

The Relationship Between Environmental, Social, Governance (ESG) Factors and Retail Investors' Investment Decisions: Evidence From PT Bank Central Asia Tbk (BBCA)

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ABSTRACT

This study investigates the influence of Environmental, Social, and Governance (ESG) factors on retail investors' investment decisions in PT Bank Central Asia Tbk (BBCA), Indonesia's largest private bank. The research aims to analyze the effect of each ESG dimension on investment decision-making and to test the moderating role of investment horizon. A quantitative explanatory approach was employed using a structured questionnaire distributed to 175 retail investors who own BBCA shares. The collected data were analyzed using multiple regression and moderated regression with 2,000-sample bias-corrected and accelerated (BCa) bootstrapping to ensure the robustness of the results. The findings show that ESG factors collectively have a positive and significant effect on investment decisions. Among the three dimensions, Governance is the only significant factor, emphasizing the importance of transparency, accountability, and ethical management in building investor trust. Environmental and Social dimensions have positive but insignificant effects, while investment horizon does not significantly moderate the relationship. The study concludes that credible governance practices serve as the strongest ESG signal influencing investor behavior and recommends that BCA enhance ESG communication through interactive portals and social media to strengthen transparency and investor engagement.

Keywords : *ESG, governance, investment decision, retail investors, investment horizon, banking, Indonesia.*

INTRODUCTION

In recent years, the integration of Environmental, Social, and Governance (ESG) factors into investment decisions has transitioned from a niche ethical concern into a global financial norm. According to Bloomberg Intelligence (2024), global assets managed under ESG mandates are projected to exceed USD 40 trillion by 2030, reflecting continued though more measured growth. This global surge in ESG adoption has also reached emerging markets like Indonesia. Data from the Financial Services Authority (OJK) show that the assets under management (AUM) in the IDX ESG Leaders Index and the SRI-KEHATI Index reached IDR 7.4 trillion as of November 2024, a sharp increase from only IDR 35 billion in 2015 (Timorria, 2025). The Financial Services Authority (OJK) introduced POJK 51/2017 to mandate sustainability reporting among financial institutions, followed by the Sustainable Finance Roadmap (2021–2025). Complementary initiatives such as the SRI-KEHATI Index and the IDX ESG Leaders Index further highlight the growing role of ESG in Indonesia's capital market. However, most of these regulatory efforts and market

indices have primarily targeted institutional investors, leaving limited understanding of how retail investors form their decision to invest based on ESG considerations.

This gap is particularly relevant in Indonesia, where the capital market is overwhelmingly dominated by retail participation. As of April 2025, the number of retail investors reached approximately 16.2 million, accounting for 99.71% of total investors, while institutional investors comprised only 0.29% (Statistik Pasar Modal Indonesia, May 2024–April 2025, KSEI). This marked contrast emphasizes the crucial contribution of retail investors to market engagement. Moreover, retail investor participation has shown a consistent upward trend over the past year. From around 13 million in early 2024, the number of retail investors steadily increased to over 16 million by April 2025. This growth signals a strengthening interest and accessibility of the capital market among individuals.

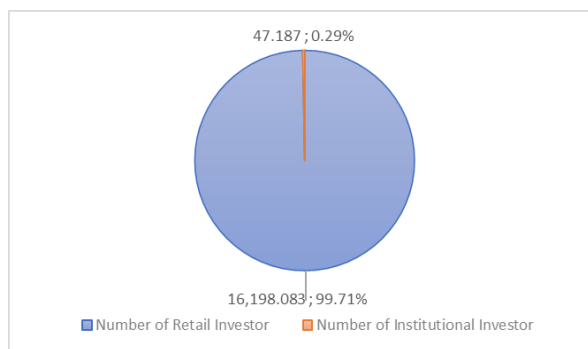


Figure 1. Composition of Retail Investors in Indonesia April 2025

Source: Statistik Pasar Modal Indonesia (April 2025), KSEI

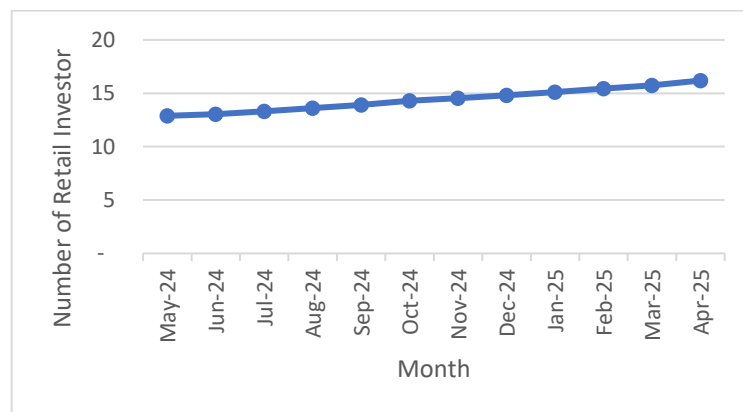


Figure 2. Growth of Retail Investors in Indonesia May 2024 – Apr 2025 (in million)

Source: Statistik Pasar Modal Indonesia (May 2024–April 2025), KSEI

In terms of Indonesia’s demographics, the majority of investors are young. Based on data from Statistik Pasar Modal Indonesia by KSEI, as of April 2025, more than 79% of individual investors were under the age of 40, with over half (54.4%) aged 30 or younger. However, this study does not analyze age effects and instead

focuses on how ESG dimensions shape investment decision. To capture time-related differences in investment decision, this study examines investment horizon as a moderating factor.

Given the retail dominance and the regulatory push for ESG, the key question is which ESG pillar most strongly increases retail investors' decision to invest in BBKA and whether the effect varies between short-horizon and long-horizon investors. Prior evidence suggests that ESG influences vary across contexts. For example, Sultana et al. (2018) demonstrate that ESG has a stronger effect on long-horizon investors, underscoring the importance of considering horizon as a moderating factor. Within Indonesia, Riadi et al. (2025) and Kholida et al. (2023) find that ESG factors are relevant to investors, with social and governance often exerting stronger influence on investment decision. Similarly, Arifin (2024) shows that credible sustainability disclosure can enhance investor trust, while Zahra and Ahmadi (2024) confirm that many retail investors still prioritize financial returns over ESG considerations.

Several studies emphasize the contrast between institutional and retail investors in processing ESG information. Bazrafshan (2023) finds that institutional investors tend to react to detailed ESG reports, whereas retail investors are more responsive to simplified, salient information. Likewise, Moss, Naughton, and Wang (2023) show that U.S. retail investors often disregard ESG disclosures altogether, even when they are financially material. These findings suggest a persistent disconnect between corporate ESG reporting and actual investor decision, highlighting the need for communication strategies tailored to retail segments.

Cross-country evidence also indicates that ESG priorities are not uniform. Park and Jang (2021) argue that the relative materiality of environmental, social, and governance dimensions differs by country and industry, with environmental and governance factors more salient in the Korean context. In Indonesia, Aditama (2022) reports that only the environmental score significantly affects stock returns in IDX30 companies, while social and governance factors appear insignificant. Arifin (2024) similarly emphasizes that the clarity and transparency of ESG disclosure are critical in shaping investor perceptions. Collectively, these findings reinforce the need to test ESG salience in the Indonesian banking context rather than assuming uniform global patterns.

In the Indonesian financial sector, governance has long been considered a critical determinant of firm value. Ekasari (2020) finds that Good Corporate Governance positively affects firm value in banks, though profitability does not always mediate this relationship. However, governance in banking is often intangible and perceived as compliance-driven, raising doubts about its perceived value for retail investors. Although BCA, the country's largest private bank, has actively implemented ESG through enhanced governance disclosures, there is limited evidence on whether such efforts genuinely increase retail investors' decision to invest in banking stocks. This context reveals a critical business issue: despite BCA's commitment to ESG, it remains unclear whether these efforts influence retail

investors’ decision to invest, and which ESG dimensions matter most. This disconnect raises key questions: Do retail investors understand and value ESG disclosures? Which ESG pillars most strongly shape their decision? And does investment horizon alter the strength of these effects?

In response to these questions, this study examines the relationship between ESG dimensions and retail investors’ investment decision in PT Bank Central Asia Tbk (BBCA). Specifically, it estimates the effects of the Environmental, Social, and Governance dimensions, identifies the most influential pillar, and analyzes whether investment horizon (short ≤ 12 months vs. long > 12 months) moderates these relationships. The findings are expected to provide evidence-based recommendations for tailoring ESG communication strategies to align with different investor horizons and strengthen retail investor engagement in Indonesia’s capital market.

METHODOLOGY

Research Design

This study adopts a quantitative, explanatory research design, which is suitable for testing hypotheses and examining causal relationships among variables using structured survey data. The aim is to analyze how Environmental, Social, and Governance (ESG) dimensions influence retail investors’ investment decision in BBCA shares, while testing whether investment horizon moderates these relationships. Similar explanatory survey-based designs have been employed in prior ESG–investment studies in Indonesia (Kholida et al., 2025), Bangladesh (Sultana et al., 2017), and Vietnam (Dung et al., 2024), which consistently documented significant ESG effects on investment decisions and highlighted governance as the most influential dimension.

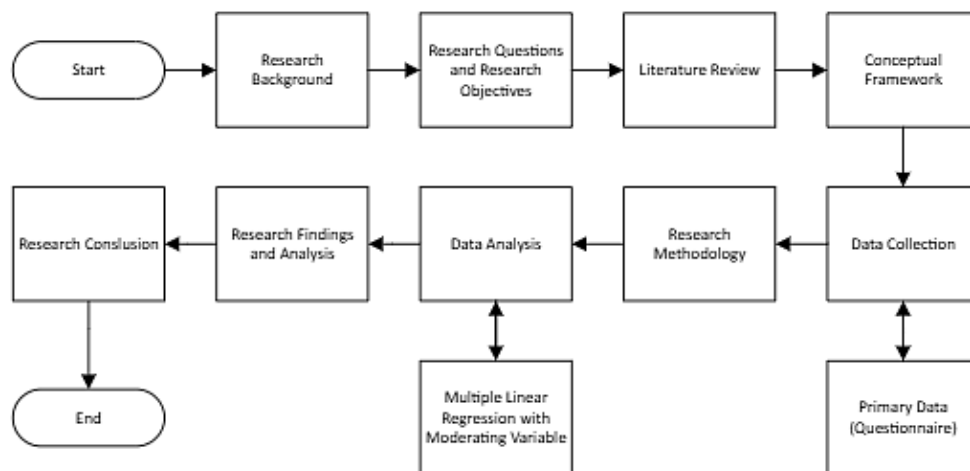


Figure 3. Research Methodology

Source: Designed by Author (2025)

The research process is structured sequentially and logically, beginning with the identification of the research background, followed by the formulation of research questions and objectives. This is supported by a comprehensive literature review that

synthesizes relevant theories including Stakeholder Theory, Signaling Theory, and the Theory of Planned Behavior, and informs the development of the conceptual framework.

Source of Information

The primary source of information in this study is individual retail investors in Indonesia who currently own shares of Bank Central Asia (BCA). These respondents are selected because they are directly engaged in capital market activities and possess first-hand experience in evaluating corporate disclosures, including those related to ESG performance. Since the study focuses on the effect of ESG factors on investment decision, it is crucial that participants have real ownership of BCCA shares.

Population and Sampling

The population of this study consists of all retail investors in Indonesia who currently hold BCA (BCCA) shares. BCA is selected as the research focus because it is one of Indonesia's leading private banks, has consistent ESG disclosure practices, and is widely held by both institutional and retail investors. As contextual background, Indonesia's capital market recorded 14.84 million Single Investor Identifications (SID) by the end of 2024 (IDX, 2025, "IDX Year-End Press Release"). Therefore, the minimum required sample size is 106 respondents.

Method of Data Collection

The primary data were collected via an online questionnaire, distributed through social media platforms (such as Instagram, WhatsApp, and Telegram), as well as retail investor communities and investment forums. This method was chosen due to several advantages:

- **Wide Reach & Cost Efficiency:** Online distribution allows access to a broad and geographically dispersed respondent base with minimal financial cost.
- **Speed of Collection:** Enables rapid data collection, which is suitable for thesis timelines.

RESULT AND DISCUSSION

This chapter presents the results of the empirical analysis conducted in this study. The analysis consists of two parts. The first part provides descriptive statistics to summarize the demographic and investment characteristics of the respondents. The second part covers the inferential analysis, including reliability testing, multiple regression, and moderated regression, to examine the influence of Environmental, Social, and Governance (ESG) factors on retail investors' decisions in BCCA shares. The findings are subsequently discussed in line with the research objectives and relevant theoretical perspectives.

1. Analysis

Respondent Profile

This research has acquired 175 respondents who are retail investors holding BBCA shares. As shown in Figure IV.1, the largest age group in the sample is 26–35 years old (53.7%), followed by 36–45 years old (18.9%) and 17–25 years old (15.4%). The smallest group consists of respondents aged 46 years or older (12.0%). This distribution indicates that the majority of BBCA retail investors in the sample are younger adults, consistent with national statistics showing that retail participation in the Indonesian stock market is dominated by investors under 40.

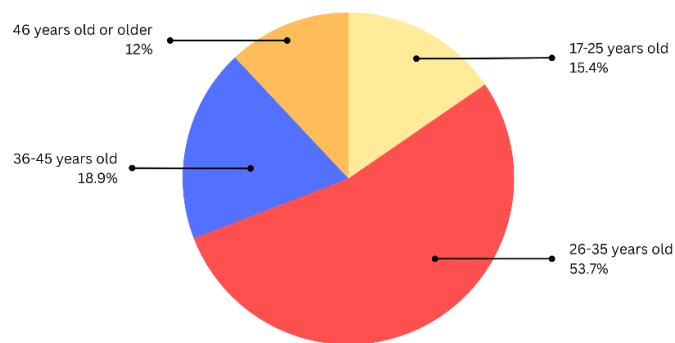


Figure 4. Age of Respondents

Source: SPSS Output, 2025

Reported monthly income clusters in IDR 10–20 million (75 respondents, 42.9%) and above IDR 20 million (63 respondents, 36.0%), with a smaller group earning below IDR 10 million (37 respondents, 21.1%). This distribution indicates that the majority of respondents fall into the middle-to-upper income bracket, which is consistent with the financial capacity required to invest in blue-chip stocks such as BBCA. Investors in this category generally have greater purchasing power, enabling them to sustain long-term holdings in stable stocks like BBCA and to consider additional factors, such as ESG performance, in their investment decisions.

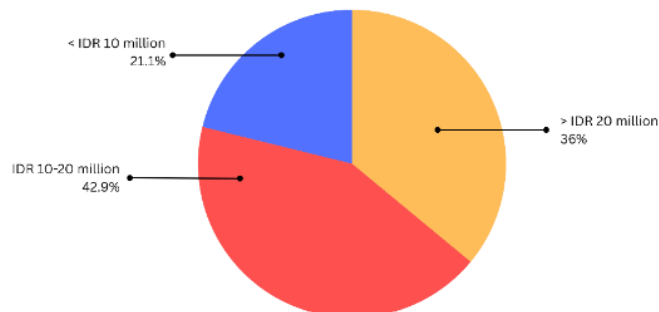


Figure 5. Average Monthly Income of Respondents

Source: SPSS Output, 2025

BBCA typically represents a meaningful but diversified portion of investors' portfolios. The most common allocation is 10–25% (54 respondents, 30.9%), followed by more than 50% (50 respondents, 28.6%), less than 10% (42 respondents, 24.0%), and 26–50% (29 respondents, 16.6%). This distribution shows that BBCA is widely regarded as a core holding, reflecting its reputation as one of the most stable and trusted banks in Indonesia. At the same time, the variation in portfolio share highlights that investors remain diversified, not relying solely on one stock. This suggests that ESG considerations may influence incremental decisions to add or hold BBCA shares, rather than driving extreme shifts in portfolio composition.

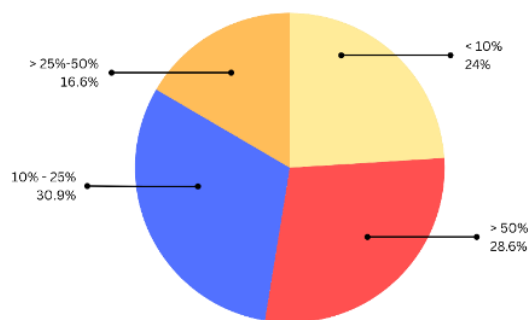


Figure 6. BBCA Portfolio Share of Respondents

Source: SPSS Output, 2025

Investment horizon for BBCA is divided into two categories: more than 12 months (139 respondents, 79.4%) and 12 months or less (36 respondents, 20.6%). The data shows that most respondents adopt a long-term orientation, suggesting that BBCA is widely perceived as a stable stock to be held over time. This distribution is also relevant for the study design, as it provides the basis for testing whether investment horizon moderates the relationship between ESG factors and investment decisions.

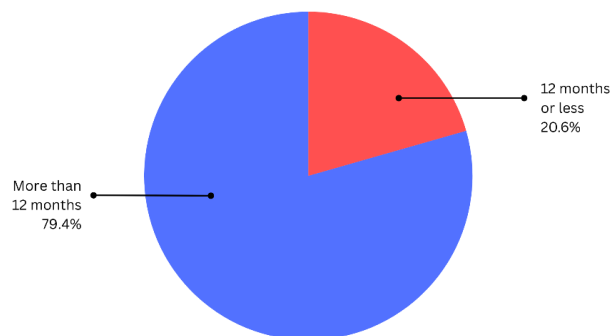


Figure 7. Investment Horizon of Respondents

Source: SPSS Output, 2025

A total of 96 respondents (54.9%) have read BCA's Sustainability Report, while 79 respondents (45.1%) have not. The proportion of investors who read the report suggests that official ESG disclosures are already reaching a meaningful share of retail investors. However, the nearly equal split also indicates that engagement

with detailed sustainability reporting is not universal. This highlights a communication challenge: while some investors are willing to consume formal reports, others may prefer simplified or alternative channels such as analyst commentary, social media, or news platforms. The mixed level of exposure is relevant for this study, as it reflects the varied ways in which ESG information may influence investment decisions depending on how it is communicated.

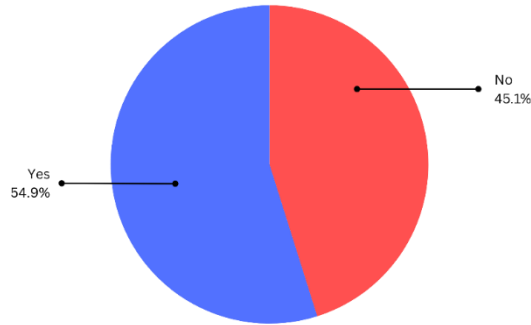


Figure 8. Reading Sustainability Report of Respondents

Source: SPSS Output, 2025

The descriptive analysis illustrates a respondent profile dominated by younger adults with moderate to extensive investing experience, most of whom report middle-to-upper monthly incomes. BBCA is generally treated as a core holding within diversified portfolios, with the majority adopting a long-term horizon of more than 12 months. Engagement with ESG information is mixed, as slightly over half of respondents have read the Sustainability Report while a substantial minority have not.

1) Reliability Test

Table 1. Reliability Test Results

| Variable | Cronbach's Alpha | Number of Items | Reliability Level | Decision |
|--------------------------|------------------|-----------------|-------------------|--------------------|
| Environmental (ENV) | 0.813 | 9 | Reliable | All items retained |
| Social (SOC) | 0.852 | 9 | Highly reliable | All items retained |
| Governance (GOV) | 0.833 | 7 | Highly reliable | All items retained |
| Investment Decision (ID) | 0.759 | 3 | Reliable | All items retained |

Source: SPSS Output, 2025

The results indicate that the Social and Governance constructs demonstrated the strongest internal consistency, suggesting that respondents interpreted the items within these dimensions in a consistent manner. This aligns with the contextual emphasis in Chapter II, where the social and governance aspects of ESG were identified as particularly salient for Indonesian retail investors (Riadi et al., 2025;

Kholida et al., 2025). The Environmental dimension, although slightly lower in alpha, remains robust and above the threshold, reflecting reliable responses regarding BCA’s environmental practices such as digitalization, emission reduction, and green financing initiatives.

• **Construct Validity**

| Construct | Number of Items | CITC Range (Min–Max) | Lowest CITC | Decision |
|--------------------------|-----------------|----------------------|-----------------|----------|
| Environmental (ENV) | 9 | 0.358 – 0.617 | ENV_6_R (0.358) | Retained |
| Social (SOC) | 9 | 0.342 – 0.714 | SOC_9_R (0.342) | Retained |
| Governance (GOV) | 7 | 0.533 – 0.781 | GOV_7_R (0.533) | Retained |
| Investment Decision (ID) | 3 | 0.533 – 0.669 | ID_3_R (0.533) | Retained |

Source: SPSS Output, 2025

These results indicate that all items exhibit satisfactory construct validity and collectively capture the intended theoretical dimensions. The strong inter-item correlations within each construct also support the theoretical coherence of the measurement model.

The Environmental items effectively reflected BCA’s ecological initiatives such as digital banking and emission reduction. The Social items captured perceptions of inclusivity, customer protection, and employee development, while the Governance items successfully measured transparency, board independence, and anti-corruption policies. Together, these confirm that the ESG constructs are well operationalized and grounded in the theoretical frameworks of Stakeholder Theory and Signaling Theory, which posit that credible ESG actions and disclosures enhance investor trust and decision-making (Freeman, 1984; Connelly et al., 2011).

With reliability and validity confirmed, the dataset is deemed statistically sound and appropriate for inferential analysis, including multiple regression, and moderated regression (MRA) to test the hypotheses presented earlier.

This stage therefore concludes the instrument verification process and establishes a solid foundation for the subsequent analysis of relationships between ESG dimensions, investment horizon, and retail investors’ investment decisions.

Descriptive Statistics of Variables

Table 3. Descriptive Statistics of Research Variables

| Variable | N | Mean | Std. Deviation | Interpretation |
|---------------------|-----|------|----------------|---|
| Environmental (ENV) | 175 | 4.01 | 0.63 | High perception; moderately consistent |
| Social (SOC) | 175 | 4.48 | 0.54 | Very high perception; homogeneous responses |

| | | | | |
|--------------------------|-----|------|------|---|
| Governance (GOV) | 175 | 4.33 | 0.63 | High perception; moderately consistent |
| Investment Decision (ID) | 175 | 4.22 | 0.82 | High investment decision; more varied responses |

Source: SPSS Output, 2025

The descriptive statistics show that respondents report generally high evaluations across all ESG dimensions and investment decisions. On a five-point Likert scale (1 = strongly disagree; 5 = strongly agree), the mean scores were 4.01 for Environmental, 4.48 for Social, 4.33 for Governance, and 4.22 for Investment Decision. These high averages indicate that respondents perceive BCA’s ESG implementation and its role in their investment considerations very positively.

1) Normality Test

Although this condition violates the normality assumption, it is generally not critical for large samples ($n = 175$), since OLS coefficients remain unbiased (Hair et al., 2019). However, the violation may affect standard errors and significance levels. Therefore, to obtain more reliable inference, subsequent analyses used 2,000-sample bias-corrected and accelerated (BCa) bootstrap estimation, which does not rely on normality assumptions and provides empirically derived confidence intervals and p-values.

Table 4. Residual Normality Test Results

| Statistic | Value | Interpretation |
|--------------|-------------|------------------------------------|
| Skewness | -1.385 | Slight negative skew (left-tailed) |
| Kurtosis | 2.742 | Leptokurtic (peaked distribution) |
| Shapiro-Wilk | $p < 0.001$ | Residuals not normally distributed |

Source: SPSS Output, 2025

2) Multicollinearity Test

As presented in Table 5, all variables met the acceptable thresholds. VIF values ranged between 2.34 and 3.03, and Tolerance values between 0.33 and 0.43. The highest Condition Index was 34.09, slightly above the conventional threshold, yet variance-decomposition proportions did not show any pair of predictors heavily loading on the same dimension. Therefore, the multicollinearity detected was moderate but non-critical, and no corrective action was required.

Table 5. Multicollinearity Diagnostics

| Predictor | Tolerance | VIF | Condition Index | Interpretation |
|-----------|-----------|-------|-----------------|------------------------------|
| ENV_mean | 0.427 | 2.343 | 30.11 | Acceptable |
| SOC_mean | 0.330 | 3.031 | 33.58 | Moderate but acceptable |
| GOV_mean | 0.370 | 2.700 | 34.09 | Slightly high but acceptable |

Source: SPSS Output, 2025

3) Heteroskedasticity Test.

Among the predictors, Environment ($B = -0.313$, $p = 0.010$) significantly explained the variation in residual magnitude, while Social ($B = 0.304$, $p = 0.058$) was

marginally significant, and Governance ($B = -0.095$, $p = 0.456$) was not significant. This result implies that heteroskedasticity was mainly associated with variations in Environmental perceptions, although its magnitude remained mild.

Table 6. Glejser Test Results

| Predictor | B | Sig. | Interpretation |
|-----------|------------------------------|-------|---|
| ENV_mean | -0.313 | 0.010 | Significant - heteroskedasticity related to ENV |
| SOC_mean | 0.304 | 0.058 | Marginally significant |
| GOV_mean | -0.095 | 0.456 | Not significant |
| Model | F (3,171) = 3.164, p = 0.026 | | Heteroskedasticity detected |

Source: SPSS Output, 2025

Since the residuals exhibited both non-normality and mild heteroskedasticity, bootstrap estimation was used to obtain reliable p-values and confidence intervals that are not sensitive to these assumption violations.

4) Robust Inference through Bootstrapping

This approach does not change the OLS coefficients (B and β) or model-fit statistics (R^2 , Adjusted R^2 , F); instead, it refines the inference by providing empirical confidence intervals that remain valid even when classical assumptions are violated. Accordingly, all significance interpretations in the regression analysis are based on BCa bootstrap results, as they offer the most reliable inference under the given data conditions.

Table 7 Summary of Classical Assumption Tests

| Assumption | Result | Interpretation | Corrective Action |
|--------------------|--|--------------------------------------|------------------------------------|
| Normality | Shapiro-Wilk $p < 0.001$; skew = -1.385; kurtosis = 2.742 | Residuals non-normal | Applied 2,000-sample BCa bootstrap |
| Multicollinearity | VIF = 2.34-3.03; Condition Index = 34.09 | Moderate but acceptable | None required |
| Heteroskedasticity | Glejser $F(3,171) = 3.164$, $p = 0.026$ | Mild heteroskedasticity (mainly ENV) | Applied 2,000-sample BCa bootstrap |

Source: SPSS Output, 2025

This ensures that the subsequent regression results accurately reflect the relationships among variables without being biased by assumption violations.

Multiple Regression Analysis

Multiple regression analysis was employed to examine the influence of ESG dimensions on investors' Investment Decision (ID) regarding BBKA shares.

Table 8. Model Summary and ANOVA

| Statistic | Value | Interpretation |
|----------------------------|--------|---|
| R | 0.505 | Indicates a moderate correlation between ESG perceptions and investment decision |
| R Square | 0.255 | ESG factors collectively explain 25.5% of the variance in investment decision |
| Adjusted R Square | 0.242 | After adjusting for the number of predictors, the model explains 24.2% of variation |
| Std. Error of the Estimate | 0.718 | Reflects moderate dispersion between observed and predicted values |
| F (3,171) | 19.489 | Model statistically significant at $p < 0.001$ |

Source: SPSS Output, 2025

The R value of 0.505 indicates a moderate correlation between ESG perceptions and investment decision. The R Square value of 0.255 shows that 25.5% of the variance in investment decision is explained by the three ESG dimensions, while the Adjusted R Square of 0.242 suggests that the explanatory power remains consistent even after adjusting for model complexity. In behavioral studies, an Adjusted R² above 0.20 is considered satisfactory (Hair et al., 2019), indicating that ESG perceptions have a meaningful influence on investment decisions, though other factors such as financial performance or risk preferences may also contribute. The F-statistic of 19.489 ($p < 0.001$) confirms that the overall regression model is statistically significant, meaning that at least one of the ESG dimensions contributes significantly to explaining investors' decision to invest in BBCA shares. This demonstrates that the regression model is valid and can be used to interpret the coefficients of each predictor.

Table 9. Regression Coefficients (BCa Bootstrap, N = 175)

| Predictor | B (OLS) | p (OLS) | 95% BCa CI | p (Bootstrap) | Decision |
|-----------------|--------------|--------------|-----------------------|---------------|------------------------|
| Constant | 0.979 | 0.034 | [0.164, 1.982] | 0.022 | — |
| ENV_mean | 0.247 | 0.065 | [-0.014, 0.534] | 0.081 | Not significant |
| SOC_mean | 0.208 | 0.242 | [-0.194, 0.540] | 0.267 | Not significant |
| GOV_mean | 0.305 | 0.032 | [0.016, 0.630] | 0.045 | Significant (+) |

Source: SPSS Output, 2025

Substituting the estimated coefficients obtained from the regression output, the empirical model is expressed as:

$$ID = 0.979 + 0.247(ENV) + 0.208(SOC) + 0.305(GOV) + \varepsilon$$

The regression coefficients indicate that only the Governance (GOV) dimension has a statistically significant and positive influence on investment decision (B = 0.305, $p = 0.045$). This suggests that investors' perception of BCA's strong governance practices—such as transparency, independence, and ethical oversight—

plays a key role in increasing their confidence to invest. The significance of governance aligns with Signaling Theory, which posits that clear and verifiable governance signals reduce information asymmetry and increase investor trust. From the perspective of Stakeholder Theory, strong governance also reflects the bank’s accountability and alignment with stakeholder interests, reinforcing its credibility in the market.

Moderated Regression Analysis

To further examine whether investment horizon moderates the relationship between ESG perception and investment decision, a hierarchical moderated regression analysis was conducted. The regression was estimated in two steps. Model 1 included the main effects of ESG perception and investment horizon, while Model 2 added the interaction term to test moderation. The results are summarized in Table 10.

Table 10. Moderated Regression Results (Investment Horizon as Moderator)

| Statistic | Value | Interpretation |
|-------------------------|--------|--|
| R | 0.597 | Moderate correlation between ESG, horizon, and investment decision |
| R ² | 0.357 | ESG and horizon jointly explain 35.7% of variance in investment decision |
| Adjusted R ² | 0.346 | Adjusted explanatory power remains stable |
| ΔR ² | 0.010 | Increase of 1.0% after adding the interaction term |
| F Change (1,171) | 2.610 | Model change not significant (p = 0.108) |
| F (3,171) | 31.688 | Overall model significant at p < 0.001 |
| VIF | ≈ 1.0 | No multicollinearity issues |
| Constant | 4.216 | - |
| ESG | 0.727 | - |
| H | 0.627 | - |
| ESG x H | 0.436 | Not significant |

Source: SPSS Output, 2025.

The model was statistically significant overall (F(3,171) = 31.688, p < 0.001), indicating that ESG perception and investment horizon jointly explain 35.7% of the variance in investment decision (Adjusted R² = 0.346). Both variables showed significant positive main effects: ESG perception (B = 0.727, p < 0.001) and investment horizon (B = 0.627, p < 0.001) were positively associated with investment decision. This means that investors who view BCA’s ESG performance favorably and who have longer investment horizons tend to report stronger decisions to invest. Because ESG and H were mean-centered, the moderated model yields VIF values of approximately 1.0, indicating lower multicollinearity than in the multiple-regression specification estimated with ENV/SOC/GOV means. Substituting the estimated coefficients, the empirical model is:

$$ID = 4.216 + 0.727(ESG) + 0.627(H) + 0.436(ESG \times H) + \varepsilon$$

When the interaction term (ESG × Horizon) was introduced, the model's explanatory power increased slightly ($\Delta R^2 = 0.010$), but the improvement was not statistically significant ($p = 0.108$). The coefficient for the interaction term was positive ($B = 0.436$) yet not significant, suggesting that investment horizon does not significantly alter the strength of the relationship between ESG perception and investment decision. In other words, while ESG perceptions enhance investment decisions for both short- and long-term investors, the difference in effect size between these groups remains small.

The Development of a Comprehensive ESG Highlight Portal

The first proposed business solution is the development of a Comprehensive ESG Highlight Portal as a digital extension of BCA's existing sustainability webpage. The purpose of this initiative is to enhance the visibility, accessibility, and credibility of ESG information by presenting BCA's sustainability performance in a clear, visual, and verified format. The portal will be structured around the three ESG pillars allowing investors to navigate easily across thematic areas while maintaining a consistent visual identity and color scheme. This solution directly addresses investors' preference for concise, visual, and interactive disclosure, as revealed in the survey results.

Integrated Social Media Communication

The second proposed business solution complements the ESG Highlight Portal through the integration of interactive communication across social media platforms. This initiative aims to strengthen the reach and continuity of BCA's ESG communication by utilizing digital channels that investors already engage with most frequently. The survey findings indicate that social media is the primary source of ESG information among retail investors, making it an essential medium for extending the visibility of BCA's sustainability messages and linking broader audiences to the official ESG portal.

CONCLUSION

This study examined the influence of Environmental, Social, and Governance (ESG) factors on retail investors' investment decisions in BBCA shares and assessed whether investment horizon moderates this relationship. Using data from 175 valid responses and applying multiple and moderated regression with 2,000-sample BCa bootstrapping, the analysis yielded several important conclusions.

Regarding the first research question (RQ1)—to what extent ESG dimensions influence retail investors' investment decisions—the results show that ESG perceptions collectively have a significant positive effect on investment decision. The model explains about 25.5% of the variance (Adjusted $R^2 = 0.242$), confirming that ESG considerations meaningfully shape investor behavior. This supports Stakeholder Theory, which highlights the value of addressing stakeholder expectations, and

Signaling Theory, which posits that transparent ESG disclosure functions as a credible signal that reduces information asymmetry. For the second research question (RQ2)—which ESG dimension exerts the strongest influence—the analysis identifies Governance as the most decisive factor ($B = 0.305$, $p = 0.045$). Investors view transparency, ethical oversight, and board independence as the most reliable indicators of managerial integrity. The Environmental ($B = 0.247$, $p = 0.081$) and Social ($B = 0.208$, $p = 0.267$) dimensions also have positive but statistically insignificant effects. This suggests that, while investors appreciate BCA's environmental and social commitments, these elements are perceived as long-term and indirect contributors to financial performance.

Concerning the third research question (RQ3)—whether investment horizon moderates the relationship between ESG and investment decision—the moderated regression results show that both ESG perception and investment horizon individually have significant positive effects, but their interaction is not statistically significant ($\Delta R^2 = 0.010$, $p = 0.108$). ESG factors therefore strengthen investment decisions among both short- and long-term investors, although the effect is slightly stronger for the latter. This outcome aligns with the Theory of Planned Behavior, which explains that favorable attitudes toward sustainability translate into investment decisions across horizons, albeit with different magnitudes.

Overall, the findings demonstrate that governance quality is the key determinant of investment decision, while environmental and social aspects reinforce the overall perception of sustainability. The study also highlights the importance of credible and accessible ESG communication to build investor trust. Although investment horizon does not significantly moderate the ESG–investment relationship, ESG performance remains relevant to all investor segments, showing that sustainability is increasingly viewed as integral to long-term corporate value creation.

Implications

a. Theoretical Implications

This research extends the application of Stakeholder Theory, Signaling Theory, and the Theory of Planned Behavior in the context of retail investment decisions within emerging markets.

- The finding that governance most strongly affects investment decision strengthens Stakeholder Theory's claim that accountability and transparency underpin legitimacy.
- The positive, though uneven, impact of ESG pillars supports Signaling Theory by showing that non-financial disclosures serve as quality signals that reduce uncertainty.
- The consistent main effects of ESG perception and horizon reinforce the Theory of Planned Behavior, confirming that favorable attitudes toward sustainability predict investment decision even without a moderating effect.

b. Managerial Implications

For BCA and similar financial institutions, these results highlight that:

- Governance transparency should be positioned as the core of investor communication, since it directly builds credibility and confidence.
- Environmental and social initiatives remain important, but must be communicated through measurable indicators and verified outcomes to enhance perceived value.
- ESG disclosure should shift from a compliance-based exercise to a strategic investor-relations tool, integrated into corporate reporting and digital engagement.

c. Practical Implications

- Investors can use governance indicators—such as board independence, audit assurance, and anti-corruption policies—as benchmarks for evaluating financial institutions.
- Regulators and stock exchanges may reference these insights to refine ESG disclosure frameworks that balance accessibility with assurance.
- Public understanding of ESG can be improved through simplified, visual, and interactive reporting formats, increasing inclusivity among retail investors.

RECOMMENDATION

Building on these findings, several recommendations are proposed for PT Bank Central Asia Tbk. BCA should strengthen governance transparency by clearly communicating audit results, board oversight, and ethics compliance across all sustainability disclosures. The bank can also develop an interactive ESG Highlight Portal that presents verified data through infographics, dashboards, and short videos aligned with POJK 51/2017, GRI Standards, and international frameworks such as TCFD.

To reach a wider investor base, BCA should expand its ESG storytelling through social media, integrating links to verified information sources and ensuring regular updates. It should also maintain external assurance and credibility through third-party verification and participation in recognized ESG indices like IDX ESG Leaders and SRI-KEHATI. Finally, ESG communication should be segmented, interactive and concise for younger investors, and detailed and verified for long-term or institutional segments. It is to ensure inclusivity and trust across demographics.

By institutionalizing these practices, BCA can reinforce its reputation as Indonesia's most trusted bank and foster long-term investor loyalty grounded in both financial and ethical performance. The findings of this study also contribute to theory by confirming that governance excellence remains the most credible ESG signal influencing retail investment behavior, while in practice they provide a roadmap for transparent, technology-enabled, and trustworthy ESG communication in Indonesia's banking industry.

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