

Evaluating the Impact of ESG Practices on Company Values in ASEAN-5 Region: The Moderating Roles of Financial Flexibility and Capital Structure

Eduard Ary Binsar Naibaho¹; Apriani Simatupang^{2*}; Zalfa Nadira³

^{1,3} Departement Accounting, Economic and Business Faculty, Universitas Pelita Harapan, Tangerang, Indonesia 15811

²Departement Management, Economic and Business Faculty, Universitas Pelita Harapan, Tangerang, Indonesia 15811

¹eduard.naibaho@uph.edu; ²apriani.simatupang@uph.edu*; ³01017210056@student.uph.edu

*Corresponding author

How to Cite: Naibaho, A. B. N., Simatupang, A., & Nadira, Z. (2025). Evaluating the impact of ESG practices on company values in ASEAN-5 Region: The moderating roles of financial flexibility and capital structure. *Journal of ASEAN Studies*, 13(1), 187-209. <https://doi.org/10.21512/jas.v13i1.12072>

Abstract

This research examined the influence of environmental, social, and governance (ESG), financial flexibility, and capital structure on company value. Company value was measured using Tobin's Q, ESG was evaluated through the ESG score from Thomson Reuters, financial flexibility was assessed through a financial flexibility proxy, and capital structure was measured using the debt-to-equity Ratio (DER). The research also employed control variables, including return on assets, firm size, firm age, growth, inflation, gross domestic product, and COVID-19. The purposive sampling method was employed to analyze secondary data from 101 companies in the ASEAN-5 region (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) from 2016 to 2022. The results indicate that ESG positively impacts a company's value. Financial flexibility and capital structure have a negative effect on company value. The control variables that significantly impact ROA, size, growth, GDP, and COVID-19, while age and inflation do not have a significant effect. The relevance of this research in finance lies in strengthening the relationship between non-financial factors (ESG) and a company's financial performance, as well as in understanding how managing financial flexibility and capital structure can support companies' sustainability and long-term value.

Keywords: company value, ESG, financial flexibility, capital structure.

Introduction

Climate change has become one of the leading global concerns today, primarily due to the direct impacts of rapid industrialization and economic expansion over the past few decades. Southeast Asia, including the ASEAN-5 countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand), is one of the regions most significantly affected by climate change, characterized by extreme weather events and heat waves. Germanwatch has identified three ASEAN countries as the most economically affected and having significant casualties due to climate change. However, research indicates that ASEAN's mitigation efforts still need improvement to address existing climate change issues (Ding & Beh, 2022)

In response to global concerns about climate change, the United Nations developed a framework in 2015 to create peace and prosperity for humanity and the Earth, known as the 17 Sustainable Development Goals (SDGs). These goals require all developing and developed countries to collaborate in addressing challenges such as poverty and hunger, enhancing health and education, reducing inequalities, and promoting sustainable economic growth. These measures also include efforts to tackle climate change by preserving oceans and forests (United Nations, n.d.).

In addition to the ongoing climate change, companies face new challenges characterized by volatility, uncertainty, and complexity. To sustain a company's operations amid these challenges, it is crucial to implement the concept of Corporate Sustainability. This has led to the focus on creating international policies in many countries, as corporate sustainability is considered a long-term goal or vision for companies to meet current needs without compromising the ability to accommodate future needs (Ghardallou, 2022)

Companies can implement sustainability using the ESG concept. This approach assesses a company's performance and impact in three main areas: Environment, Social, and Governance. Applying the ESG concept enables companies to determine the degree to which they integrate ESG factors into their decision-making processes and operations. Consequently, many investors use ESG factors to identify risks and opportunities related to a company's long-term performance (Pohan, 2023)

Since its establishment in 1967, ASEAN has been striving to support economic growth and social and cultural development in its member countries. The adoption rates of the Task Force on Climate-Related Financial Disclosure (TCFD) in the ASEAN-5 countries are as follows: Indonesia, 4%; Thailand, 24%; Malaysia, 28%; Singapore, 38%; and the Philippines, 48%. The ASEAN-5 countries have rapidly adopted investment and ESG strategies compared to other member countries, with Singapore and Thailand leading, with 70% and 59% of companies, respectively, classified as having ESG practices (E-Vahdati et al., 2022)

The research only selected public companies from ASEAN-5 that had a complete ESG score from Thomson Reuters and consistently available financial data from 2016 to 2022. Many companies from other ASEAN countries, such as Laos, Cambodia, Myanmar, Brunei Darussalam, and Vietnam, do not have adequate or consistent ESG data to analyze in the

period. ASEAN-5 are the countries with the largest and most developed economies in the ASEAN region. These countries are also pioneers in the adoption of ESG and disclosure of sustainability practices, as demonstrated by the higher adoption rate of Task Force on Climate-Related Financial Disclosures (TCFD) than other ASEAN countries (ASEAN, 2020; GRI ASEAN & Centre for Governance and Sustainability, 2022; Phang & Chia, 2024; Pimpa, 2025). ASEAN-5 has a relatively more developed and open capital market and follows more uniform financial reporting standards. This allows for more valid and reliable comparisons between companies from these countries (MIA, 2022; Robiyanto et al., 2023).

Implementing ESG practices has increased stock valuation for companies with ESG ratings compared to those without. This is due to stakeholders' satisfaction with the quality of companies' ESG information disclosure, which can build stakeholder trust. The growing trust from stakeholders contributes to increased investment from investors, providing companies with ESG certification an advantage in their funding (Wong et al., 2021).

To ensure a company's sustainability in an uncertain environment, in addition to implementing ESG, it is essential to have financial flexibility when adapting its strategies. Financial flexibility refers to a company's comprehensive ability to minimize financial risks and utilize its financial resources effectively. This concept reflects the company's flexibility in its financial structure, enabling it to adapt to market conditions or changes in business needs. With financial flexibility, a company can be more responsive to opportunities and challenges, giving it a competitive advantage in the capital market. Additionally, it can strengthen capital by incurring more efficient costs, even in times of crisis (Teng et al., 2021).

Another crucial aspect for companies to consider regarding capital is their capital structure. The importance of an optimal capital structure for a company becomes increasingly evident in the complex and imperfect dynamics of the global capital market. In this context, prudent financial policies can serve as a coordinator in identifying and capitalizing on financial opportunities in the international capital market. An optimal capital structure enables the company to maximize shareholder welfare and minimize the cost of capital. Both of these aspects can enhance the company's future cash flow, thereby increasing the fundamental value of the company's stock in the capital market (Mahmood et al., 2023).

During the COVID-19 pandemic in 2020–2021, the application of ESG principles became increasingly important for companies in maintaining operational sustainability and stakeholder trust. Companies are required not only to maintain a commitment to environmental responsibility but also to demonstrate social concern for employees and the surrounding community through health protection, work flexibility, and social assistance. In terms of governance, companies that apply transparent and adaptive governance principles have proven to be more resilient in dealing with crises (Gao & Geng, 2024). Previous studies have shown that companies with good ESG performance tend to have stronger resilience and more stable market value during the pandemic, thus confirming that ESG plays a role as a risk mitigation strategy in situations of extreme uncertainty (Abedifar et al., 2023; Yahya, 2023).

The control variables selected in this research include Return on Asset (ROA), firm size, firm growth, Gross Domestic Product (GDP), and the COVID-19 pandemic. ROA is an

indicator of financial performance that measures a company's ability to generate profit from its assets. ROA is chosen as a control variable because good financial performance can directly impact a company's value. By controlling ROA, this research can more accurately isolate the impact of ESG on company value (Sadiq, 2020). Larger companies tend to have more resources to implement ESG practices and are more likely to be well-known in the market, which can positively impact company value.

Controlling for firm size helps ensure that differences in company size do not distort the impact of ESG. Companies with high growth rates may have better prospects and attract more investors, increasing company value. Therefore, it is essential to control for this variable in the analysis (Niu et al., 2022). GDP changes can impact companies' overall financial performance and, consequently, their value. By controlling for GDP, this research can separate the influence of general economic conditions from the specific impact of ESG. The COVID-19 pandemic has had a profound effect on the global economy and the operations of companies worldwide. A dummy variable for COVID-19 is included to control for the pandemic period, with a value of 1 for the years 2020 and 2021 and 0 for all other years to ensure that the research results are not affected by the economic disruptions caused by the pandemic (Zhang & Liu, 2022)

Recent research on the impact of ESG on company value is deemed necessary due to inconsistencies in previous research. Studies by Sadiq et al. (2020) and Aydoğmuş et al. (2022) indicate that ESG has an impact on company value, contrasting with the findings of Duque-Grisales and Aguilera-Caracuel (2021) who suggest that ESG does not impact company value. The inconsistencies that resulted from previous research has motivated researchers to reexamine the influence of ESG on company value and contributing to the research by considering financial flexibility and capital structure as moderators, the study is focusing on public companies with ESG Scores in the ASEAN-5 countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) during 2016-2022.

Based on the previously outlined phenomenon, this research poses the following questions: Does ESG influence Company Value? Does ESG influence Company Value with Financial Flexibility as a moderator? Does ESG influence Company Value with Capital Structure as a moderator? This research is expected to strengthen the relationship between non-financial factors (ESG) and a company's financial performance, as well as to understanding how managing financial flexibility and capital structure can support companies' sustainability and long-term value.

This research is based on the research gap related to the relationship between ESG and corporate values, where the results of previous studies show inconsistent findings; some state that ESG has a positive effect on company value (Sadiq et al., 2020; Aydoğmuş et al., 2022), while others found no significant influence (Duque-Grisales & Aguilera-Caracuel, 2021). In addition, most previous research has not considered the role of moderation variables such as financial flexibility and capital structure, even though these two factors have the potential to affect the effectiveness of ESG implementation in increasing company value. Therefore, this research fills this gap by analyzing the influence of ESG on company value more comprehensively, including financial flexibility and capital structure as moderation variables,

and using the context of developing countries in the ASEAN-5 region, which is still rarely explored in similar research.

Literature Review/Analytical Framework

Legitimacy Theory

According to legitimacy theory, an entity strives to create alignment between the values and social norms present in society and the activities conducted by the organization to be accepted within a broader social system. When there is a mismatch between the values and social norms of an organization's activities, threats to its legitimacy arise. The threats can be legal, economic, or other social sanctions (Dowling & Pfeffer, 1975).

Legitimacy theory is considered a social contract between companies and society, where companies are expected to act in accordance with the beliefs, expectations, standards, and values of society to achieve legitimacy and, ultimately, social permission to operate. Legitimacy is an understanding or assumption that the actions of an entity are considered desirable and in line with the prevailing norms and values in its social environment. Consequently, investing in ESG is expected to enhance the acceptance and image of the company in the trading market and society (Rahman et al., 2023).

Pecking Order Theory

Pecking order theory states that the company prioritizes financing from internal sources over external funding. Companies adjust the target dividend payout ratio based on their investment prospects. The established dividend policy, combined with fluctuating profitability and unpredictable investment opportunities, will impact the internally generated cash flow, determining whether it is greater or smaller than investment expenditures.

If external funding is still required, the company's safest securities to be issued first are debts (Arifah, 2024). Companies tend to make decisions regarding funding from internal sources rather than external ones. This is done to achieve higher profits with a lower level of debt. Therefore, the proportion of debt and equity is crucial for companies to maximize their capital structure, ultimately increasing their value (Hannawanti & Naibaho, 2021).

Company Value

Company value is an overall assessment by investors reflected in the company's stock price. The company's value increases when the stock price rises, creating broader shareholder prosperity. One way to enhance a company's value is through its competitive advantage. Competitive advantage can improve a company's competitiveness to achieve its goal of optimizing company value (Hannawanti & Naibaho, 2021). Another definition of company value is the tradable value in the market, interpreted as the growth of value for shareholders.

Signals regarding the company's performance can be obtained from the observed stock prices in the market. The higher the stock price, the higher the company's value. To achieve optimal company value, shareholders typically entrust the company's management to competent professionals in their field (Bawai & Kusumadewi, 2021).

ESG

ESG and Corporate Social Responsibility (CSR) share similar aspects. However, ESG tends to be more extensive in terms of terminology than CSR. The ESG concept encompasses environmental, social, and governance factors that can influence a company's ability to implement effective strategies and enhance its corporate values (Niu et al., 2022). The increased awareness of social responsibility globally has led to activities related to community welfare positively reflecting a company's status, which is closely linked to the company's financial values (Sadiq et al., 2020). Some companies utilize sustainability reporting to gain a competitive advantage, while others view this concept as a standard practice that all companies should adopt. Companies with more ESG practices are expected to receive economic benefits from such practices (Aydoğmuş et al., 2022).

Financial Flexibility

Financial flexibility is not just the company's ability to adapt to financial risks; it is a comprehensive strength that enables it to manage these risks and utilize financial resources effectively. Amid dynamic changes in the financial sector, a reconfiguration of company resources is necessary. This allows for the adjustment and enhancement of financial resources. In this context, financial flexibility becomes crucial to directing and adjusting the company's strategies amid a constantly changing business environment (Teng et al., 2021). Companies with financial flexibility can avoid financial difficulties when facing sudden negative changes and fund investments when profitable opportunities arise. When identifying and deciding on an organizational capital structure, company managers need to prioritize financial flexibility. Applying the concept of financial flexibility is appealing not only because it can provide secure value storage but also because it can preserve valuable options in the face of future uncertainty (Hanasa & Lubis, 2023).

Capital Structure

Capital structure, or the structure of a company's funding, represents the company's financial needs. It is portrayed as the ratio between the company's long-term debt and its equity. Ownership of a significant amount of cash enables the company to enhance its performance and achieve greater profits (Purnamasari & Fauziah, 2022). An optimal capital structure, utilizing various sources of financing (including debt and equity), enables the attainment of goals and enhances the company's value. Therefore, company management should always strive to maintain an optimal capital structure to achieve the company's objectives, namely operating the business at the desired efficiency level (Prekazi et al., 2023).

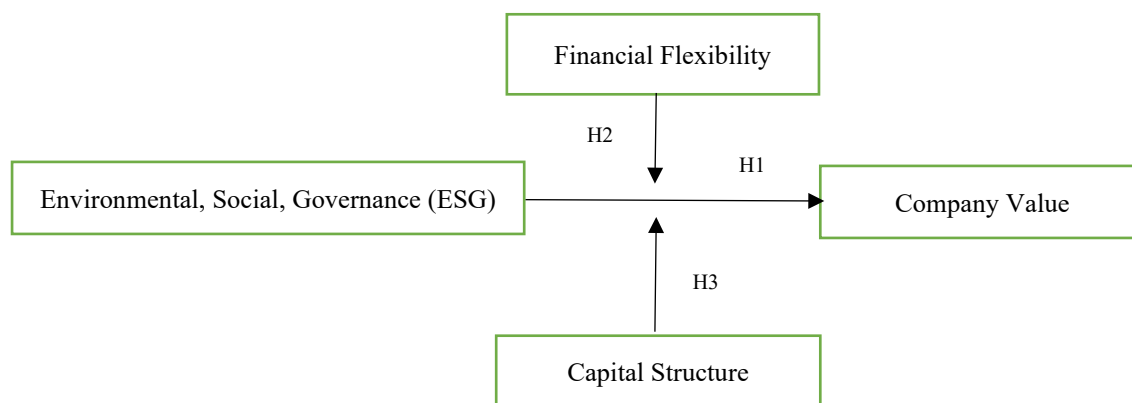


Figure 1. Conceptual Framework

ESG and Company Value

As shown in Figure 1, this research conceptualizes the relationship between ESG and company value, with financial flexibility and capital structure serving as moderating variables. The increasing number of stakeholders is urging companies to consider ESG factors in their business practices. ESG is perceived to provide additional information to stakeholders in the form of non-financial data that can be used to analyze the benefits and risks associated with investments. The current focus of ESG has shifted from prioritizing individual interests to considering the broader impact on society, requiring companies to incorporate various aspects into their operations, such as environmental preservation, social responsibility, and enhancing their business governance (Yunica & Rokhim, 2023).

Previous research on the influence of ESG on company value has shown a positive relationship. A high ESG score not only characterizes excellence in a company's ESG aspects but also contributes to a significant positive impact on the company's value, creating a strong correlation between sustainability practices and increased company value. Investors' growing interest and increasing public awareness of environmental risks and other non-financial factors are prompting companies to compete and intensify their efforts to consider non-financial aspects of their business operations. Companies can utilize the implementation of ESG as a means of social responsibility and a strategy to achieve corporate sustainability, thereby enhancing their competitive advantage (Aydoğmuş et al., 2022).

Wong et al. (2021) indicate that companies obtaining ESG certification will significantly strengthen their company value. Companies with a high ESG score send a positive signal that they can be trusted to conduct their business with a commitment to implementing ESG practices. The research findings demonstrate that firm value increases in companies with a high ESG score. Thus, this research considers and proposes that ESG influences company value, and the Hypothesis 1 (H1) is proposed.

H1: ESG has a positive effect on Company Value.

ESG, Company Value, and the Role of Financial Flexibility

Currently, the business environment is significantly more uncertain, leading to increased obstacles for companies in developing sustainability. Companies can utilize the concept of financial flexibility as a systematic and comprehensive ability to adapt to environmental changes actively, address systemic uncertainties, integrate financial resources, and optimize financial decision-making. Companies with financial flexibility are considered more capable of managing risks amid uncertainty and facilitating the achievement of corporate sustainability (Zhang & Liu, 2022).

ESG is closely related to financial flexibility, as companies with good ESG performance will send positive signals that influence the development of corporate sustainability. Establishing a good reputation by providing ESG information to stakeholders will help reduce information asymmetry and decrease the perceived risks expected by stakeholders. It will also increase credit availability from financial institutions, minimize debt financing costs, and enhance the company's ability to secure debt financing. Simultaneously, this will increase free cash flow, thereby improving financial flexibility (Zhang & Liu, 2022).

Financial flexibility refers to a company's capacity to obtain low-cost funding for unanticipated demands. Basic cash holdings (cash and cash equivalents) and anticipated cash inflows are the two most common sources of cash inflow. Because cash holdings are expensive due to agency issues, businesses maintain relatively low cash levels and retain unused lending capacity, allowing them to obtain adequate cash when needed. Firms maintain financial flexibility by making informed decisions regarding current financing, leverage, and cash holdings that will meet their future financial needs. Firms with more substantial borrowing capacity can raise funds from the external capital markets (Wu et al., 2023).

Based on the above explanation, this hypothesis is a conjecture that could make a novel contribution to this research, as previous studies have not extensively investigated financial flexibility as a moderating variable to examine the relationship between ESG and company value. Therefore, the Hypothesis 2 (H2) for this research is proposed.

H2: Financial Flexibility moderates the relationship between ESG and Company Value.

ESG, Company Value, and the Role of Capital Structure

Capital structure plays a significant role in financial management and a company's social reputation. Companies with high levels of social responsibility tend to rely more on equity financing than debt. This demonstrates a commitment to sustainable financial practices. Additionally, the quality of corporate governance is sought to help reduce conflicts and agency costs and potentially decrease the level of debt a company holds (Zahid et al., 2023).

Furthermore, capital structure refers to the arrangement of debt and equity that enterprises use to fund their long-term operations. Capital is seen as a long-term funding source within a business, ascertained by subtracting short-term obligations from total assets.

To get this ideal capital structure, firms must implement suitable modifications. It is achieved when organizations strategically align their funding sources to maximize benefits. Empirical research investigating the influence of capital structure on business value has shown inconclusive results. Specific research on capital structure suggests that companies with higher debt ratios often exhibit improved financial performance (Bui et al., 2023).

To achieve long-term sustainability goals, companies are increasingly incorporating ESG into their strategies. Sustainable practices are implemented to ensure the company's survival by preserving its legitimacy among various stakeholders and maintaining a good reputation. Lenders appreciate companies with strong ESG performance, assigning lower debt costs to those with strong ESG practices compared to companies with weak ESG or those neglecting ESG practices in their business (Adeneye & Kammoun, 2022).

Thus, this hypothesis is a conjecture that could make a novel contribution to this research, as previous studies have not extensively investigated the use of capital structure as a moderating variable to examine the relationship between ESG and company value. Therefore, the Hypothesis 3 (H3) for this research is proposed.

H3: Capital Structure moderates the relationship between ESG and Company Value.

Research Method

The research focuses on public companies that have ESG scores and are listed in the ASEAN-5 countries (Indonesia, Malaysia, the Philippines, Singapore, and Thailand) from 2016 to 2022. Moreover, this research employs a non-probability sampling technique using the purposive sampling method. Sample selection is based on predefined criteria, providing a focused and specific approach to the research subject. The researchers established the following criteria to obtain a sample: (1) public companies that have ESG scores and are listed on the stock exchanges of Indonesia, Malaysia, the Philippines, Singapore, and Thailand from 2016 to 2022; (2) companies that have published financial reports as of December 31 for each year from 2016 to 2022; and (3) exclusion of outlier. The dataset comprises a total of 707 observations, representing 101 enterprises over a seven-year period.

This research utilizes quantitative data from secondary sources accessed through paid databases, including S&P Capital IQ and Thomson Reuters. Data sourced from S&P Capital IQ and Thomson Reuters are reliable as they are world-leading providers of financial information services similar to Bloomberg. The secondary data comprises the financial information and ESG scores.

The literature study and documentation technique were employed to gather the data for this study. A variety of journals, articles, financial statement data, and other publications were reviewed as essential to enriching the study during the literature review. The documentation technique involved recording documents during the data collection process for the study. The financial data used is as of the end of the financial year.

Data analysis techniques involve quantitative analysis, including multiple linear regression tests and panel data regression analysis. Multiple linear regression is a statistical method designed to determine the influence of ESG on Company Value, with Financial Flexibility and Capital Structure as moderators, in public companies with an ESG Score in the ASEAN-5 region. There are two research models to test the hypotheses in the study. Model 1 (see Equation 1) serves as the testing model for Hypothesis 1. Model 2 (see Equation 2) is used to test hypotheses 2 and 3.

$$TOBINSQ_{it} = \beta + \beta_1 ESG_{it} + \beta_2 ROA_{it} + \beta_3 SIZE_{it} + \beta_4 AGE_{it} + \beta_5 GROW_{it} + \beta_6 INFL_{it} + \beta_7 GDP_{it} + \beta_8 COV_{it} + e \quad (1)$$

$$TOBINSQ_{it} = \beta + \beta_1 ESG_{it} + \beta_2 (ESG_{it} \times FFLEX_{it}) + \beta_3 (ESG_{it} \times DER_{it}) + \beta_4 ROA_{it} + \beta_5 SIZE_{it} + \beta_6 AGE_{it} + \beta_7 GROW_{it} + \beta_8 INFL_{it} + \beta_9 GDP_{it} + \beta_{10} COV_{it} + e \quad (2)$$

The TOBINSQ is the company value, β is the constant, β_1 -10 are the regression coefficients, ESG is the environment, social, and governance score, ESG x FFLEX is the interaction between ESG and Financial Flexibility, ESG x DER is the interaction between ESG and Debt-to-Equity Ratio, ROA is the return on asset, Size is the company size, Age is the company age, GROW is the company growth, INFL is inflation, GDP is gross domestic product, Covid-19 is dummy, i is the company, t is the year of observation, and e is the error. Each variable's measurement is shown in Table 1.

Table 1. Operational definition

Variable	Measurement	Data Source
Company Value	$TOBINSQ = \frac{(MVE+PS+DEBT)}{TA}$ (Guo et al., 2020)	S&P Capital IQ
ESG	ESG = ESG Score from Thomson Reuter's (Ghardallou, 2022)	Thomson Reuters
Financial Flexibility	FFLEX = Cash Flexibility + Debt Flexibility (Teng et al., 2021)	S&P Capital IQ
Capital Structure	$DER = \frac{Total\ Debt}{Total\ Equity}$ (Hannawanti & Naibaho, 2021)	S&P Capital IQ
Return on Asset	$ROA = \frac{Net\ Income}{Total\ Asset}$ (Bui et al., 2023)	S&P Capital IQ
Firm Size	Firm Size = Ln Total Asset (Bui et al., 2023)	S&P Capital IQ
Fim Age	Firm Age = Year of Research – Year of Company Listed (Ali et al., 2021)	S&P Capital IQ
Growth	$\frac{Total\ Asset\ (t) - Total\ Asset\ (t - 1)}{Total\ Asset\ (t - 1)} \times 100\%$ (Bag & Mohanty, 2021)	S&P Capital IQ
Inflation	Inflation Rate from World Bank's (World Bank, 2024)	World Bank
Gross Domestic Product	Gross Domestic Product Rate from World Bank's (World Bank, 2024)	World Bank
COVID-19	The financial reporting period that falls within the COVID-19 period (years 2020-2021) will be assigned a value of 1, while the financial reporting period that does not fall within the COVID-19 period (years 2017-2019) will be assigned a value of 0. (Bag & Mohanty, 2021)	Dummy

Results

Table 2. Results of descriptive statistics

Variable	Observation	Mean	Standard Deviation	Minimum	Maximum
TOBINSQ	707	1.226158	1.743508	-0.2112719	22.80219
ESG	707	57.70601	17.03145	2.600429	88.36264
FFLEX	707	0.505967	0.2509291	0.1176758	1.187796
DER	707	0.8190219	0.776744	0.0000327	7.801346
ROA	707	0.0450349	0.0648826	-0.4111904	0.6032196
SIZE	707	18.59226	1.363633	15.06092	21.93533
AGE	707	55.14851	34.76675	5	188
GROW	707	6.185301	11.50305	-63.2492	108.3842
INFL	707	2.263024	1.76752	-1.138702	6.12106
GDP	707	3.470339	4.085233	-9.518295	8.882354
COV	707	0.2857143	0.4520738	0	1

Source: Output STATA 17 (2023)

Based on Table 2, the dataset comprises 707 observations from 101 companies between 2016 and 2022. The table data show that Tobin's Q variable, representing company value, has an average value of 1.226158 with a standard deviation of 1.743508, indicating that company value, as measured by an ESG Score, fluctuates significantly due to a higher deviation from the mean. The lowest Tobin's Q value is -0.2112719, generated by the Malaysian company Sime Darby Bhd in 2017, indicating a low (undervalued) company value when Tobin's Q is below one. On the other hand, the highest Tobin's Q value reaches 22.80219, produced by an Indonesian company in 2017, namely PT Unilever Indonesia Tbk. The result suggests a high (overvalue) company value or the market value of the company is higher than its book value, indicating successful management performance and high investment growth potential.

The independent variable ESG has a mean value of 57.70601, indicating an average ESG Score obtained by public companies in the ASEAN-5 countries of 57.70601 with a standard deviation of 17.03145. The significantly smaller standard deviation compared to the mean in the ESG variable indicates that the ESG score has low fluctuation, maintaining high consistency in assessing ESG factors. The lowest ESG value is 2.600429, generated by a Malaysian company, FGV Holdings Bhd, in 2020. Meanwhile, the highest ESG value is 88.36264, owned by UEM Sunrise Bhd, a Malaysian company, in 2022.

The moderation variable, Financial Flexibility (FFLEX), has a mean value of 0.505967, indicating that, on average, the total value of financial flexibility for companies with ESG Score in the ASEAN-5 countries is 50.5% with a standard deviation of 0.2509291. With a significantly smaller standard deviation than the mean of the FFLEX variable, the financial flexibility level for companies with ESG scores tends to exhibit low fluctuations, indicating high stability in

the face of financial dynamics. The lowest FFLEX value is 0.1176758, attributed to the Thai company TMB Thanachart Bank PCL in 2019. On the other hand, the highest FFLEX value is 1.187796, generated by an Indonesian company, Indocement Tungal Prakarsa Tbk PT, in 2016.

The moderation variable, DER, yields an average value of 0.8190219, indicating that the average composition of debt to equity for companies with an ESG Score is 81.90%, with a standard deviation of 0.776744. With a standard deviation surpassing the mean in the DER variable, it can be concluded that the capital structure of companies with ESG scores has high fluctuations, reflecting significant variations in the composition of debt to equity. The lowest DER value was 0.0000327, achieved by an Indonesian company, PT Vale Indonesia Tbk, in 2020. Meanwhile, the highest DER value is 7.801346, generated by a Malaysian company, Astro Malaysia Holdings Bhd, in 2016.

The correlation analysis uses pairwise correlation, with significance levels of 1%, 5%, and 10%. The results can be seen in Table 3.

Table 3. Correlation Analysis

<i>Variable</i>	TOBINSQ	ESG	FFLEX	DER	ROA	SIZE	AGE	GROWTH	INF	GDP	COV
TOBINSQ	1										
ESG	0.0899**	1									
FFLEX	-0.0199	-0.1773***	1								
DER	-0.0062	-0.0102	-0.4427***	1							
ROA	0.7213***	0.0204	0.2212***	-0.0811**	1						
SIZE	-0.2893***	0.2532***	-0.5016***	-0.0400	-0.3651***	1					
AGE	0.0803**	0.1880***	-0.1413***	-0.0966**	0.1207***	0.2427***	1				
GROWTH	-0.0125	0.0048	-0.0545	0.0232	0.1019***	0.1694***	0.0320	1			
INFL	0.0429	-0.0679*	0.0418	-0.0537	0.0948**	0.0020	0.1273***	0.0809**	1		
GDP	0.0226	-0.0750**	0.0331	-0.0412	0.1107***	-0.0518	0.0305	0.0435	0.5340***	1	
COV	-0.0512	0.1038***	-0.0041	0.0334	-0.0759**	0.0409	0.0273	0.0074	-0.3513***	-0.6959***	1

Source: Output STATA 17 (2023)

Notes:

*** : significant at 0.01 (1%)

** : significant at 0.05 (5%)

* : significant at 0.10 (10%)

Table 3 presents the relationship between ESG and company value (Tobin's Q), with a correlation coefficient of 0.0899 at a significance level of less than 5%, indicating a significant positive correlation between ESG and company value. Next, the relationship between FFLEX and company value (Tobin's Q) has a correlation coefficient of -0.0199. In contrast, the DER in relation to company value (Tobin's Q) has a coefficient of -0.0062. Both FFLEX and DER have significance levels above 10%. Meanwhile, the control variables ROA and AGE show a positive correlation with company value (Tobin's Q) at 1% and 5% significance levels. In

comparison, SIZE shows a negative correlation with company value (Tobin's Q) at a significance level of 1%. Other control variables, namely GROWTH and COV, exhibit a negative correlation with company value (Tobin's Q), while INFL and GDP show a positive correlation with company value (Tobin's Q). However, the significance level is above 10%. Based on the correlation analysis using the pairwise correlation method, multicollinearity issues are not indicated, as no values exceed 0.8 between the independent variables.

The model selection test is conducted for this panel data analysis using the Chow and Hausman tests for both models. The Chow test conducted for model 1 yielded a result of $\text{Prob} > F = 0.0000$, and the Hausman test showed a result of $\text{Prob} > \text{Chi}^2 = 0.0000$, both with a p-value of less than 0.05, indicating statistical significance. Based on this result, the model selected for Model 1 is the Fixed Effect Model. The Chow test conducted for model 1 yields a result of $\text{Prob} > F = 0.0000$, and the Hausman test shows a result of $\text{Prob} > \text{Chi}^2 = 0.0000$, both with a p-value of less than 0.05, indicating statistical significance. Based on this result, the model selected for Model 1 is the Fixed Effect Model.

This research employs the Shapiro-Wilk test as an analytical tool to assess the extent to which the data distribution in this study follows a regular pattern. Based on this test, the probability values indicate that the data is not normally distributed. After treatment, the generated data remains non-normally distributed, reverting to its original state. However, since the observational data comprises 707 samples, normality can be disregarded, and the data are likely to be normally distributed.

The test for multicollinearity is based on the average values of the the Variance Inflation Factor (VIF). According to the results, Model 1 has an average VIF of 1.58, which is less than the recommended threshold of 10. Thus, Model 1 does not have multicollinearity issues. The VIF value for the ESG variable is 1.12, which is less than 10. Meanwhile, the average VIF in Model 2 is 1.71, which is less than 10. Therefore, it can be concluded that there are no multicollinearity problems overall in Model 2. The VIF values for ESG, ESGFFLEX (ESG $\times$ Financial Flexibility), and ESGDER (ESG $\times$ Debt-to-Equity Ratio) are 2.10, 2.17, and 1.50, respectively.

The heteroscedasticity test used in the Fixed Effects model is the Breusch-Pagan Lagrange Multiplier Test. According to the result of this test, Model 1 is significantly valued, indicating that it contains heteroscedasticity issues. A Box-Cox Treatment is applied to address the heteroscedasticity problem. The results show that Model 1 is not accessible due to heteroscedasticity issues after the treatment. Next, in Model 2, the $\text{Prob} > \text{chi-square}$ value indicates a significant result, meaning that this model contains heteroscedasticity issues. To address the heteroscedasticity problem in Model 2, a Box-Cox Treatment was performed. After the treatment, the heteroscedasticity test results for Model 2 showed a $\text{Prob} > \text{chi-square}$ value that is not significant at the 1% significance level. Therefore, it can be interpreted that Model 2 is free from heteroscedasticity issues.

The autocorrelation test uses the Wooldridge test. Based on the results, the probability value yields a significant figure, indicating that Model 1 exhibits autocorrelation issues. A Cochrane-Orcutt Treatment was performed to address the autocorrelation problem in Model

1. After the treatment, the prob > F result yielded an insignificant value, indicating that Model 1 is free from autocorrelation issues. Next, in Model 2, the value is insignificant, as indicated by the probability value (Prob > F) of 0.0001. This means that Model 2 contains autocorrelation issues. The Cochrane-Orcutt Treatment will address the autocorrelation problem in Model 2. The result of this treatment is a p-value greater than the F-value, indicating that Model 2 is free from autocorrelation issues.

The F-test results for Model 1 yielded a probability value of 0.0000, which is less than the set significance threshold of 0.10%. Therefore, it can be inferred that in Model 1, all independent variables – namely, ESG, ROA, SIZE, AGE, GROWTH, INFL, GDP, and COV – simultaneously influence the dependent variable TOBINSQ. Referring to Table 3 for the results of Model 1, which has a coefficient of determination (adjusted R-square) of 0.5429. It can be interpreted that the variables covering ESG, ROA, SIZE, AGE, GROWTH, INFL, GDP, and COV collectively can explain the dependent variable, TOBINSQ, by 53.99%. In comparison, variables outside the scope of this research model can explain the remaining 46.01%.

Furthermore, Model 2 has a significant p-value of 0.0000, which is below the set significance threshold of 0.10. Hence, it can be inferred that in Model 2, all variables – namely, ESG, ESG*FFLEX, ESG*DER, ROA, SIZE, AGE, GROWTH, INFL, GDP, and COV – simultaneously influence the dependent variable TOBINSQ. Then, Table 4 shows that Model 2 has a coefficient of determination (Adjusted R-square) of 0.5958. It means that the independent variables involved in this research model can explain the dependent variable, Company Value (TOBINSQ), by 59.58%. The remaining 40.42% is attributed to other variables not covered within the framework of this research.

Table 4. Regression Result Model 1

TOBINSQ	Coef.	Std. Err.	t	Prob/2	Conclusion
ESG	0.0089257	0.0027805	3.21	0.0005***	H ₁ supported
ROA	19.34496	0.7836272	24.69	0.0000***	
SIZE	-0.0462121	0.0393305	-1.17	0.1200	
AGE	-0.0004625	0.0013884	-0.33	0.3695	
GROWTH	-0.0115451	0.0040411	-2.86	0.0020***	
INFL	0.0214278	0.0303544	0.71	0.2400	
GDP	0.0475729	0.0169501	-2.81	0.0025***	
COV	-0.2826255	0.1388076	-2.04	0.0210	
_cons	0.9933511	0.7086889	1.40	0.0805*	

Source: Output STATA 17 (2023)

Notes:

*** : the significance of the influence at the level 1%

** : the significance of the influence at the level 5%

* : the significance of the influence at the level 10%

Table 5. Regression Result Model 2

TOBINSQ	Coef.	Std. Err.	t	Prob/2	Conclusion
ESG	0.0301344	0.0035785	8.42	0.0000***	
ESG*FFLEX	-0.0359862	0.0037283	-9.65	0.0000***	H ₂ supported
ESG*DER	-0.0038673	0.0010946	-3.53	0.0000***	H ₃ supported
ROA	19.12132	0.7383762	25.90	0.0000***	
SIZE	-0.2643272	0.0435695	-6.07	0.0000***	
AGE	-0.0013162	0.0013117	-1.00	0.1580	
GROWTH	-0.0093792	0.0038037	-2.47	0.0070***	
INFL	0.029781	0.0285153	-1.04	0.1485	
GDP	-0.0475636	0.0159112	-2.99	0.0015***	
COV	-0.2426086	0.1303698	-1.86	0.0315**	
_cons	5.043847	0.7935918	6.36	0.000	

Source: Output STATA 17 (2023)

Notes:

*** : the significance of the influence at the level 1%

** : the significance of the influence at the level 5%

* : the significance of the influence at the level 10%

The variable ESG has a coefficient of 0.0089257 with a p-value of 0.001. Since it is a one-tailed hypothesis, the p-value is divided by two, resulting in 0.0005. The result indicates significance at the 1% significance level. Table 5 shows that Hypothesis 1 (H1) is supported, suggesting that ESG has a significant impact on Company Value. The influence of ESG factors, moderated by Financial Flexibility (FFLEX), yields a coefficient value of -0.0359862 with a probability value of 0.000, indicating significance at the 1% significance level. Table 5 also shows that Hypothesis 2 (H2) is supported, suggesting that financial flexibility can mitigate the negative impact of ESG factors on Company Value. The influence of ESG factors, moderated by Capital Structure (DER), yields a coefficient value of -0.0038673 with a probability value of 0.000, indicating significance at the 1% significance level. Table 5 demonstrates that Hypothesis 3 (H3) is supported, suggesting that capital structure can mitigate the negative impact of ESG factors on Company Value.

For the control variable, ROA, the coefficients are 19.34496 in Model 1 and 19.12132 in Model 2. This indicates that both models yield a highly significant ROA, with a p-value of 0.000. As a measure of profitability, ROA is positively correlated with company value. Higher profitability directly enhances company value, making ROA a critical control variable. Firm Size (SIZE) coefficient is -0.0462121 in Model 1 and -0.2643272 in Model 2. Model 1 shows no significance (p-value = 0.240), whereas model 2 shows significance (p-value = 0.000). The negative coefficient suggests that larger firms might have a lower Tobin's Q, indicating that as firms grow, their market value relative to their book value might decrease due to potential inefficiencies or market perceptions. Firm Age (AGE) coefficient is -0.0004625 in Model 1 and -0.0013162 in Model 2. Notably, both models show no significance, with p-values of 0.739 and 0.316, respectively. The firm's age does not significantly affect its value, suggesting that its maturity does not necessarily impact its market valuation.

Firm Growth (GROWTH) coefficient is -0.0115451 in Model 1 and -0.0093792 in Model 2. Both models show significance with p-values of 0.004 and 0.014, respectively. For inflation (INFL), the coefficients are 0.0214278 in Model 1 and 0.029781 in Model 2, both of which show no significance (p-values = 0.480 and 0.297). Inflation does not significantly impact company value, suggesting that inflationary pressures are either effectively managed or do not play a crucial role in the valuation of these firms during the study period, as indicated by the GDP coefficients of 0.0475729 in Model 1 and -0.0475636 in Model 2. Model 1 shows significance (p-value = 0.005), whereas Model 2 shows significance (p-value = 0.003). The positive coefficient in Model 1 and the harmful coefficient in Model 2 indicate varying impacts of economic conditions on company value, potentially reflecting different economic cycles or sector-specific responses to GDP changes. COVID-19 (COV) coefficient is -0.2826255 in Model 1 and -0.2426086 in Model 2. The significance of both models is demonstrated by p-values of 0.042 and 0.063, respectively. The negative coefficient indicates the adverse impact of the COVID-19 pandemic on company value, underscoring the economic disruptions it has caused.

This research contributes to the growing body of literature on sustainability and corporate finance by providing empirical evidence on the positive impact of ESG practices on company value in the context of emerging ASEAN-5 markets. Uniquely, the study integrates two financial moderators—financial flexibility and capital structure—offering a more comprehensive understanding of how internal financial strategies can strengthen or weaken the relationship between ESG and firm value. By focusing on ASEAN-5 countries, this research addresses a geographical gap in ESG-related studies, which have been predominantly concentrated in developed markets. The findings are expected to benefit investors, policymakers, and corporate managers by highlighting the strategic importance of ESG integration and financial readiness in enhancing long-term firm value, particularly in dynamic and vulnerable economic environments.

The novelty of this research lies in its integrated analysis of ESG practices and their influence on company value, introducing financial flexibility and capital structure as moderating variables. This approach remains underexplored in prior studies, especially within the ASEAN-5 context. While most existing research focuses on the direct relationship between ESG and firm performance, this study uniquely examines how internal financial conditions can alter that relationship, offering a more nuanced perspective. Furthermore, by focusing on the ASEAN-5 countries, which are underrepresented in the ESG literature, and covering the period from 2016 to 2022, including the COVID-19 pandemic, this research provides timely and region-specific insights that enhance the understanding of ESG's strategic role in emerging markets.

Discussion

According to Table 4, the research results suggest that ESG factors have a substantial impact on company value. This finding indicates that companies' increasing implementation of ESG practices can positively affect company value. This research aligns with several previous studies by Aydoğmuş et al. (2022) and Wong et al. (2021), which demonstrate that

companies with ESG scores can positively influence their company value. In recent years, investor interest and global community concerns about overall corporate risks have increased, highlighting the profits generated by companies and focusing on environmental and other non-financial factors. This includes the social responsibility of companies to society and good corporate governance. They refer to the legitimacy theory, which posits that companies should act in accordance with society's beliefs, expectations, standards, and values to achieve legitimacy and social permission to operate. Thus, companies will strive to align their business operations with activities related to the environment, social aspects, and good governance to improve their ESG scores and meet stakeholders' expectations. This can signal credibility in conducting business in line with the company's ESG commitments.

Based on Table 5, the research results indicate that ESG, when moderated by financial flexibility, can mitigate the negative impact on company value. This finding is supported by Guo et al. (2020), which suggests that companies with financial flexibility can quickly enter the capital market, thereby meeting more extensive capital requirements. With sufficient capital, companies are better positioned to meet the expectations of various stakeholders. Suppose the company fulfills the stakeholders' expectations, particularly in environmental and social aspects, and engages in suitable corporate governance activities. In that case, the company and stakeholders can establish a positive relationship. This capability can create a positive reputation and contribute to the overall increase in company value.

Based on Table 5, the research results reveal that the moderation of capital structure can weaken the negative impact of ESG on company value. This finding differs from Hannawanti and Naibaho (2021) and Bae et al. (2021), who state that capital structure can harm company value. The results of this research suggest that adopting an optimal capital structure by increasing a company's debt level can help mitigate the negative impact of implementing ESG, which is often considered a costly endeavor and may reduce a company's value. This aligns with the findings of Vo (2021) that states an optimal capital structure creates solid and stable financial conditions, ultimately enhancing company value. Companies with rapid business development require substantial sources of funding. This considers additional funding options from external parties to meet the company's financial needs for business development, including the implementation of ESG concepts. Companies with long-term business growth are likely to provide high returns to investors, ultimately increasing their company value (Vo, 2021).

Furthermore, Table 5 shows that H1 is supported, indicating that ESG has a significant impact on company value. This study found that the adoption of ESG practices has a positive effect on company value. This means companies adopting more ESG practices tend to have higher company value. Exemplary ESG implementation can enhance investor and stakeholder confidence, increasing the company's stock value and overall company value. The implications of these results underscore the importance of companies paying attention to and enhancing their ESG practices. By implementing sustainable and socially responsible policies, companies can increase their value in the eyes of investors and the public. This can also lead to long-term sustainability and competitive advantage.

Table 5 indicates that H2 is supported, suggesting that financial flexibility can weaken the negative impact of ESG on Company Value. The influence of ESG factors, moderated by Capital Structure (DER), yields a coefficient value of -0.0038673 with a probability value of 0.000, indicating significance at the 1% significance level. The research shows that financial flexibility can weaken the negative impact of ESG implementation on company value. Financial flexibility allows companies to more easily adjust their strategies and manage financial risks, which in turn can strengthen the positive impact of ESG on company value. The implication of this finding is that companies must consider their financial flexibility as part of their risk management strategy. By having good financial flexibility, companies can be more responsive to changes in the business environment and better integrate ESG practices without sacrificing company value. This also suggests that investors may be more inclined to invest in companies with high financial flexibility and a strong commitment to ESG.

Table 5 indicates that H3 is supported, suggesting that capital structure can mitigate the negative impact of ESG factors on Company Value. The research findings indicate that a company's capital structure can mitigate the negative impact of ESG implementation on its value. An optimal capital structure, which balances debt and equity, can help companies manage the costs associated with ESG implementation and maintain or increase their company value. Company managers must consider an optimal capital structure to support their ESG initiatives. By effectively managing the composition of debt and equity, companies can reduce the cost of capital and maximize company value. Companies with a healthy capital structure and good ESG practices are more attractive to investors.

The analysis of control variables reveals that ROA has a significantly positive impact on company value, indicating that high profitability can enhance a company's market value. Firm size shows a significantly negative impact in the second model, suggesting that larger companies may face efficiency declines or negative market perceptions. Firm growth exhibits a significantly negative impact, possibly due to high expansion costs or investor skepticism regarding the sustainability of such development. The firm age and inflation variables do not show significant impacts, indicating that these factors do not play an essential role in determining company value in this context. GDP shows significant effects with varying directions in the two models, reflecting the complex influence of economic conditions on company value. The COVID-19 pandemic has had a profoundly negative impact, underscoring the economic disruptions it has caused and the importance of effective crisis management strategies. These findings emphasize the importance of profitability, adequate firm size, effective growth management, and adaptability to economic conditions and crises in determining a company's value.

Conclusion

This research examines the influence of ESG on company value with financial flexibility and capital structure as moderators. The purposive sampling method yielded 101 companies with ESG scores in the ASEAN-5 region, comprising Indonesia, Malaysia, Singapore, the Philippines, and Thailand, from 2016 to 2022, resulting in 707 observations. Based on the conducted research, several conclusions can be drawn. First, ESG has a positive impact on the Company Value of companies with ESG scores in the ASEAN-5 region during the period 2016-2022, consistent with the author's hypothesis development. Second, Financial Flexibility can weaken the negative impact of ESG on the Company Value of companies with ESG scores in the ASEAN-5 region during 2016-2022, aligning with the author's hypothesis development. Third, Capital Structure can weaken the negative impact of ESG on the Company Value of companies with ESG scores in the ASEAN-5 region during the period 2016-2022, consistent with the author's hypothesis development.

Based on the research, the following implications are drawn for various parties. For prospective investors, the higher implementation of ESG practices, which prioritizes financial flexibility and a sound capital structure, can enhance the company's value. Therefore, investors may consider this in planning their investments. Then, for companies to improve financial flexibility and maintain a sound capital structure, active participation in implementing ESG practices is encouraged. This engagement is expected to enhance the company's value.

During this research, the researcher encountered several limitations. Many companies in the ASEAN-5 region needed to meet the research criteria, lacked more ESG scores, and had incomplete data during the 7-year study period, namely from 2016 to 2022. Consequently, only 101 companies, representing 707 observations, are included in the research sample. Additionally, variables outside the scope of this study may influence company value.

The results of the statistical testing indicate that ESG practices have a significant positive impact on company value, while financial flexibility and capital structure serve as important moderating factors. For the industry, this implies that integrating ESG into corporate strategies, supported by strong financial management, can enhance firm value and investor confidence—especially during periods of economic uncertainty. Companies are encouraged to invest in sustainability initiatives while maintaining optimal financial flexibility and capital structures to remain resilient and competitive. For government policymakers, these findings underscore the importance of promoting ESG adoption through regulatory frameworks, incentives, and standardized disclosure requirements, particularly in emerging markets, to foster sustainable economic growth and enhance capital market stability across the ASEAN region.

The primary limitation of this research is the restricted sample size, which comprises only 101 publicly listed companies from the ASEAN-5 region that have complete ESG scores and financial data for the period from 2016 to 2022. This limitation may affect the generalizability of the findings to the broader ASEAN or global context. Additionally, the

study relies solely on secondary data and does not account for qualitative aspects of ESG implementation or differences in industry-specific ESG practices. For future research, it is recommended to expand the sample to include more ASEAN member countries or other emerging markets, incorporate qualitative assessments of ESG strategies, and explore the role of other moderating variables, such as innovation capability, corporate governance mechanisms, or stakeholder engagement, in strengthening the ESG–firm value relationship.

Acknowledgment

The author would like to thank all those who have provided support, assistance, and valuable feedback in completing this research. Special thanks are extended to the university and colleagues for their contributions during the research and writing process. Our funding source is Pelita Harapan University.

About The Authors

Dr. Eduard Ary Binsar Naibaho, S.E.,M.M.,MBA.,CMA.,CIBA.,CIFM.,CIABV is a lecturer and researcher with expertise in financial management, corporate governance, and sustainability reporting. He contributes to studies on banking performance, ESG disclosure, and strategic financial decision-making. In addition to his academic career, he also serves as a trainer in several corporate employee development programs, particularly in the field of corporate finance, supporting professional growth and financial literacy within organizations.

Dr. Apriani Simatupang, S.E., M.M has been actively involved in numerous academic research projects and publications focusing on banking performance, digital transformation, sustainable finance, and entrepreneur funding. She currently serves as the Head of the Management Study Program Laboratory at Universitas Pelita Harapan (UPH), where she plays a vital role in research development, academic coordination, and student mentorship in financial management and sustainability.

Zalfa Nadira is a researcher and academic contributor whose interests include corporate finance, sustainability, and digital transformation in business. She supports studies on financial performance and ESG implementation within the ASEAN context.

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