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ESG AND PROFITABILITY: THE MODERATING OF LEVERAGE IN THE INDONESIAN ENERGY SECTOR

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ABSTRAK

Sektor energi di Indonesia menghadapi dinamika dan tantangan kompleks seperti dampak lingkungan, kebutuhan investasi untuk infrastruktur, tekanan transisi energi, dan regulasi yang ketat. Penerapan ESG menjadi penting sebagai salah satu strategi keberlanjutan perusahaan. Namun, belum banyak studi yang mengkaji bagaimana ESG berkontribusi terhadap profitabilitas perusahaan energi, terutama dalam interaksinya dengan struktur keuangan. Penelitian ini bertujuan untuk menganalisis pengaruh skor ESG, Debt to Equity Ratio (DER), Current Ratio (CR) terhadap profitabilitas yang diukur dengan Return on Asset (ROA) pada perusahaan sektor energi yang terdaftar di Bursa Efek Indonesia (BEI), serta peran moderasi dalam hubungan antara ESG dan ROA. Dengan pendekatan kuantitatif kausal, penelitian ini menggunakan Teknik pengambilan sampling purposive sampling dengan menggunakan lima perusahaaan sektor energi yang terdaftar sebelum tahun 2015 dan memiliki data ESG dan laporankeuangan lengkap selama periode 2015-2024. Analisis data menggunakan regresi data panel dan hasil penelitian menunjukkan bahwa Common Effect Model merupakan model yang tepat dalam penelitian ini dan hasil pengujian menunjukkan bahwa ESG, DER, dan CR berpengaruh positif signifikan terhadap profitabilitas dan leverage yang diukur dengan DER terbukti memoderasi secara negative pengaruh ESG terhadap profitabilitas. Kesimpulan dari studi ini menekankan pentingnya pengelolaan struktur modal agar implementasi ESG dapat memberikan nilai tambah optimal bagi kinerja keuangan perusahaan. Implikasi praktisnya, perusahaan energi perlu menyeimbangkan komitmen keberlanjutan dengan strategi keuangan yang sehat. Keterbatasan penelitian ini terletak pada cakupan sektor dan variabel yang digunakan, sehingga studi lanjutan disarankan untuk memperluas sektor industri dan mempertimbangkan variabel penjelas lainnya guna memperkaya pemahaman tentang dinamika ESG dan profitabilitas

Keywords: ROA, ESG, Current Ratio, Debt Equity Ratio, sektor energi

ABSTRACT

The energy sector in Indonesia has a lot of complicated challenges for business, such as regulatory requirements, infrastructure investment, environmental effects, and pressures from the energy transition. Environmental, social, and governance (ESG) practices ought to be given top priority in corporate sustainability plans. The relationship between ESG and profitability, however, has not received much attention in research, especially when it comes to the role as a mediating factor in energy companies. This study analyzes the role of DER as a moderating variable of the effect of ESG on ROA, the direct effect of ESG, DER, and CR on the profitability of energy sector companies listed on the IDX. The purposive sampling technique is used in this quantitative & causal research by obtaining a sample of five energy sector companies that have published a complete financial report for the year 2015-2014, an ESG score, and were listed on the IDX before 2015. The results of the panel data regression test found that DER, CR, and ESG had a meaningful effect on profitability. This shows that the capital structure of the company should be managed to support and optimize the implementation of ESG to create added value for the company's profitability. The practical implications of this study suggest that an equilibrium should be achieved between corporate financial performance and corporate sustainability commitment. Further research should be carried out to investigate various other sectors and other variables. The main limitations of this study are the sector and the variables considered in this study.This study analyzes the role of DER as a moderating variable of the effect of ESG on ROA, the direct effect of ESG, DER, and CR on the profitability of energy sector companies listed on the IDX. The purposive sampling technique is used in this quantitative & causal research by obtaining a sample of five energy sector companies that have published a complete financial report for the year 2015-2014, an ESG score, and were listed on the IDX before 2015. The results

of the panel data regression test found that DER, CR, and ESG had a meaningful effect on profitability. This shows that the capital structure of the company should be managed to support and optimize the implementation of ESG to create added value for the company's profitability. The practical implications of this study suggest that an equilibrium should be achieved between corporate financial performance and corporate sustainability commitment. Further research should be carried out to investigate various other sectors and other variables. The main limitations of this study are the sector and the variables considered in this study.

Kata Kunci: *ROA, ESG, Current Ratio, Debt Equity Ratio, energy sector*

1. INTRODUCTION

The ability to maintain profitability in the global economy has become an issue of tremendous importance. Profitability is essential to a company's operational success and measures a company's economic, operational, and financial success. ROA is a common ratio to measure a company's profitability. It shows how well a company uses its assets to make a profit (Brigham & Houston, 2019). Businesses are expected to prioritize the Triple Bottom Line (TBL), which emphasizes profit, social equity (people), and ecological sustainability (planet), in recognition of the significance of sustainability in the marketplace. Stakeholders such as investors, the regulatory environment, and the general public are putting pressure on businesses to be socially and environmentally responsible (Freeman et al., 2021).

Investors now consider a company's long-term viability in addition to its historical financial performance when making decisions. Social equality, climate change, and good governance are now important considerations when making investment decisions. Sustainability is now a priority for global corporate strategy and investment, and it is operationalized through the implementation of Environment, Social, and Governance (ESG) initiatives.(Koundouri et al., 2022). Another element influencing this is the Sustainable Development Goals (SDGs), an international agenda established by United Nations member states in 2025 (United Nation, 2015). As a result, businesses must also take action to support sustainable development. Businesses should consider Environmental, Social, and Governance (ESG) considerations in addition to profit to maintain long-term corporate sustainability. Companies with high ESG scores are seen as more trustworthy and risk-tolerant, which raises their long-term worth (Friede et al., 2015).

Businesses in the energy sector, which include coal, oil and gas, and power generation, are vital to the growth of the national economy. One of the biggest contributors to the national economic structure, the mining and quarrying subsector continuously made between 11% and 13% of Indonesia's GDP between 2015 and 2024. In the meantime, though in lesser amounts, the sub-sector of gas and electricity supply also contributed steadily (Badan Pusat Statistik, 2019, 2024). According to this data, the energy sector is the main driver of economic growth through exporting energy commodities, supplying essential infrastructure, and domestic consumption. However, companies in the energy sector face complicated dynamics and challenges because their operations have an impact on the environment and often require large infrastructure investments. These include pressures to transition to more environmentally friendly energy sources and the requirement for substantial financial leverage due to shifting energy regulations.. Through POJK No. 51 of 2017 (Otoritas Jasa Keuangan, 2017) and SEOJK No. 16 of 2021 (Otoritas Jasa Keuangan, 2021), energy sector companies in Indonesia are also faced with greater transparency in ESG activities. Additionally, they are pushed towards adopting green innovations through regulation, such as the Minister of Energy and Mineral Resources Regulation No. 48 of 2017 on Supervision of Business in the Energy and Mineral Resources Sector, and are also faced with global pressure and increasingly stringent environmental regulations (Kementerian Energi dan Sumber Daya Mineral, 2017).

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It would be interesting to look into these dynamics, which include DER and CR variables, in connection with how ESG activities affect the probability of Indonesia's energy sector, as shown by ROA. Because of the public and regulatory attention to environmental aspects in this sector, ESG activities are a strategic issue and a significant financial challenge. Additionally, empirical research on how ESG, DER, and CR affect profitability varies by industry and nation. For example, a German study by Velte (2017) discovered that ROA is positively impacted by ESG. ESG also has a positive impact on ROA, according to research on European public companies by De Lucia et al. (2020). Findings from the Indonesian manufacturing sector, Nugroho & Hersugondo (2022)corroborate this conclusion. Conversely, Research on multinational corporations in Latin America showed the negative impact of ESG on profitability. found that ESG has a negative effect on profitability. ESG activities require investment. Cash flow is required for the company's operations. It can reduce a company's financial performance. (Duque-Grisales & Aguilera-Caracuel, 2021). The company's financial performance suffers because of the high implementation costs of ESG. Additionally, this is consistent with the findings of the study by Nareswari et al. (2023).

Similarly, studies looking into how DER affects ROA have also produced conflicting results. According to Situmorang's (2023) research, DER considerably reduces ROA in the media, printing, and advertising subsectors. A high DER suggests that a business is using more debt than equity for funding, which requires more investigation. The study also supports the detrimental effect of DER on ROA. The results show that a capital structure with less debt than equity tends to increase profitability. For instance, DER has a positive effect on ROA, according to Priyatnasari & Hartono (2019), while Setyadi & Ida (2024) found no significant impact of DER on ROA.

Consistently, the result of many studies investigating the influence of CR on ROA is also mixed. A study by Putri & Kusumawati (2020), Situmorang (2023) highlighted that CR had a negative impact on the ROA. Too high CR is leading to lower profits. It occurs when there is an excessive idle current assets, and not enough active working capital management and eventually less of companies profits. Nevertheless, the research conducted by Setyadi & Ida (2024) and Zarkasyi et al. (2021) both prove that CR has a positive impact on ROA and propose the opinion that company's profitability is improved as its liquidity is sufficient.

The persistence of contradictory findings in different industries and locations suggests that a study specific to the energy sector within Indonesia is warranted. This is an industry that functions under a very complex set of regulatory, environmental and operational challenges which could significantly change longstanding financial relationships. As the energy sector is an extremely capital-intensive industry requiring significant and continuous investment, this study, therefore, uniquely considers the DER as a decisive moderating variable. Consequently, the present study is designed to achieve two primary objectives: (1). to analyze the direct effects of Environmental, Social, and Governance (ESG) performance, Current Ratio, and DER on the profitability of companies listed on IDX, (2). to elucidate the specific mechanism by which DER attenuates—or weakens—the relationship between ESG initiatives and financial performance.

ESG and Profitability

Stakeholder theory also suggests a basic premise that corporate effectiveness and success are to crop on how an organization satisfied the interest s of its constituents or stakeholders that leads in superior performance of the organization (Freeman, 1984). Among these theoretical foundations, recent literature suggest that Environmental Social Governance (ESG) activities have become central mechanisms to the development of cooperative capital-market relationships as one

dimension of a firm's capacity to create sustained long-term value (Amosh et al., 2023, Darsono et al., 2025). 'ESG performs a strategic role ESG performance can be an instrument to improve and strengthen corporate reputation and build stakeholder confidence. Additionally, with positive financial effects, Nugroho & Hersugondo (2022) highlight the importance of these gains in perceived credibility and commitment to sustain continued support from investors, customers, employees, and society at large

H1: ESG has a positive effect on profitability.

DER and Profitability

According to the trade-off theory (Jensen & Meckling, 1976) businesses should weigh the tax advantages of debt (tax shield) against the costs of distress and bankruptcy if debt is excessive in order to determine how best to use debt and equity. Businesses can increase profitability by utilizing tax shields and agency benefits when they have moderate debt levels. The use of debt to fund a business's operations is referred to as leverage. The higher the leverage, the higher the expected profit for the company (Putri & Kusumawati, 2020). To satisfy stakeholder expectations, businesses must strive for higher profit levels, which can eventually boost the firm's profitability (Indrawan et al., 2020). Therefore, a business that relies more on debt is under pressure to produce returns on its asset investments that are higher than the cost of debt.

H2: DER has a positive effect on profitability.

CR and Profitability

According to the signaling theory, Businesses use financial data to update investors on their current situation and possible future financial prospects (Brigham & Houston, 2019). A high CR may be a good indicator of the company's financial credibility and liquidity stability. Investor confidence, the company's reputation, and ultimately profitability could all be enhanced by this signal. Strong liquidity, as indicated by CR, indicates that the company can settle its short-term debt with its current assets. This suggests strong financial standing and efficient asset management, both of which have the potential to indirectly increase profitability (Situmorang, 2023). Thus, in theory, a higher CR should indicate that the business is better at handling its finances, which should increase profitability.

H3: CR has a positive effect on profitability.

ESG, DER, and profitability

The Resource-Based View (RBV) states that a business has a competitive advantage if it can effectively manage and use resources that are valuable, scarce, difficult to duplicate, and difficult to replace (Barney, 1991). Programs for sustainability can be strategic assets that increase productivity, foster stakeholder loyalty, and enhance reputation. All of which contribute to long-term profitability (Jovita, 2023). However, implementing ESG requires a significant financial outlay in order to create corporate social responsibility (CSR) initiatives, meet new environmental standards, and set up transparent governance systems (Nareswari et al., 2023). The trade-off theory states that a company's DER is determined by the advantages and disadvantages of using debt are balanced. It is more challenging to finance ESG initiatives as effectively as possible when a company's financial flexibility is restricted by a high DER (Duque-Grisales & Aguilera-Caracuel, 2021). Due to increased financial risks and liquidity constraints, companies with high DER may allocate funds for ESG in a way that is either symbolic or less than ideal. Under these conditions, ESG ceases to be a strategic asset that boosts profitability and instead turns into an extra burden that offers no tangible financial benefit (Han & Jo, 2024). For example, a firm that practices ESG only to please stakeholders but lacks sufficient resources and depends heavily on debt will lose its advantages because of decreasing profitability.

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H4: DER negatively moderates the effect of ESG on profitability.

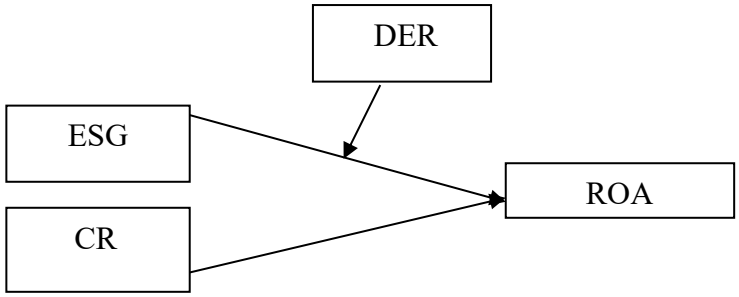

Figure 1. Research Model

Figure 1 shows a research model that describes how CR and ESG affect business profitability as determined by ROA. The company's liquidity position is reflected in CR. Furthermore, this model incorporates DER as a moderating variable. According to the DER, this moderating role suggests that a company's capital structure may mitigate the impact of ESG on profitability.

2. RESEARCH METHOD

This study uses a quantitative approach and a causal research design to investigate the effects of ESG score, DER, and CR on the profitability of energy sector companies listed on IDX. In addition, this article examines the moderating effect of DER on the relationship between profitability and ESG. The research population includes all energy firms listed on the IDX before 2015. Purposive sampling was the sampling method used with the criteria of IDX-listed energy companies that have complete ESG score data and annual financial reports from 2015 to 2024. Following this criterion, 5 companies can be used as samples in this study.

Table 1. Sample Companies

No.	Company
1.	PT Alamtri Resources Indonesia Tbk
2.	PT Bukit Asam Tbk
3.	PT Bumi Resources Tbk
4.	PT Indo Tambangraya Megah Tbk
5.	PT United Tractors Tbk

This study utilized a total of 50 observational data points, comprising a balanced panel of 5 sample companies over 10 years (2015-2024). The minimum sample size of 30 has been reached by these 50 observations (Sugiyono, 2019). Panel data regression analysis was used to analyze the data using EVIEWS 13. This technique was employed to test the causal relationship between the variables of ESG, DER, CR, and profitability, as well as to examine the moderating effect of DER.

Table 2. Operational Variable
Source: Researcher Observation Results (2025)

No.	Variable	Description	Scale
1	Independent Variable:	X_1: ESG Score — Data ESG Score from Refinitive	ratio
		X_2: *Current Ratio* — $Current\ Ratio = \frac{Current\ Assets}{Current\ Liabilities}$ (Gitman & Zutter, 2012)	ratio

2	Moderator Variable: Leverage	Z: *Debt to Equity Ratio*	$Debt\ to\ Equity\ Ratio = \frac{Total\ Liabilities}{Total\ Equity}$ (Gitman & Zutter, 2012)	ratio
3	Dependent Variable: Financial Performance	Y: ROA	$Return\ on\ Assets = \frac{Earning\ After\ Tax}{Total\ Assets}$ (Gitman & Zutter, 2012)	ratio

3. RESULT AND DISCUSSION

Result

Model Selection

The Chow test was conducted to select the appropriate model between CEM and the Fixed Effect Model (FEM). The tests show a p-value of 0.0832 for multiple regression and 0.0980 for moderating regression (Table 3) > 0.05. These indicate that the CEM is the more appropriate model. Subsequently, the Lagrange Model (LM) test was performed. The results of the LM test for selecting between CEM and the Random Effect Model (REM) showed Breusch-Pagan cross-section probability value of 0.9947 for multiple regression and 0.9886 for moderating regression (Table 4) >0.05, so the CEM is confirmed as the appropriate model for this research.

Table 3. Chow Test Result
Source: Eviews 13 (2025)

Model	Regression Type	*Effects Test*	Prob.
Model 1	Multiple Regression		**0.0832**
Model 2	Moderating Regression	*Cross-section* X^2	**0.0980**

Table 4. LM Test Result
Source: Eviews 13 (2025)

Model	Regression Type	Breusch-Pagan Prob.
Model 1	Multiple Regression	**0.9947**
Model 2	Moderating Regression	**0.9886**

The results of the Chow test and LM test indicate that the appropriate model is CEM. Therefore, the panel data regression model used is CEM. Based on the results of the panel data regression test, the following regression equation is obtained:

Model 1 Multiple Regression:
ROA= -28.03235 +0.34397ESG_SCORE-0.23672DER+8.49770CR

Model 2 Moderating Regression:
ROA= -30.92279 +0.422479ESG_SCORE+ 17.50031DER+7.230428CR-0.224726ESG__DER

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Table 5. CEM Panel Data Multiple Regression
Source: Eviews (2025)

Variable	Coeff.	Std. Error	t-Stat	Prob.
C	-28.03235	8.121821	-3.451486	**0.0012**
ESG_SCORE	0.34397	0.108967	3.156649	**0.0028**
DER	-0.23672	0.989993	-0.239117	**0.8121**
CURRENT_RATIO	8.49770	1.963185	4.328526	**0.0001**
Adjusted R^2	**0.371686**			
F-stat.	10.66217			
Prob(F-stat.)	**0.000019**			

The estimation results from the multiple regression indicate that ESG has a positive and significant effect on ROA, with a regression coefficient of 0.34397 and a significance value of 0.0028 < 0.05. DER demonstrated a negative and no significant impact on ROA, with a regression coefficient of -0.23672 and a significance value of 0.8121 > 0.05. CR has a positive and significant effect on ROA, evidenced by a coefficient of 8.49770 and a significance value of 0.0001 < 0.05.

The adjusted R^2 value is 37.17%. This suggests that ESG, DER, and CR can account for variance in profitability as determined by ROA. is affected by variables not included in the model. Additionally, the probability value was 0.000019 < 0.05, and the F-statistic was 10.66217. This result shows that the ESG score, DER, and CR have a simultaneous significant impact on ROA.

Table 6. CEM Panel Data Moderating Regression
Source: Eviews (2025)

Variable	Coeff.	Std. Error	t-Stat	Prob.
C	-30.92279	7.516098	-4.114208	**0.0002**
ESG_SCORE	0.422479	0.103230	4.092609	**0.0002**
DER	17.50031	5.808956	3.012643	**0.0042**
CURRENT_RATIO	7.230428	1.848681	3.911129	**0.0003**
ESG__DER	-0.224726	0.072692	-3.091483	**0.0034**
Adjusted R^2	**0.470237**			
F-stat.	11.87353			
Prob(F-stat.)	**0.000001**			

With a regression coefficient of 0.422479 and a significance value of 0.0002 < 0.05, the regression table's estimation results show that ESG significantly and positively affects ROA. With a regression coefficient of 0.0042 < 0.05, DER also showed a positive and significant effect on ROA. Similarly, a coefficient of 7.230428 and a significance value of 0.0003 < 0.05 show that CR has a positive and significant impact on ROA. On the other hand, the relationship between ESG and ROA is significantly moderated negatively by DER.

The adjusted R^2 value is 47.02%. This indicates that variation in profitability, as measured by ROA, can be explained by ESG, DER, CR, and the interaction between ESG and DER. The remaining 52.98% is influenced by other factors outside the model. Furthermore, the F-stat. value

of 11.87353, with a prob. value of 0.000001 < 0.05. This result demonstrates that the ESG score, DER, and CR have a simultaneous significant effect on ROA.

Table 7. Hypothesis Test Result

Hypothesis	Model 1: Multiple Regression	Model 2: Moderating Regression
H1	Accepted	Accepted
H2	Rejected	Accepted
H3	Accepted	Accepted
H4	-	Accepted

Discussion

Effect of ESG on profitability

The results demonstrated that, for both multiple regression and moderating regression, ESG had a statistically significant positive impact on financial performance. According to this study, improved sustainability performance, as measured by a higher ESG Score is associated with increased profitability, as shown by a higher ROA. This outcome aligns with the theoretical frameworks of stakeholder theory and agency theory. A company's financial performance can be enhanced by robust ESG initiatives that show its commitment to sustainability. Businesses that uphold social and environmental responsibility are more likely to win over stakeholders, reduce agency conflicts, draw in investors, and reduce risk.

The study also shows that Indonesian energy companies are reaping long-term rewards from ESG implementation, such as improved risk mitigation and reputation. These long-term advantages seem to outweigh the upfront expenses of implementing ESG, establishing ESG as a wise investment that boosts business profitability. This result is in line with earlier studies by Gholami et al., (2022), Velte (2017), who also found a significant positive impact of ESG on financial performance. This finding is also consistent with the study of Hwang et al., (2021) on Korean firms. Strong ESG performance was found to have lessened the COVID-19 pandemic crisis's impact on earnings decline. A smaller decrease in profits was associated with better ESG performance. This outcome shows that ESG initiatives can increase a company's likelihood, supporting the ESG performance score in uncertain times. Companies and stakeholders can develop relationships and trust through ESG initiatives. ESG initiatives support better financial results by offering useful non-financial data.

Effect of DER on profitability

The study's empirical findings show that in the multiple regression model, DER does not have a significant effect on ROA. This result is in line with the studies (Cahyana & Suhendah, 2020, Fianti et al., 2022, Hutami & Nursiam, 2024), which found that DER does not always directly affect financial performance. The use of debt does not directly reflect the efficiency of asset utilisation to generate profits, so that an increase in debt resulting in additional interest costs is not offset by an increase in company profits.

However, in the moderation regression model that included DER as a moderating variable in the relationship between ESG and ROA, the study's empirical results demonstrate that DER significantly improves profitability as measured by ROA. This relationship suggests that intentionally raising leverage could increase company profitability. This leverage effect mechanism seems to be the productive use of debt, the firm's asset-use efficiency and profitability will increase if the returns on debt-financed investments exceed the cost. This result is consistent with a prior study of banks conducted by Christina et al. (2025) which also discovered a favorable

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and noteworthy effect of DER on ROA. The finding is also aligned with the capital structure trade-off theory, where a company considers the cost of financial distress to using the tax shield benefit of debt. In maximizing value, the company will reach an optimal capital structure. In their study of mid-sized ICT firms, Kim et al. (2023) further supported the idea that productive and efficient use of debt can boost profitability by confirming the significant impact of DER on ROA.

Effect of CR on profitability

The results of this study show that among Indonesian energy sector companies, the CR and ROA have a significant positive impact on multiple regression and moderating regression. This finding suggests that greater corporate liquidity, specifically a strong capacity to meet short-term obligations, positively affects profitability. A high current ratio lowers the risk of financial distress and encourages smoother, efficient business continuity by showing that there are sufficient liquid assets to meet short-term obligations. This financial stability boosts confidence among creditors and investors about the firm's financial health and supports more favorable conditions for ongoing operations and strategic business development. This observation is consistent with earlier empirical studies. According to Tasmil et al. (2019), Zarkasyi et al., (2021) the CR has a positive and significant impact on profitability measures. This supports the idea that sound liquidity management is a fundamental component of financial performance.

DER moderates the effect of ESG on profitability

We find that DER has a significant effect on the negative relationship of Return on Assets (ROA) with Environmental, Social, and Governance (ESG). The results reveal that the energy sector expects to suffer a significant reduction in benefits when debt grows, though ESG practices have a positive impact on profitability. Higher financial risk or leverage can have the potential to reduce the value of ESG investments, possibly impairing overall profitability. Heavy indebtedness can limit a company’s financial flexibility and, accordingly, the capacity to implement sustainability commitments in the long term. Therefore, when supported by unsustainable capital structures, the positive market signals brought about by strong ESG performance are accompanied by increased financial risks. Additionally, this study shows that the DER significantly changes the Han & Jo (2024) Analysis of Korean firms. They also found that the relationship between financial performance and ESG is negatively impacted by DER. This supports our conclusion. These results all indicate that Indonesian energy companies are in dire need. They must balance investments in sustainability with effective capital management. Maximizing the financial benefits of strong ESG initiatives requires achieving this balance.

4. CONCLUSION AND SUGGESTION

This study evaluated the effects of ESG, DER, and CR on the profitability of energy sector companies listed at IDX, with a specific view on how DER moderates the relationship between ESG and profitability. Results showed that ROA is positively influenced by ESG, DER, and CR, but the moderating effect of DER in the relationship between ESG and profitability is negative. High levels of debt dampen the effect of ESG on profitability. Therefore, for ESG activities to result in a positive profitability impact on energy companies in Indonesia, capital structure management has to be cautious. It is a general perception that ESG activities improve corporate financial performance. However, high indebtedness may partially dilute this positive effect. Liquidity has been the main force of corporate existence, thus, companies should bear this in mind. One of the limitations of this study is that it only used data from energy sector companies in Indonesia, which had available ESG scores, also in estimating profitability using only ESG, DER, and CR. Other studies can generalize this to other industries and include more variables not included in this paper.

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