

Analysis of Factors Influencing Perceptions and Attitudes Towards Investment Decisions in Esg-Based Companies By Investment Analysts (Case Study on PT. Astra International TBK)

Shara Novalina

Universitas Padjadjaran, Indonesia

Email: shara22001@mail.unpad.ac.id

ABSTRACT

This study analyzes the factors affecting investment analysts' perceptions and attitudes towards investment decisions in ESG (Environmental, Social, and Governance) based companies at PT. Astra International Tbk. With growing global emphasis on sustainability, understanding the determinants of ESG investment decisions has become critical for both practitioners and scholars. This study employs a qualitative approach with in-depth interviews involving investment analysts at PT. Astra International Tbk. Data were analyzed using NVivo 14 software through systematic coding and thematic analysis to identify patterns and relationships among variables. Results reveal that knowledge is the most influential factor in shaping perceptions and attitudes towards ESG-based investment decisions. Other significant factors include availability bias, social media influence, overconfidence, anchoring bias, herding behavior, representative bias, interest rates, loss aversion, and locus of control, while age demonstrates minimal influence. These findings provide practical implications for investment firms seeking to enhance ESG integration: companies should prioritize comprehensive ESG training programs, develop strategies to mitigate cognitive biases, and leverage digital platforms for effective ESG communication. This research contributes to behavioral finance theory in sustainable investing contexts and offers actionable guidance for developing robust ESG investment frameworks in emerging markets.

KEYWORDS ESG investment, investment decision, behavioral finance, investment analyst, sustainable investment



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INTRODUCTION

In today's socioeconomic environment, companies are expected to operate ethically, create positive societal impacts, and move beyond focusing solely on profit growth (Collevecchio et al., 2023). This expectation incorporates environmental, social, and governance (ESG) considerations. Growing awareness of sustainability (ESG) issues encourages companies to integrate these factors into investment decision-making processes.

Asset managers, pension fund managers, and institutional investors increasingly evaluate companies' ESG performance as a core element of investment analysis (Kim & Li, 2021). Sustainability has become a requirement for all companies; thus, stakeholders demand it regardless of its potential positive or negative impact on performance (Miralles-Quirós et al., 2019). This shift reflects a broader transformation in capital markets, where non-financial factors are recognized as material determinants of long-term financial performance and risk management.

The Indonesian context presents a compelling case for examining ESG investment dynamics, particularly in shaping analysts' perceptions and attitudes toward investment

decisions in ESG-based companies. The Annual Report Award (ARA)—given to companies with the best annual reports based on principles of transparency, accountability, and good corporate governance—encourages excellence in decision-making processes. According to Mardiasmo (2024), ARA 2023 marks the 19th iteration of this initiative since its inception in 2002, demonstrating Indonesia's sustained commitment to elevating corporate governance standards.

Companies adopting ESG principles demonstrate commitment to business activities that are not only financially profitable but also contribute to social and environmental sustainability. Heightened awareness of sustainability issues prompts firms to prioritize ESG-based investments and adopt these principles to underscore responsible practices.

Currently, the Indonesia Stock Exchange (IDX) collaborates with Morningstar Sustainability to assess ESG performance. Sustainability employs an ESG risk assessment framework based on risk decomposition, exposing companies to two key dimensions: exposure and management. Exposure refers to the material risks a company faces, which influence its overall ESG risk rating. Management reflects the company's commitment and concrete actions—through policies and programs—to address ESG issues.

Companies receive ESG scores and are grouped into five categories, as shown in Table 1.

Table 1. ESG Score Assessment

Categories	ESG Score	Remarks
Negligible	0-10	Very low risk
Low	10-20	Low risk
Medium	20-30	Medium risk
High	30-40	High risk
Severe	>40	Very high risk

Source: IDX (Indonesia Stock Exchange)

PT. Astra International Tbk is one of the largest public companies in Indonesia, with 300 subsidiaries, joint ventures, and associated entities supported by 100,000 employees. The company's business model diversifies across industry sectors, including automotive, financial services, heavy equipment, mining, construction and energy, agribusiness, infrastructure and logistics, information technology, and property.

Since its establishment, PT. Astra International Tbk has demonstrated strong social responsibility. Through sustainability reports released since 2007, the company has consistently shown its commitment to sustainable ESG practices. This commitment is reflected in various Corporate Social Responsibility (CSR) programs, including education through scholarship programs, health via the Astra clinic, the environment through reforestation programs, and SME empowerment.

Despite growing interest in ESG investments globally and in Indonesia, significant knowledge gaps remain regarding the specific factors influencing investment analysts'

decision-making processes in ESG contexts. While existing literature extensively examines ESG performance and financial outcomes (Shrestha et al., 2025; Liu, 2025), limited research explores the psychological, behavioral, and contextual factors shaping investment analysts' perceptions and attitudes toward ESG-based investments, particularly in emerging market contexts like Indonesia. This study addresses this gap by systematically investigating multidimensional factors—including cognitive biases, knowledge levels, social influences, and demographic characteristics—that shape how investment analysts evaluate and integrate ESG considerations into their investment decisions.

The urgency of this research is underscored by several contemporary developments. First, Indonesia's commitment to achieving net-zero emissions by 2060 and its participation in global sustainability initiatives necessitate robust ESG investment frameworks. Second, the rapid growth of sustainable finance in Southeast Asia, projected to reach USD 1 trillion by 2030, requires a deeper understanding of the decision-making processes driving ESG capital allocation. Third, persistent gaps between ESG policy commitments and actual investment practices suggest that psychological and behavioral factors significantly mediate the translation of ESG principles into concrete investment decisions. Understanding these mediating factors is essential for developing effective interventions that enhance ESG integration in investment analysis.

Based on this background, this study aims to analyze the factors affecting investment analysts' perceptions and attitudes toward investment decisions in ESG-based companies, particularly PT. Astra International Tbk. This research is expected to contribute to understanding the dynamics of ESG-based investment decision-making in Indonesia.

RESEARCH METHOD

This study employed a qualitative approach with a case study method. The qualitative approach was chosen because this study aims to deeply understand the factors affecting investment analysts' perceptions and attitudes towards ESG-based investment decisions through rich, contextualized data that captures the complexity and nuance of decision-making processes. The case study was conducted at PT. Astra International Tbk as one of the leading companies in implementing ESG principles in Indonesia.

Primary data were collected through in-depth interviews with investment analysts working at PT. Astra International Tbk. Informants were selected using purposive sampling techniques, a non-probability sampling method appropriate for qualitative research seeking participants with specific characteristics and experiences relevant to the research phenomenon (Amin et al., 2023). The selection criteria were: (1) working as investment analysts at PT. Astra International Tbk, (2) possessing a minimum of two years of experience in investment analysis, ensuring sufficient professional maturity and exposure to investment decision-making processes, and (3) being directly involved in ESG-based investment decision-making. These criteria ensure that participants possess both the technical competence and practical experience necessary to provide meaningful insights into ESG investment decision-making processes. The two-year experience threshold was established to capture analysts who have completed typical training periods and actively participate in investment recommendations. Additionally, direct involvement in ESG-based decisions ensures that informants can speak from actual experience rather than theoretical knowledge alone.

The research instrument consisted of semi-structured interview guidelines developed based on a comprehensive literature review on factors influencing investment decisions, behavioral finance theory, and ESG concepts. The interview guidelines included questions regarding ESG knowledge, cognitive biases (availability bias, overconfidence, anchoring bias, herding behavior, representative bias), economic factors (interest rates), loss aversion, locus of control, social media influence, and demographic characteristics (age). The semi-structured format allowed for flexibility in exploring emerging themes while maintaining consistency across interviews, enabling both systematic data collection and the discovery of unanticipated insights.

The collected data were analyzed using NVivo 14 software, a qualitative data analysis program that facilitates systematic coding, pattern recognition, and thematic analysis of textual data. The data analysis process included: (1) transcription of interview results verbatim to preserve the authenticity and richness of participants' responses, (2) coding to identify emerging themes and patterns through iterative review and refinement of coding categories, (3) categorization based on factors influencing perceptions and attitudes towards ESG-based investment decisions using both deductive codes derived from theoretical frameworks and inductive codes emerging from the data itself, and (4) interpretation of results to answer research questions through synthesis of patterns across interviews and connection to existing theoretical frameworks. The NVivo coding process involved multiple stages: initial open coding to identify preliminary themes, axial coding to establish relationships among themes, and selective coding to develop overarching conceptual categories. Frequency counts were generated to assess the relative prominence of different factors across interviews, providing a quantitative dimension to the qualitative analysis. The validity of the data was maintained through triangulation of sources and member checking with informants to ensure accurate representation of participants' perspectives and enhance the credibility of findings.

RESULTS AND DISCUSSION

Informant Profile

This research involved 10 investment analysts working at PT. Astra International Tbk with diverse characteristics. The profile of the informant is presented in Table 2.

Table 2. Informant Profile

Code	Departments	Education	Experience	Age
IA-01	Senior Analyst	S2 Finance	8 years	35
IA-02	Analyst	S1 Accounting	5 years	30
IA-03	Junior Analyst	S1 Management	3 years	27
IA-04	Senior Analyst	S2 Economics	10 years	38
IA-05	Analyst	S1 Finance	6 years	32

Source: Primary Data (2025)

Factors Influencing Perceptions and Attitudes to ESG-Based Investment Decisions

Based on the analysis using NVivo 14, 10 main factors were identified that affect investment analysts' perceptions and attitudes towards investment decisions in ESG-based companies. The degree of influence of each factor varies as presented in Table 3.

Table 3. Factors Influencing ESG-Based Investment Decisions

No	Factors	Frequency	Influence Level
1	Knowledge	87	Very High
2	Availability Bias	62	High
3	Social Media	62	High
4	Overconfidence	54	Significant
5	Anchoring Bias	54	Significant
6	Herding Behavior	48	Significant
7	Representative Bias	48	Significant
8	Interest Rates	41	Significant
9	Loss Aversion	35	Significant
10	Locus of Control	32	Significant
11	Age	18	Low

Source: NVivo 14 Analysis Results (2025)

Knowledge was the most influential factor with the highest frequency of occurrence (87). This indicates that investment analysts' understanding of ESG concepts, the benefits of sustainable investments, and ESG assessment criteria greatly determines their perception and attitude towards investment decisions. As stated by Eduard et al. (2024), investment knowledge has a significant effect on investment decisions. Investment analysts who have in-depth knowledge of ESG tend to be more positive in assessing ESG-based companies and more confident in making investment decisions.

Availability bias and social media ranked second with the same frequency (62). Availability bias refers to the tendency of investment analysts to rely on information that is easy to remember or access in decision-making. The influence of social media reflects the reality that information about a company's ESG practices is often widely disseminated through social media platforms. Zhao & Li (2024) show that social media influences family investment behavior, which is also relevant in the context of professional investment analysts.

Overconfidence and anchoring bias significantly affect investment decisions (frequency 54). Overconfidence can cause investment analysts to be overconfident in their own analysis and ignore important information about ESG risks. Du et al. (2025) found that managers' overconfidence affects a company's ESG performance. Meanwhile, anchoring bias causes

investment analysts to be fixated on the initial information received about the company, which can affect their evaluation of ESG performance.

Herding behavior and representative bias also had a significant effect (frequency 48). Herding behavior shows the tendency of investment analysts to follow investment decisions made by peers or other market participants. Safitri & D (2018) stated that herding affects investment decisions. Representative bias causes investment analysts to judge companies based on stereotypes or past experiences with similar companies, without considering the unique characteristics of the company's ESG practices.

Interest rates as a macroeconomic factor also have a significant influence (frequency 41). Changes in interest rates affect the cost of capital and expected returns from investments, including ESG-based investments. Lan et al. (2024) show that interest rate liberalization affects household investment in China. Wu et al. (2024) also found that interest rate liberalization affects companies' green investments.

Loss aversion and locus of control affect the investment analyst's risk perception of ESG-based investments (frequencies 35 and 32). Loss aversion causes investment analysts to be more sensitive to potential losses than gains in ESG investments. Islam et al. (2024) show that behavioral biases including loss aversion affect investment decisions. The locus of control, both internal and external, affects the extent to which investment analysts feel they have control over the outcome of their investment decisions. Mualim et al. (2023) found that the locus of control affects gold investment decisions.

Age has the lowest influence (frequency 18) on investment analysts' perceptions and attitudes. This indicates that the age difference does not really determine how investment analysts view and make ESG-based investment decisions. What is more influential is the factor of knowledge and experience in ESG investment analysis, not solely chronological age.

The findings of this study are in line with the theory of behavioral finance which explains that investment decisions are not always rational and are influenced by various cognitive biases and psychological factors (Ahmad et al., 2025; Mahmood et al., 2024; Leaf & Bromiley, 2025). In the context of ESG-based investing, these factors become increasingly complex as they involve non-financial considerations such as environmental and social impacts.

This study also shows that sustainable financial literacy is the key to improving the quality of ESG-based investment decisions. Lanciano et al. (2024) emphasize the importance of financial literacy in sustainable financial decisions among Italian households. The same goes for professional investment analysts who need a comprehensive understanding of the integration of ESG factors in investment analysis.

CONCLUSION

This study analyzes the factors that affect the perception and attitude of investment analysts towards investment decisions in ESG-based companies at PT. The results of the analysis using NVivo 14 identified 11 factors with varying degrees of influence. Knowledge is the most influential factor, showing that a deep understanding of ESG concepts greatly determines the perception and attitude of investment analysts. Availability bias and social media rank second, reflecting the importance of information accessibility and media influence in the digital age. Other factors that have a significant influence include overconfidence, anchoring bias, herding behavior, representative bias, interest rates, loss aversion, and locus of

control. Meanwhile, age has the least influence. These findings contribute to the development of behavioral finance theory in the context of sustainable investing and provide practical implications for companies in designing ESG education programs. This study has limitations because it only focuses on one company, so further research is recommended to expand the scope of the research, add other relevant variables, and use mixed methods for a more comprehensive understanding of the dynamics of ESG-based investment decisions.

REFERENCE

- Ahmad, U., van Keulen, M., Briassouli, A., & Saad, M. (2025). Cognitive biases, robo-advisor, and investment decision psychology: An investor's perspective from the New York Stock Exchange. *Psychological Act*.
- Amin, N. F., Gaplan, S., & Abunawas, K. (2023). General concepts of population and sample in research. *Journal of Contemporary Islamic Studies*.
- Collecchio, F., Temperini, V., Sanchez, V. B., & Martinez, A. M. (2023). Sustainable governance: Board sustainability experience and the interplay with board age for firm sustainability. *Journal of Business Ethics*.
- Du, J., Zhu, R., & Ye, Q. (2025). Managers' overconfidence, institutional investors' shareholding, and corporate ESG performance. *Finance Research Letters*.
- Eduard, M. B., Widyastuti, T., Maidani, & Sari, P. N. (2024). The influence of investment knowledge, financial literacy, and risk perception on investment decisions in millennials and Generation Z in North Bekasi District. *Sentri*. <https://ejournal.nusantaraglobal.ac.id/index.php/sentri>
- Islam, K. U., Bhat, S. A., Lone, U. M., Darzi, M. A., & Malik, I. A. (2024). Financial risk propensity and investment decisions: An empirical analysis using behavioural biases. *Finance Research Letters*.
- Kim, S., & Li, Z. (Frank). (2021). Understanding the impact of ESG practices in corporate finance. *Sustainability*, 13(7). <https://www.mdpi.com/journal/sustainability>
- Lan, J., Peng, Z., Pan, Y., & Liu, Y. (2024). Interest rate liberalization and household investment in China. *International Review of Economics and Finance*.
- Lanciano, E., Previati, D., Ricci, O., & Santilli, G. (2024). Financial literacy and sustainable finance decisions among Italian households. *Journal of Economics and Business*.
- Leaf, D., & Bromiley, P. (2025). A review of cognitive biases in strategic decision making. *Long Range Planning*.
- Liu, F.-J. (2025). ESG performance, managerial ability, and corporate investment efficiency. *Finance Research Letters*.
- Mahmood, F., Arshad, R., Khan, S., Afzal, A., & Bashir, M. (2024). Impact of behavioral biases on investment decisions and the moderation effect of financial literacy: Evidence from Pakistan. *Psychological Act*.
- Mardiasmo. (2024). *Annual report award 2023*.
- Miralles-Quirós, M. M., Miralles-Quirós, J. L., & Hernández, J. R. (2019). ESG performance and shareholder value creation in the banking industry: International differences. *Sustainability*, 11(5). <https://www.mdpi.com/journal/sustainability>

- Mualim, A. S., Basuki, F. H., & Latuamury, J. (2023). The influence of locus of control, financial literacy, and income on gold investment decisions: An empirical study on noble product customers at PT Pegadaian (Persero) Ambon Branch. *Journal of Accounting*.
- Safitri, L. A., & D, Y. R. (2018). The influence of herding, income, and age on investment decisions in gold: A case study at PT Pegadaian (Persero) in Semarang City.
- Shrestha, C., Andrikopoulos, P., & Park, J. S. (2025). ESG rating and financial performance in emerging markets: The moderating effects of cross-listing and industry type. *Research in International Business and Finance*.
- Wu, W., Yang, S., Li, A., Chen, Y., & Chen, S. (2024). Does interest rate liberalization affect corporate green investment? *Energy Economics*.
- Zhao, Z., & Li, X. (2024). Social media and family investment behavior. *Finance Research Letters*.