature. We still don't fully comprehend why and how investors use ESG data. In an effort to fill this vacuum in the literature, the current study examines how individual Bangladeshi stock market investors evaluate ESG factors while also taking into account their own moral awareness.

Consequently, the goal of this study is to establish a comprehensive model of individual investors' ESG investment decision by emphasizing ESG issues and moral awareness. A thorough literature analysis is used to derive the proposed model. The inferred model is supported by the theory of planned behavior (TPB) (Ajzen, 1991), and the norm activation model (NAM) (Schwartz, 1977).

The following research questions will be addressed in this study:

i. How the investors are influenced by Environmental information, Social information, and Governance information provided by the companies?

ii. Does investors’ moral awareness have any moderating role on the ESG investment decision?

The presentation of this article consists of five segments. An introduction is included in the first portion of the study. The conceptual framework, hypothesis development, and literature review are presented in the next section. The methodology is explained in the third part. The fourth component of the study presents an interpretation of the empirical findings. Lastly, the fifth section covers the study's conclusions and implications, ideas for further investigations in future, and a reference list.

**Literature Review**

**Theoretical and Conceptual Background**

Corporate operations have significant environmental impacts, such as biodiversity loss, resource destruction, and global warming. These changes affect social development, financial advancement, resource scarcity, and population growth (Ferreira et al., 2016). Businesses that communicat environmental concerns often earn higher profits while fulfilling their obligations. Speculators evaluate organizations’ socially conscious behavior based on environmental issues (Berry and Junkus, 2013). Fraudulent manipulation of environmental information can negatively affect firms (Crifo et al., 2015).

Social issues, such as welfare, rights, and workplace safety, are increasingly recognized by investors across the investment spectrum. Michel T. J. Rakotomavo (2011) states that speculators weigh employer-employee relationship and human rights in their venture decision. Bradford et al. (2016) argue that for socially conscious investors, social issues are still more important than environmental issues. No matter where a company's activities are situated, Smith (2002) found that consumers expect it to uphold high standards for worker, human rights, health and safety, and environmental preservation. In fact, social concerns are increasingly recognized by investors, as they impact venture selection and investment return.

Strong governance practices enhance a company’s social and ecological responsibility. Governance issues comprise board size, structure, autonomy, diversity, internal control, risk management, official pay, data disclosure, business ethics, investor rights, and more (UNPRI, 2015). Investors seldom prioritize social concerns over financial returns, indicating an inclination toward corporate governance issues (Michel T. J. Rakotomavo, 2011). In Australia, 64% of securities exchange financial specialists consider governance issues when choosing a venture (De Zwaan, L. et al., 2015).

Social investors are often linked to ethical codes of ethics in the context of Social Responsibility (SRI). Social investors prioritize their beliefs, social ideals, and conscience when making investment decisions (Dionf et al., 2016). Lewis and Mackenzie's (2000)
study found that ethical investors can be both "saints" and "devils," and that even when ethical funds underperform, they often keep their investments. According to Barreda-Tarrazona et al. (2011), beyond return and diversification, investors who are aware of the funds’ socially responsible character contribute more money.

Theoretical Foundation of the Study

This study combines Ajzen's (1991) Theory of Planned Behavior (TPB) and Schwartz's (1977) norm activation model (NAM) to understand individual investors' pro-environmental behaviors towards ESG investment. TPB, an extension of the Theory of Reasoned Action (TRA) (Ajzen and Fishbein, 1980; Fishbein and Ajzen, 1975), suggests that decision makers' behavioral goals drive their actions, and attitudes; accepted standards, and perceived behavioral control influence behavior intentions. The study takes into account the "attitudes" of stock market investors toward ESG concerns, as well as subjective standards (such as moral awareness), in order to operationalize TPB. It then focuses on the "intention" towards ESG investing by taking investment decisions into account. Studies have shown that attitudes, subjective norms, and perceived behavioral control positively influence individuals' intentions to engage in online stock trading (Gopi and Rumayah, 2007). Warsame and Ireri (2016) used the Theory of Planned Behavior (TPB) to Sukuk investing and discovered that attitude and perceived behavior control had a favorable and substantial impact on behavior intention.

The NAM (Schwartz, 1977) suggests that understanding a situation is crucial for acting responsibly, leading to pro-social behavior when individuals are aware of negative consequences and take responsibility for changing them. Pro-environmental conduct is driven by moral convictions, norm-based views, self-interest, and volitional goals. Individuals typically engage in pro-social behaviors when they feel morally obligated to do so (Zhang et al., 2013), and understanding the consequences of their actions encourages acceptance of responsibility (Dalvi-Esfahani et al., 2017). This study suggests that investors' moral awareness influences their propensity to invest in businesses that publish ESG data.

Empirical Review and Hypothesis Development

Environmental Issues and investment decisions

Environmental concerns include air, water, and resource contamination, ozone-harming substance discharge, environmental change, and waste management (UNPRI, 2015). Companies already face financial repercussions from carbon emissions; and stakeholders are interested in reducing hazardous substance emissions and fulfilling corporate objectives. Research on the relationship between management and the environment has shown that investors need knowledge to adjust their investment exposure (Gray et al., 1996) or monitor management (Healy and Palepu, 2001). Environmental data can help investors understand a company's risk exposure to future regulatory expenses (Blacconiere and Patton, 1994). Businesses that disclosed environmental information in the past with less detail received negative market reactions (Patten and Nance, 1998). Environmental concerns are a critical factor to consider when making investment decisions, and this is true in various cultural contexts, including the USA, France, Japan, Sweden, and New Zealand (Van der Laan Smith et al., 2010; Liyanarachchi and Milne, 2005). Environmental data may help financial stakeholders make better decisions, and when financial data is paired with environmental performance ratings, financial statement information becomes much more valuable (Nair and Ladha, 2014). Shareholders are likely to seek environmental information when making investment decisions, indicating the importance of environmental information in decision-making. Thus the initial hypothesis of the investigation is developed as a consequence of this.

H1: Investors' investing decisions are influenced favorably by corporate environmental issues.

Social Issues and investment decision

Social factors, including economic growth, freedoms, welfare, and zeal, significantly impact investment decisions (Crifo et al., 2015). Social reporting is still important as it offers a solid justification for a company's activities. A study of 10 entrepreneurs who created profitable new companies found that engaging in CSR and reporting can lead to financial success (Joyner et al., 2002). Speculators consider social factors in their venture choices. Research shows that Australian financial experts place more value on social concerns than governance and economic issues (Perez-Gladish et al., 2012). In developed countries, stock market investors are becoming more conscious about social issues encountered by firms (De Zwaan, L. et al., 2015). For socially conscious investors, social issues continue to be more significant than environmental ones (Bradford et al., 2016). This leads to the second hypothesis being developed as a result.

H2: Corporate social issues positively influence investors' investment decisions.

Governance Issues and investment decision

Studies reveal that when it comes to protecting shareholder rights and regulating management decisions, governance issues makes the greatest sense for investors. Effective governance eliminates the agency problem and ensures transparency, resolving conflicts of interest between management and shareholders (Aguilera et al., 2018). It also guarantees the accuracy and transparency of company information, helping shareholders make prudent decisions regarding investments. Mainstream investors prioritize financial performance, governance structure, and commitment to the environment and society as a whole (Walsh et al., 2009). Corporate governance scandals have increased investor concern over incorporating governance issues into investment decisions, highlighting...
the need for greater corporate governance. Given the importance of governance considerations in investor investment decision-making around the globe and the existing challenges with corporate governance in Bangladesh, the third hypothesis of the current study is recommended.

H3: Corporate governance issues positively influence individual investors’ investment decisions.

**Moderating effect of Moral Awareness**

Moral awareness is the understanding that one’s actions may impact their interests, the welfare of others, or their expectations in ways that may conflict with ethical principles (Butterfield et al., 2000). Individual variations in moral awareness may help to explain why people react to unethical leadership practices in different ways. People are more sensitive to moral dilemmas when they have a strong moral awareness (Butterfield et al., 2000). According to Schwartz, S. H. (1977), a significant and growing segment of the population has an emotional drive to integrate personal values into all aspects of life, including investment and finance. Therefore, a lot of moral investors would avoid investing in businesses that support, among other things, the military, the fossil fuel industry, fast food, alcohol, cigarettes, gambling, pornography, weapons, contraception, and abortion. Thus we anticipate that investors with high moral awareness will be more sensitive to the ESG concerns that firms face. On the other hand, persons with lower moral awareness will be indifferent to corporate ESG concerns. Hence we hypothesize:

H4: The association between environmental issues and investment decisions is positively moderated by investor's moral awareness.

H5: The connection between social issues and investment decision is positively moderated by investor’s moral awareness.

H6: Investor’s moral awareness positively moderates the link between governance issues and investment decision.

**Conceptual Framework**

The conceptual framework of this study includes a set of independent variables as environmental (E), social (S), and governance (G) issues and a dependent variable defined as investors’ investment decision (ID). Figure 1 depicts the association between the independent and dependent variables through arrows. Beside these moral awareness (MA) as the moderating variable used in the study. 'Moral Awareness’ has moderation effect on the relationship between the E, S, G issues and the ID. Moderating variable positively influences individual investors’ investment decision regarding companies that have concern about environmental, social, and governance factors. These effects are shown with by downward arrows in Figure-1.

![Conceptual Framework](image)

**Figure 1: Conceptual Framework**

**Research Methodology**

**Sampling**

The study's sample structure comprises retail investors from brokerage firms located in Dhaka and Chattogram, the two major cities in Bangladesh. The purposive sample, which is non-probability, was chosen due to the nature of the study. Fifteen questions for ESG dimensions were derived from UNGC (2004), TRCRI (2013), and Sultana et al. (2017). Five questions were created based on publications by JT.Wei & IM. Wang (2016), Geoffrey Williams (2007), McKinsey & Company, J. (2002), McKinsey/KIOD (2003), and Helm (2007) in order to gauge the investors' investment decision. Three questions to test the moderating effect of Moral
Awareness were developed based on research works of Arnaud (2010), Javaid, M. F., Raoof, R., Farooq, M., & Arshad, M. (2020). Demographic questions were based on researches of Joan C. Junkus and Thomas C. Berry, (2010) and Sultana et al. (2017). 900 equity investors receive an email with a link to a software-generated questionnaire. Sixty-six percent of the questionnaires that were provided were returned, with a total of 610 questionnaire samples (Sekaran, 2003). Eleven multiple outliers were identified and deleted based on Mahalanobis score above critical values. Consequently, the actual sample size for analysis is 599. The majority of the sample was male (74.62%), with the majority aged 41-50 (39.57%). 49.42% of the population held a bachelor's degree, whilst 1% of the population held a post-graduate degree. The bulk of investors (63.11%) were married, the majority made mid-range (1–5 years) investments (48.25%), and the majority invested between Tk 500000 and Tk 1000000.

Assessment of the measurement model

Five constructs make up the model: one endogenous and four exogenous. When it comes to formative indicators, the absence of any element has no influence on changes in any item’s latent variable since all items are interchangeable and considered consequences rather than causes of latent variables (Chin, 1998). Using a multi-item scale, the estimate model has 23 measurable items and 5 latent variables. Since every measured item is loaded into a separate latent variable, the error terms are unrelated to any other elements in the model. Five measured items represent three latent factors (i.e., EI, SI, and GI), three items reflect the moderating variable (MA), and five measured items demonstrate the latent dependent variable (‘Investment Decision’). The study employed the five-point Likert scale as its measuring scale because of its ease of use and coding, ability to provide respondents a wider variety of possibilities (less skewed distribution), and versatility in statistical analysis (Burns and Bush, 2006). This study selects the partial least squares (PLS) path modeling approach because of its principal capacity for addressing violations of normality (i.e., multivariate normality).

Reliability

Individual item reliability, Cronbach's alpha, and composite reliability were evaluated by evaluating the outer loadings of items on the latent variable to calculate reliability (Barclay, et al., 1995). With the exception of two items, EI-1 and EI-2, with their outer loadings remaining below 0.60, all individual item dependability values were within acceptable limits. With one loading (MA1) being below the appropriate average of 0.707 but over the threshold level of 0.60 (0.668), all loadings are above the suggested value of 0.707.
Composite reliability was investigated by examining the loadings of items and latent variables together with the internal consistencies for the 21 objects and 5 latent variable scales. All loadings exceeded the recommended parameter value of 0.70, as shown in Table 1. Variance Inflation Factor (VIF) is employed to evaluate the collinearity of indicators. The multicollinearity condition was deemed acceptable due to the fact that the factor VIF for each component was less than five (Hair et al., 2011).

Validity (Convergent and Discriminant Validities)

Convergent validity evaluates the degree to which many measurements operate well together inside a certain framework. When evaluating convergent validity, one should consider the indicator’s factor loading, composite reliability (CR), and average variance extracted (AVE). The value may be in the range of 0 to 1 and in order to ensure convergent validity, the AVE value must exceed 0.50 (Hair et al., 2011). Table 1 illustrates that the AVE was found to be fair, lying between 0.561 and 0.775. This implies that more than half of the variation was explained by each latent variable.

Discriminant validity quantifies the extent of differences across overlapping systems (Hair et al., 2011). The heterotrait-monotrait (HTMT) ratio of correlation, the cross-loading of indicators, and the Fornell and Larcker criteria are used to assess discriminant validity. Table 2 shows that every cross-loading in this analysis is more than 0.70.
Table 2: PLS Output of Cross Loading

<table>
<thead>
<tr>
<th></th>
<th>EI</th>
<th>GI</th>
<th>ID</th>
<th>MA</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI-3</td>
<td>0.909</td>
<td>0.351</td>
<td>0.591</td>
<td>0.322</td>
<td>0.286</td>
</tr>
<tr>
<td>EI-4</td>
<td>0.876</td>
<td>0.281</td>
<td>0.499</td>
<td>0.266</td>
<td>0.239</td>
</tr>
<tr>
<td>EI-5</td>
<td>0.857</td>
<td>0.274</td>
<td>0.503</td>
<td>0.278</td>
<td>0.23</td>
</tr>
<tr>
<td>GI-1</td>
<td>0.21</td>
<td>0.714</td>
<td>0.406</td>
<td>0.331</td>
<td>0.479</td>
</tr>
<tr>
<td>GI-2</td>
<td>0.297</td>
<td>0.805</td>
<td>0.485</td>
<td>0.372</td>
<td>0.521</td>
</tr>
<tr>
<td>GI-3</td>
<td>0.247</td>
<td>0.77</td>
<td>0.439</td>
<td>0.32</td>
<td>0.552</td>
</tr>
<tr>
<td>GI-4</td>
<td>0.246</td>
<td>0.748</td>
<td>0.428</td>
<td>0.327</td>
<td>0.543</td>
</tr>
<tr>
<td>GI-5</td>
<td>0.298</td>
<td>0.746</td>
<td>0.488</td>
<td>0.351</td>
<td>0.529</td>
</tr>
<tr>
<td>ID-1</td>
<td>0.327</td>
<td>0.501</td>
<td>0.772</td>
<td>0.423</td>
<td>0.464</td>
</tr>
<tr>
<td>ID-2</td>
<td>0.359</td>
<td>0.463</td>
<td>0.769</td>
<td>0.397</td>
<td>0.482</td>
</tr>
<tr>
<td>ID-3</td>
<td>0.84</td>
<td>0.494</td>
<td>0.807</td>
<td>0.414</td>
<td>0.453</td>
</tr>
<tr>
<td>ID-4</td>
<td>0.343</td>
<td>0.407</td>
<td>0.747</td>
<td>0.407</td>
<td>0.394</td>
</tr>
<tr>
<td>ID-5</td>
<td>0.322</td>
<td>0.407</td>
<td>0.743</td>
<td>0.355</td>
<td>0.382</td>
</tr>
<tr>
<td>MA-1</td>
<td>0.232</td>
<td>0.28</td>
<td>0.3</td>
<td>0.668</td>
<td>0.266</td>
</tr>
<tr>
<td>MA-2</td>
<td>0.265</td>
<td>0.398</td>
<td>0.475</td>
<td>0.822</td>
<td>0.383</td>
</tr>
<tr>
<td>MA-3</td>
<td>0.245</td>
<td>0.318</td>
<td>0.368</td>
<td>0.749</td>
<td>0.31</td>
</tr>
<tr>
<td>SI-1</td>
<td>0.232</td>
<td>0.48</td>
<td>0.409</td>
<td>0.29</td>
<td>0.773</td>
</tr>
<tr>
<td>SI-2</td>
<td>0.234</td>
<td>0.502</td>
<td>0.41</td>
<td>0.346</td>
<td>0.748</td>
</tr>
<tr>
<td>SI-3</td>
<td>0.211</td>
<td>0.525</td>
<td>0.43</td>
<td>0.329</td>
<td>0.765</td>
</tr>
<tr>
<td>SI-4</td>
<td>0.214</td>
<td>0.499</td>
<td>0.345</td>
<td>0.279</td>
<td>0.711</td>
</tr>
<tr>
<td>SI-5</td>
<td>0.214</td>
<td>0.623</td>
<td>0.542</td>
<td>0.394</td>
<td>0.82</td>
</tr>
</tbody>
</table>

The second criterion to assess discriminant validity is the Fornell-Lacker criteria (Fornell and Larcker, 1981). The square root value of each construction's AVE should be higher than the correlation it has with other latent constructs (Hair et al., 2011). Table 3 shows that the latent variable's diagonal is the square root of its AVE, indicating that it is bigger than any column or row.

Table 3: Discriminant Validity (Fornell-Larcker Criterion)

<table>
<thead>
<tr>
<th></th>
<th>EI</th>
<th>GI</th>
<th>ID</th>
<th>MA</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td>0.881</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GI</td>
<td>0.346</td>
<td>0.757</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>0.606</td>
<td>0.595</td>
<td>0.768</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>0.33</td>
<td>0.45</td>
<td>0.52</td>
<td>0.749</td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>0.287</td>
<td>0.693</td>
<td>0.568</td>
<td>0.434</td>
<td>0.764</td>
</tr>
</tbody>
</table>

*Note: The diagonal are the square root of AVE; the higher than any column or row.

The heterotrait-monotrait (HTMT) correlation ratio is an additional criterion for the validity of discrimination. HTMT values less than the 0.85 cutoff threshold are displayed in Table 4. Overall, the components' discriminant validity is confirmed, and this measurement model's discriminant validity might be approved.

Table 4: Discriminant Validity (Heterotrait-Monotrait Ratio - HTMT)

<table>
<thead>
<tr>
<th></th>
<th>EI</th>
<th>GI</th>
<th>ID</th>
<th>MA</th>
<th>SI</th>
</tr>
</thead>
<tbody>
<tr>
<td>EI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>GI</td>
<td>0.408</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ID</td>
<td>0.673</td>
<td>0.717</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>MA</td>
<td>0.452</td>
<td>0.623</td>
<td>0.707</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SI</td>
<td>0.343</td>
<td>0.84</td>
<td>0.673</td>
<td>0.591</td>
<td></td>
</tr>
</tbody>
</table>

Note: the values (in bold) indicated discriminant validity is lower than the HTMT threshold value 0.85 criterions.
Structural Model

Assessment

The second-generation approach (PLS), which employs prediction-oriented processes and looks at the correlations and interactions between independent and dependent latent variables, is used to construct the structural model. The inner structure model includes five latent variables. The outputs of the structural model were examined to confirm the study hypotheses, evaluate the predictive value, and ascertain the connections between the constructs, consistency, and intensity. Finding the path coefficient (value), T-statistic value, and coefficient of determination (R²) were all part of this process.

![Path Model Significance Results](image)

**Figure 3: Path Model Significance Results**

R²

R² values greater than 0.67, 0.33, or 0.19 show both the strength of the effect and significant, moderate, or weak correlations. (Chin, 1998). Table 5 illustrates that the R² in this study was significant. The findings of every test were sufficient and acceptable.

<table>
<thead>
<tr>
<th></th>
<th>R-square</th>
<th>R-square adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>ID</td>
<td>0.599</td>
<td>0.597</td>
</tr>
</tbody>
</table>

**Table 5: R² AND Adjusted R²**

Path Coefficient of the Structural Model

Using indices and path coefficients, the study computes the inner structural model for the dependent latent variable (investment decision-ID). The findings indicate a strong correlation between six associations and investment decisions, supporting the hypotheses that EI, SI, and GI have a direct influence on investment decision. After bootstrapping each latent variable separately, the structural model uses latent variables to investigate each hypothesis for direct and indirect effects (fig. 4).

The effects of corporate environmental, social, and governance (ESG) concerns—specifically, EI, SI, and GI—on investors' investment decision (ID) are investigated in Hypotheses 1-3. Corporate EI, SI, and GI, i.e., H1- EI -> ID (β = 0.38, t = 12.15, p < .01), H2- SI -> ID (β = 0.23, t = 6.09, p < .01), and H3- GI -> ID (β = 0.20, t = 5.49, p < .01), with these values, favorably influence investor's investment decision (ID), according to the results (table 6).

The study estimated the moderating effect of MA in the interactions between environmental (EI), social (SI), governance (GI) issues, and investment decision (ID) (fig-5). The results showed (Table-6) that MA significantly moderates the relationship between EI and ID (Mod MA* EI -> ID: b = 0.09, t = 2.78, p < .01), does not moderate the relationship between SI and ID (Mod MA * SI -> ID: b
= 0.06, t = 1.425, p > .01), and significantly moderates the relationship between GI and ID (Mod MA * GI -> ID : b = 0.11, t = 3.179, p < .01). This suggests that MA plays a crucial role in shaping investment decisions.

### Table 6: Hypotheses Outcomes

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Path</th>
<th>(β) value</th>
<th>Standard Deviation (STDEV)</th>
<th>T Statistics</th>
<th>P Values</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td>EI -&gt; ID</td>
<td>0.376712</td>
<td>0.031</td>
<td>12.152</td>
<td>0</td>
<td>Supported</td>
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<tr>
<td>H2</td>
<td>SI -&gt; ID</td>
<td>0.225404</td>
<td>0.037</td>
<td>6.092</td>
<td>0</td>
<td>Supported</td>
</tr>
<tr>
<td>H3</td>
<td>GI -&gt; ID</td>
<td>0.202982</td>
<td>0.037</td>
<td>5.486</td>
<td>0</td>
<td>Supported</td>
</tr>
<tr>
<td>H4 (Moderator)</td>
<td>Mod MA* EI -&gt; ID</td>
<td>0.089088</td>
<td>0.032</td>
<td>2.784</td>
<td>0.005</td>
<td>Supported</td>
</tr>
<tr>
<td>H5 (Moderator)</td>
<td>Mod MA * SI -&gt; ID</td>
<td>0.061275</td>
<td>0.043</td>
<td>1.425</td>
<td>0.154</td>
<td>Not Supported</td>
</tr>
<tr>
<td>H6 (Moderator)</td>
<td>Mod MA * GI -&gt; ID</td>
<td>0.111265</td>
<td>0.035</td>
<td>3.179</td>
<td>0.001</td>
<td>Supported</td>
</tr>
</tbody>
</table>

### Discussion

This study highlights the significance of ESG data in investment decisions, as it provides transparency about a company’s environmental, social, and governance performance. This information is correlated with financial performance, and investors tend to reward businesses with top practices in these areas (Khemir et al., 2019). Therefore, ESG information is crucial in influencing investment allocation.

**RQ 1: How the investors are influenced by Environmental information, Social information, and Governance information provided by the companies?**

According to the H1 hypothesis, investors’ investment decision (ID) and corporate environmental issues (EI) are significantly positively correlated (t = 11.88, p < .01), indicating that investors are concerned about environmental issues. These results are consistent with those of Holm and Rikhardsson (2008), Nakamura (2013), and Sultana et al. (2018). Nakamura (2013) also discovered that environmental concerns weighed heavily on investors’ decisions in Japan, when they assess firms’ CSR practices.

In line with other research findings (Murray et al., 2006; De Zwaan, L. et al. 2015; Zramdini and Fedhila, 2003; Sultana et al., 2018), Hypothesis H2 verifies that corporate social concerns have a substantial positive link with the investors’ investment decision (ID) (t = 4.54, p < .01). This study, however, contradicts the findings of Milne and Chan (1999), who found that financial and accounting professionals do not take social disclosure into consideration while making investment decisions.

The results confirm the H3 hypothesis and show a strong positive connection (t = 3.61, p < .01) between governance issues (GI) and the investment decision (ID). These results are consistent with those of previous research by Crifo et al. (2015) and Sultana et al. (2018).

**RQ 2: Does investors’ moral awareness has any moderating role on the ESG investment decision?**

The H4 hypothesis suggests that Moral Awareness (MA) moderates the relationship between Environmental Issues (EI) and Investment Decision (ID), which aligns with previous studies (Nico Alexander Vizano et al., 2021; Zhang, Q. and Ahmad, S., 2021; and Tseng and Lee, 2020). However, this finding contradicts previous research by Chaudary, Samra, Ali, Muhammad (2016), and Moores and Chang (2006). The strong impact of MA is due to companies disclosing their CSR plans as a platform for public relations and establishing a distinctive corporate reputation. To protect a company’s reputation from negative environmental behavior, it is essential to highlight positive actions. Increased awareness about environmental initiatives leads to a positive attitude and behavior in investors, leading to increased shares in favor of a company's environmental activities.

The moderating effect of investors’ Moral Awareness (MA) over social issues (SI) and investment decision (ID) was shown to have a non-significant association under the H5 hypothesis (b = 0.06, t = 1.425, p > .01). This result is in line with studies by Moores and Chang (2006), and Chaudary, Samra and Ali, Muhammad (2016). It may be deduced that investors may not believe that corporations have social concerns, or they may be aware of moral issues but still choose to ignore corporate activities in favor of higher profits. As a result, the link between social concerns and investment decisions is unaffected by their moral consciousness. Nevertheless, this result is inconsistent with the studies conducted by Nico Alexander Vizano et al. (2021), Zhang, Q. and Ahmad, S. (2021), and Tseng and Lee (2020) as they have found that awareness has positive moderating effect.

It is demonstrated in the H6 hypothesis that the relationship between “Governance Issues (GI)” and “Investment Decision (ID)” is intensified by “Moral Awareness (MA).” However, this result contradicts the findings of Moores and Chang (2006) and Chaudary, Samra and Ali, Muhammad (2016), who did not detect a moderating influence of awareness. This study shows a strong agreement with other empirical research that found a moderating influence of Moral Awareness (Nico Alexander Vizano et al., 2021; Zhang,
Q. and Ahmad, S., 2021; Tseng and Lee, 2020). People with more awareness would prefer to buy shares of firms that have superior governance information, which explains why moral awareness (MA) has a large influence.

Conclusions

The influence of environmental, social, and governance (ESG) problems on retail investors' investment decisions is investigated in this study. It proves the untested theory that moral awareness plays a moderating role on ESG investment decisions. The study expands on our knowledge of ESG investment behavior and emphasizes how crucial ESG issues are to behavioral finance. It also looks at how corporate ESG issues have developed, how they relate to one another, and how they affect the decisions made by rational investors. This study is rare in the literature on behavioral finance and ESG, and employs a positivist paradigm.

This study explores the impact of Moral Awareness (MA) on corporate ESG issues and investment decisions in behavioral finance. It provides empirical evidence to the fact that ESG strategies are more effective when stakeholders, particularly investors, are well-aware of the consequences of ESG issues (Nico Alexander Vizano et al., 2021; Zhang, Q. and Ahmad, S., 2021; and Tseng and Lee, 2020). This research contributes to the understanding of the relationship between corporate ESG strategies and investment decisions, highlighting the importance of fostering a positive moral awareness among stakeholders.

This study suggests that adopting business practices that combine environmental, social, and corporate governance principles is an innovative strategy that enhances stockholder value. It recommends that ESG practices become a requirement for strategic administrators of Bangladeshi public companies. Investors have significant power over sustainability strategies, and managers' preference for ESG practices is justified by their confidence in this information. To maintain ESG adoption, the government should establish public policies, guidelines, and laws to promote sustainable growth. The demand for ESG among investors may lead to the creation of guidelines and legislation supporting ESG performance and reporting, and the eventual launch of an ESG index in Bangladesh.

As ESG investments are a relatively new concept in finance literature, there was a dearth of understanding of ESG among private investors at the time the data was being collected. As a result, this restriction also applied to the knowledge of ESG disclosure practices. In order to broadly disseminate ESG theory and practice in the future, researchers should step forward.

Another important drawback of this analysis was the absence of other studies in Bangladesh that discussed the same variables, to the best of the researcher's knowledge. Data have been collected from Bangladeshi retail shareholders. The absence of studies restricts the ability to compare this research's findings with those of other studies conducted in the same setting. In a nutshell, no prior research has looked at the relationships between the constructs of this study in the context of Bangladesh, so the researcher had to continue the analysis without the assistance of other findings to benchmark or use as “compare and contrast” to generate further explanations.

This study looks at the connection between investors' investment decisions in Bangladesh and a company's favorable ESG concerns. It recommends extending to more nations and developing analogous surveys with multi-nation settings. The study also examined the connection between investors' investment decisions and a company's good ESG concerns, opening up possibilities for future research into other types of linkages between investors' negative screening and unpleasant ESG news. Not to mention, this study was the first to employ moral awareness as a moderating factor between the ESG concerns of the firm and the investment choices made by individual investors. It will need further empirical research to bolster the conclusions of this study.

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All authors have read and agreed to the published version of the manuscript.

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Conflicts of Interest: The authors declare no conflict of interest.

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