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The Impact of Profitability, Liquidity, Leverage, and Eco-Efficiency on Firm Value in Energy Companies

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Abstract

This study aims to analyze the effect of profitability, liquidity, leverage, and eco-efficiency on firm value in energy sector companies listed on the Indonesia Stock Exchange during the 2020–2023 period. The population consists of all energy companies listed on the exchange, with a total sample of 29 firms selected using purposive sampling based on specific criteria. Secondary data were obtained from financial reports published on the official IDX website and the respective companies' websites. The data were analyzed using descriptive statistics and multiple regression analysis. The findings reveal that profitability, as measured by return on equity (ROE), has a positive and significant effect on firm value. In contrast, liquidity (current ratio/CR) shows a negative but statistically insignificant effect, while leverage (debt-to-equity ratio/DER) and eco-efficiency both exhibit positive but insignificant effects on firm value throughout the observation period.

INTRODUCTION

Indonesia, as a developing country with a large population, is experiencing a continuous increase in energy demand due to economic growth and urbanization. According to the International Energy Agency (IEA), Indonesia's total energy supply increased by nearly 60% from 2000 to 2021, with coal remaining the dominant energy source. The energy sector plays a crucial role in national economic stability but also presents challenges, including dependency on fossil fuels and environmental impacts. The Global Carbon Project reported that Indonesia ranks among the world's top ten carbon-emitting countries, with emissions reaching 700 million tons in 2022, an 18.3% increase from the previous year. This rise is primarily driven by fossil fuel consumption, particularly coal, and land-use changes such as deforestation. Addressing these challenges requires a shift towards eco-efficient energy practices.

To reduce carbon emissions, the Indonesian government has implemented various policies, including the Energy Law No. 30 of 2007 and the National Energy Plan 2014. These policies aim to decrease fossil fuel dependency and promote renewable energy investments, targeting a 23% renewable energy share by 2025. However, the transition towards clean energy faces structural and financial challenges, affecting the operational sustainability of energy sector companies. Investors increasingly consider firm value as a key indicator of financial stability and long-term growth prospects in this sector. Thus, energy companies that adapt to sustainability policies while maintaining strong financial performance are more attractive to investors.

Firm value in publicly traded energy companies on the Indonesia Stock Exchange (IDX) is influenced by various financial factors, including profitability, liquidity, leverage, and eco-

efficiency. Profitability, measured through Return on Assets (ROA) and Return on Equity (ROE), indicates a company's ability to generate earnings. Studies, such as those by Wicaksono et al. (2020) and Dewantari et al. (2019), suggest a positive correlation between profitability and firm value. Liquidity, reflecting a company's ability to meet short-term obligations, has yielded mixed findings regarding its impact on firm value (Iman et al., 2021; Astuti & Yadnya, 2019). Similarly, leverage, representing financial risk, has shown varying influences depending on risk management strategies (Markonah et al., 2020; Aisyah et al., 2019). Meanwhile, eco-efficiency, which integrates economic and environmental efficiency, is gaining recognition as a factor that enhances firm value through improved reputation and investor appeal (Aviyanti & Isbanah, 2019; Panggau & Septiani, 2017).

Despite growing awareness of eco-efficiency, research on its impact on firm value in Indonesia's energy sector remains limited. Previous studies have largely focused on conventional financial indicators, leaving a research gap in understanding the role of sustainability in corporate valuation. This study aims to address this gap by examining the influence of profitability, company size, liquidity, leverage, and eco-efficiency on the firm value of energy sector companies listed on the IDX from 2019 to 2023.

The objectives of this research are to analyze the individual and combined effects of these factors on firm value, providing empirical evidence that integrates financial and sustainability perspectives. The findings are expected to contribute to academic literature and offer practical insights for investors, policymakers, and corporate managers in balancing financial performance with environmental responsibility.

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

a. Literature Review

Signaling Theory, according to Brigham & Houston (2019), signaling theory explains how investors make investment decisions based on the information they receive about a company. Since not all investors have the same level of information, they rely on historical, current, and projected data as signals to assess a company's prospects. Positive signals indicate strong future performance, attracting investors and increasing stock prices and valuation. Conversely, negative signals may discourage investment, leading to a decline in stock prices and company value.

Stakeholder Theory, proposed by Freeman (1984), states that companies must consider the interests of all stakeholders, not just shareholders. Treating stakeholders fairly helps secure their support for long-term success (Gray et al., 1995). Freeman (2015) classifies stakeholders into primary, who are essential for business survival, and secondary, who influence or are affected by the company (Clarkson, 1995).

Profitability is a key financial metric that measures a company's ability to generate profit relative to its revenue, assets, or shareholders' equity (Brigham & Houston, 2019). It serves as a crucial indicator of a firm's operational efficiency and managerial effectiveness. Investors tend to favor companies with high profitability since it reflects the firm's ability to provide returns on their investments. According to Kasmir (2019), a high profitability ratio attracts investors, thereby increasing demand for the company's stock, which in turn enhances the firm's value. Prior research has established a positive relationship between profitability and firm value (Shiyammurti & Ningsih, 2024; Bennany & Susilo, 2024; Markonah et al., 2020). The chosen proxy for profitability in this study is Return on Equity (ROE), which measures the efficiency of equity in generating profit.

Liquidity represents a company's ability to meet its short-term obligations using its current assets (Brigham & Houston, 2019). Firms with high liquidity are perceived as financially stable

and capable of sustaining operations without financial distress. Munawir (2007) and Sartono (2014) argue that strong liquidity positions enable companies to distribute dividends more consistently, which enhances investor confidence and firm value. Prior studies (Srimindarti & Nurjanah, 2023; Sopian & Rohiati, 2023; Sa'diah et al., 2023) have confirmed a positive impact of liquidity on firm value. The Current Ratio (CR) is used as the liquidity proxy in this research.

Leverage measures the extent to which a company utilizes debt financing in its capital structure (Brigham & Houston, 2010). Higher leverage can increase financial risk, but it can also amplify returns when investments yield positive returns. According to Kasmir (2019), excessive leverage raises the risk of financial distress, which may negatively affect firm value. However, moderate leverage levels can be beneficial by providing tax shields and enhancing shareholder returns. Research findings on the leverage-firm value relationship remain mixed. The Debt to Equity Ratio (DER) is used as the leverage proxy in this study.

Eco-efficiency reflects a firm's ability to minimize environmental impact while maintaining economic performance (Aviyanti & Isbanah, 2019; Panggau & Septiani, 2017). Companies with high eco-efficiency often gain competitive advantages, including cost savings, regulatory compliance, and improved corporate reputation. The presence of ISO 14001 certification serves as a widely accepted measure of eco-efficiency (Damas et al., 2021; Ong et al., 2016). Firms that demonstrate environmental responsibility tend to attract investors and enhance firm value, particularly in the energy sector, where sustainability concerns are paramount.

Firm value reflects the overall worth of a company in the eyes of investors and market participants. It is commonly measured using the Tobin's Q ratio, which compares the market value of a firm to the replacement cost of its assets (Lindenberg & Ross, 1981). A Tobin's Q greater than 1 indicates that the market values the firm higher than its recorded asset value, signifying strong growth potential and investor confidence.

b. Hypothesis Development

Profitability and Firm Value

Highly profitable firms attract investor confidence, leading to increased stock demand and higher firm valuations. Prior studies support the positive influence of profitability on firm value (Shiyammurti & Ningsih, 2024; Bennany & Susilo, 2024; Markonah et al., 2020). Based on this rationale, the hypothesis is formulated as follows:

H1: Profitability has an effect on firm value.

Liquidity and Firm Value

A company with strong liquidity can efficiently meet its short-term obligations and distribute dividends, which enhances investor trust and firm value. Empirical findings by Srimindarti & Nurjanah (2023), Sopian & Rohiati (2023), and Sa'diah et al. (2023) confirm this relationship. Thus, the hypothesis is:

H2: Liquidity has an effect on firm value.

Leverage and Firm Value

The impact of leverage on firm value is debated. Brigham & Houston (2010) describe it as a double-edged sword, offering tax benefits but increasing financial risk. Kasmir (2019) argues that moderate leverage enhances returns, while excessive debt harms firm value. Prior studies (Panjaitan & Supriati, 2023; Ispriyahadi & Abdulah, 2021; Aprilyani et al., 2021) report mixed findings on this relationship, this study hypothesizes:

H3: Leverage has an effect on firm value.

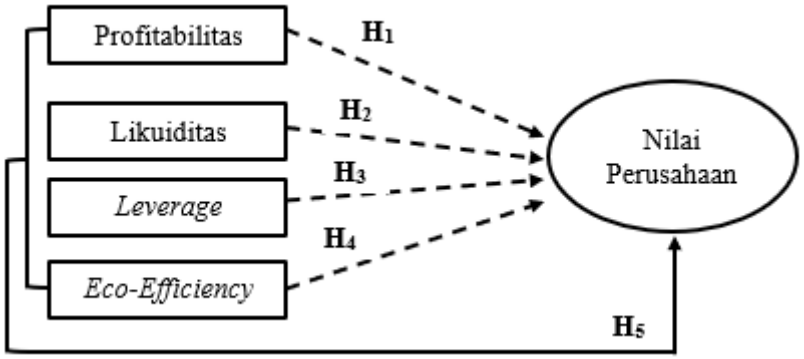
Eco-Efficiency and Firm Value

Eco-efficient companies are perceived as sustainable and attractive to investors, particularly in environmentally sensitive industries such as the energy sector. Prior research (Damas et al.,

2021; Ong et al., 2016) supports the notion that eco-efficiency positively influences firm value. Thus, the hypothesis is:

H4: Eco-efficiency has an effect on firm value.

Figure 1. Conceptual Model



Source: Author's Processed Results (2025)

RESEARCH METHOD

This research was conducted from 2020 to 2023 on energy sector companies listed on the Indonesia Stock Exchange. The data used is secondary data, namely, annual financial reports from energy sector companies obtained through the official website of the Indonesia Stock Exchange, namely http://www.idx.co.id. In this research, the author uses quantitative data, so the research design adopts a quantitative descriptive approach, and the calculations are carried out using statistical analysis. In this research, there are two types of variables, namely the dependent variable (*firm value*) and the independent variables (*Profitability, Liquidity, Leverage, and Eco-Efficiency*). The population in this research includes all energy sector companies listed on the Indonesia Stock Exchange during the 2020-2023 period. Based on the sample criteria, the energy sector companies listed on the Indonesia Stock Exchange that are included in this research are those that meet the following conditions: (1) classified under the Main Board listing, and (2) did not conduct an initial public offering (IPO) during the observation period. The sampling technique used in this research is purposive sampling, which selects companies based on specific criteria. The data analysis methods used in this research include Descriptive Statistical Analysis, Classical Assumption Tests (Normality Test, Multicollinearity Test, Heteroscedasticity Test, and Autocorrelation Test), Multiple Linear Regression Analysis, and Hypothesis Testing (F-Test, Coefficient of Determination Test, and t-Test).

RESULTS AND DISCUSSION

Results

This chapter presents the results of the data analysis conducted on the research variables. The analysis aims to examine the impact of Profitability, Liquidity, Leverage, and Eco-Efficiency on firm value in energy sector companies listed on the Indonesia Stock Exchange (BEI) for the 2020-2023 period. This study employs secondary data in the form of annual reports obtained from the official website of the Indonesia Stock Exchange (www.idx.co.id) and the respective official websites of each company. The research sample comprises all energy sector companies listed on the BEI during the specified period. Using a purposive sampling method based on predetermined criteria, 29 companies were selected from a total of 90 listed energy companies. Consequently, over the four-year research period, a total of 116

observational data points were obtained for analysis. The following is a list of companies that have met the sample criteria.

Table 1. Sample of Energy Companies 2020-2023

No	*Code*	*Company Name*
1	*ABMM*	*ABM Investama Tbk*
2	*ADRO*	*Alamtri Resources Indonesia Tb*
3	*AKRA*	*AKR Corporindo Tbk*
4	*BUMI*	*Bumi Resources Tbk*
5	*BYAN*	*Bayan Resources Tbk*
6	*DEWA*	*Darma Henwa Tbk*
7	*DOID*	*Delta Dunia Makmur Tbk*
8	*DSSA*	*Dian Swastatika Sentosa Tbk*
9	*ELSA*	*Elnusa Tbk*
10	*ENRG*	*Energi Mega Persada Tbk*
11	*GEMS*	*Golden Energy Mines Tbk*
12	*HITS*	*Humpuss Intermoda Transportasi Tbk*
13	*HRUM*	*Harum Energy Tbk*
14	*INDY*	*Indika Energy Tbk*
15	*KKGI*	*Resource Alam Indonesia Tbk*
16	*MBSS*	*Mitrabahtera Segara Sejati Tbk*
17	*MEDC*	*Medco Energi Internasional Tbk*
18	*MYOH*	*Samindo Resources Tbk*
19	*PGAS*	*Perusahaan Gas Negara Tbk*
20	*PTBA*	*Bukit Asam Tbk*
21	*PTRO*	*Petrosea Tbk*
22	*SOCI*	*Soechi Lines Tbk*
23	*TOBA*	*TBS Energi Utama Tbk*
24	*TPMA*	*Trans Power Marine Tbk*
25	*WINS*	*Wintermar Offshore Marine Tbk*
26	*SHIP*	*Sillo Maritime Perdana Tbk*
27	*PSSI*	*IMC Pelita Logistik Tbk*
28	*TEBE*	*Dana Brata Luhur Tbk*
29	*ITMG*	*Indo Tambangraya Megah Tbk*

Source: Author's Processed Results (2025)

Table 2. Descriptive Statistics Test Results

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Profitabilitas	99	-.23	.80	.1658	.19068
Likuiditas	99	.23	4.97	1.7267	.82703
Leverage	99	.20	4.11	1.0991	.87332
Eco-Efficiency	99	0	1	.88	.328
Nilai Perusahaan	99	-.09	2.25	.6900	.43493
Valid N (listwise)	99				

Source: data processed using SPSS 27 (2025)

Descriptive statistics in this study indicate that the firm value, measured using Tobin's Q Ratio, ranged from a minimum of -0.09 to a maximum of 2.25. The mean value is 0.6900, with a standard deviation of 0.43493, suggesting moderate variability in the firm value data. The mean value indicates that, on average, the market values these companies slightly below their book value, while the standard deviation implies variations in how different firms are valued relative to their book value.

Profitability, measured using Return on Equity (ROE), ranges from a minimum of -0.23 to a maximum of 0.80. The mean value is 0.1658, with a standard deviation of 0.19068, indicating relatively high variability in the profitability data. The mean suggests that, on average, companies generate a return of approximately 16.58% on shareholders' equity, while the high standard deviation reflects significant differences in profitability, with some firms experiencing losses and others achieving strong returns.

Liquidity, measured using the Current Ratio (CR), ranges from a minimum of 0.23 to a maximum of 4.97. The mean value is 1.7267, with a standard deviation of 0.82703, suggesting moderate consistency in the liquidity data. The mean indicates that, on average, firms have 1.73 times more current assets than current liabilities, implying an overall ability to meet short-term obligations. The standard deviation suggests that while some firms maintain strong liquidity positions, others may struggle to cover short-term debts.

Leverage, measured using the Debt to Equity Ratio (DER), ranges from a minimum of 0.20 to a maximum of 4.11. The mean value is 1.0991, with a standard deviation of 0.87332, indicating considerable variability in the leverage data. The mean suggests that, on average, companies finance their assets with a mix of equity and debt, with debt levels slightly exceeding equity. The high standard deviation indicates that while some firms maintain low leverage, others rely heavily on debt financing, potentially increasing financial risk.

Table 3. Normality Test Result

One-Sample Kolmogorov-Smirnov Test

			Unstandardized Residual
N			99
Normal Parameters[a,b]	Mean		.0000000
	Std. Deviation		.40230057
Most Extreme Differences	Absolute		.083
	Positive		.083
	Negative		-.061
Test Statistic			.083
Asymp. Sig. (2-tailed)[c]			.088
Monte Carlo Sig. (2-tailed)[d]	Sig.		.093
	99% Confidence Interval	Lower Bound	.085
		Upper Bound	.100

Source: data processed using SPSS 27 (2025)

The normality test was conducted using the One-Sample Kolmogorov-Smirnov test. The results indicate that the significance value (Asymp. Sig. 2-tailed) is 0.088, which is greater than the commonly used significance level of 0.05. This suggests that the residuals are normally distributed, fulfilling the normality assumption required for multiple linear regression analysis.

Table 4. Multicollinearity Test Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.519	.140		3.713	<,001		
	Profitabilitas	.895	.224	.392	3.990	<,001	.932	1.073
	Likuiditas	-.008	.055	-.015	-.144	.886	.834	1.199
	Leverage	.033	.053	.066	.631	.530	.810	1.234

a. Dependent Variable: Nilai Perusahaan

Source: data processed using SPSS 27 (2025)

The multicollinearity test results indicate that all independent variables have Tolerance values greater than 0.10 and VIF values below 10. Specifically, Profitability has a Tolerance of 0.932 and a VIF of 1.073, Liquidity has a Tolerance of 0.834 and a VIF of 1.199, and Leverage has a Tolerance of 0.810 and a VIF of 1.234. Since these values meet the commonly accepted thresholds, it can be concluded that there is no multicollinearity issue among the independent variables in this regression model.

Table 5. Heteroscedasticity Test Result

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.737	.287		2.569	.012
	Profitabilitas	.077	.443	.019	.175	.862
	Likuiditas	-.098	.119	-.095	-.828	.410
	Leverage	-.046	.104	-.052	-.446	.656

a. Dependent Variable: ABS_RES2

Source: data processed using SPSS 27 (2025)

The Glejser test results show that the significance values for Profitability (0.862), Liquidity (0.410), and Leverage (0.656) exceed 0.05, indicating no heteroscedasticity. Thus, the assumption of homoscedasticity is met, ensuring the model's reliability.

Table 6. Autocorrelation Test Result

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.294[a]	.086	.057	.36815	1.914

a. Predictors: (Constant), LAG_X3, LAG_X1, LAG_X2

b. Dependent Variable: LAG_Y

Source: data processed using SPSS 27 (2025)

The Durbin-Watson (DW) test detected autocorrelation, which was corrected using the Cochrane-Orcutt transformation. The final DW value of 1.914 falls between dU (1.7355) and 4−dU, confirming that the model meets the no-autocorrelation assumption.

Table 7. Multiple Linear Regression Analysis

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.493	.171		2.891	.005
	Profitabilitas	.890	.226	.390	3.935	<,001
	Likuiditas	-.009	.055	-.017	-.163	.871
	Leverage	.032	.053	.064	.606	.546
	Eco-Efficiency	.033	.127	.025	.261	.795

a. Dependent Variable: Nilai Perusahaan

Source: data processed using SPSS 27 (2025)

The regression equation model derived from the research results above is as follows:

$$Y = 0{,}493 + 0{,}890X_1 - 0{,}009X_2 + 0{,}032X_3 + 0{,}033D$$

From the panel data regression equation above, it can be explained as follows:

1. The constant value of 0.493 indicates that if profitability, liquidity, leverage, and eco-efficiency variables are held constant, the firm's value will be 0.493.
2. The profitability coefficient of 0.890 means that if profitability increases by one unit, the firm's value will increase by 0.890, assuming other independent variable coefficients remain constant.
3. The liquidity coefficient of -0.009 means that if liquidity increases by one unit, the firm's value will decrease by 0.009, assuming other independent variable coefficients remain constant.
4. The leverage coefficient of 0.032 means that if leverage increases by one unit, the firm's value will increase by 0.032, assuming other independent variable coefficients remain constant.
5. The eco-efficiency coefficient of 0.033 means that if eco-efficiency increases by one unit, the firm's value will increase by 0.033, assuming other independent variable coefficients remain constant.

Table 8. F Test Results

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.689	4	.672	3.987	.005[b]
	Residual	15.849	94	.169		
	Total	18.538	98			

a. Dependent Variable: Nilai Perusahaan

b. Predictors: (Constant), Eco-Efficiency, Leverage, Profitabilitas, Likuiditas

Source: data processed using SPSS 27 (2025)

Based on the table above, it can be seen that the F-Statistics probability value of 0.005 is smaller than the significance level, namely 0.05 or 5%. So it can be said that the variables used in the panel data regression equation are appropriate or feasible.

Table 9. Coefficient of Determination Test Result

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.381[a]	.145	.109	.41062

a. Predictors: (Constant), Eco-Efficiency, Leverage, Profitabilitas, Likuiditas

Source: data processed using SPSS 27 (2025)

Based on the Adjusted R-Square value of 0.109, the independent variables—profitability, liquidity, leverage, and eco-efficiency—explain 10.9% of the variation in firm value, while the remaining 89.1% is influenced by other factors outside this regression model. This indicates that the independent variables in this study have a weak ability to explain the dependent variable.

Table 10. Statistical Test Results t

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.493	.171		2.891	.005
	Profitabilitas	.890	.226	.390	3.935	<,001
	Likuiditas	-.009	.055	-.017	-.163	.871
	Leverage	.032	.053	.064	.606	.546
	Eco-Efficiency	.033	.127	.025	.261	.795

a. Dependent Variable: Nilai Perusahaan

Source: data processed using SPSS 27 (2025)

The partial test (t-test) was conducted to determine the effect of each independent variable on firm value. At a significance level of 0.05, the regression analysis results indicate:

1. Profitability has a significance value of <0.001, which is less than 0.05, indicating that profitability has an effect on firm value.

2. Liquidity has a significance value of 0.871, which is greater than 0.05, indicating that liquidity does not have an effect on firm value.
3. Leverage has a significance value of 0.546, which is greater than 0.05, indicating that leverage does not have an effect on firm value.
4. Eco-Efficiency has a significance value of 0.795, which is greater than 0.05, indicating that eco-efficiency does not have an effect on firm value.

Discussion

1. The Effect of Profitability on Firm Value

Profitability is a key driver of firm value, as higher profits indicate strong financial performance and efficient equity utilization. This enhances investor confidence, attracting more investment and increasing firm valuation. The results confirm that profitability significantly affects firm value, supporting H1. These findings align with prior studies by Shiyammurti & Ningsih (2024), Nurjanah & Srimindarti (2023), and Bennany & Susilo (2024), which also found a positive relationship between profitability and firm value.

2. The Effect of Liquidity on Firm Value

Liquidity reflects a firm's ability to meet short-term obligations. However, the findings indicate that liquidity does not influence firm value, as shown by the insignificant coefficient. Excess liquidity may stem from unproductive assets, limiting its impact on firm performance. Thus, H2 is not supported. These results are consistent with studies by Franjaya & Viriany (2024), Rafli & Imron (2023), and Syofia & Hamdani (2023), which also found no significant relationship.

3. The Effect of Leverage on Firm Value

Leverage represents the proportion of debt in a firm's capital structure. The findings reveal that leverage does not affect firm value, as firms prioritize internal over external financing in line with the Pecking Order Theory. A low reliance on debt may restrict growth potential, limiting its influence on firm valuation. Thus, H3 is not supported. These results align with previous research by Ilham et al. (2022), Saputri & Bahri (2021), and Maulidina et al. (2021).

4. The Effect of Eco-Efficiency on Firm Value

Eco-efficiency, measured by ISO 14001 certification, does not significantly impact firm value. Investors tend to focus on short-term financial performance rather than sustainability initiatives. Additionally, the costs associated with environmental certification may not yield immediate financial returns. As a result, H4 is not supported. These findings are in line with prior research by Wenlong He et al. (2015), Dejan Jovanović et al. (2024), and Aulia & Hadinata (2019).

CONCLUSION

This study examines the impact of profitability, liquidity, leverage, and eco-efficiency on firm value in energy sector companies listed on the Indonesia Stock Exchange from 2020 to 2023. The findings reveal that profitability has a positive and significant effect on firm value, indicating that higher profitability enhances firm valuation. Liquidity exhibits a negative but insignificant relationship with firm value, suggesting that higher liquidity does not necessarily translate into increased valuation. Leverage shows a positive but insignificant impact, implying that debt utilization does not play a major role in determining firm value. Similarly, eco-efficiency demonstrates a positive yet insignificant effect, indicating that sustainability efforts, while beneficial, do not significantly influence firm valuation in the short term.

This study has several limitations. The independent variables account for only a small proportion of the variation in firm value, with the majority being influenced by external factors

beyond the scope of this research. Based on these findings, several recommendations are proposed. Companies are encouraged to prioritize profitability enhancement, as it significantly contributes to firm value. Investors should consider profitability as a key determinant when assessing investment opportunities in the energy sector while also taking into account industry dynamics and external conditions. Future research may build upon this study by extending the observation period and expanding the sample size to improve the robustness and accuracy of the findings.

REFERENCE

Apriandi, D., & Lastanti, H. S. (2023). Apakah kinerja lingkungan dan kinerja keuangan dapat mempengaruhi nilai perusahaan? *Jurnal Ekonomi Trisakti, 3*(1), 1219–1228. https://doi.org/10.25105/jet.v3i1.16058

Aprilyani, I., Widyarti, M. H., & Hamidah, N. (2021). The effect of ERM, firm size, leverage, profitability, and dividend policy on firm value (Evidence from food & beverage sub-sector companies listed in IDX 2015–2019). *Jurnal Aktual Akuntansi Keuangan Bisnis Terapan, 4*(1), 65.

Astuti, N. K. B., & Yadnya, I. P. (2019). Pengaruh profitabilitas, likuiditas, dan ukuran perusahaan terhadap nilai perusahaan melalui kebijakan dividen. *E-Jurnal Manajemen, 8*(5), 3275-3302. https://doi.org/10.24843/EJMUNUD.2019.v08.i05.p25

Aulia, R., & Hadinata, S. (2019). Pengaruh environmental performance, environmental disclosure, dan ISO 14001 terhadap financial performance. *Jurnal Akuntansi, Ekonomi dan Manajemen Bisnis, 7*(2), 136–147.

Aviyanti, S. C., & Isbanah, Y. (2019). Pengaruh Eco-Efficiency, Corporate Social Responsibility, Ownership Concentration , dan Cash Holding terhadap Nilai Perusahaan Sektor Consumer Goods di BEI Periode 2011-2016. *Jurnal Ilmu Manajemen*, 7(1), 77–84.

Bennany, S., & Susilo, D. E. (2024). Pengaruh profitabilitas, keputusan investasi, kebijakan dividen, dan struktur modal terhadap nilai perusahaan sektor energi 2020-2022. *JIMEA | Jurnal Ilmiah MEA (Manajemen, Ekonomi, dan Akuntansi)*, *8*(2), 918. https://doi.org/10.31955/mea.v8i2.4079

Bongsoikrama, J., Andini, P., Riyadi, S., & Wulandari, A. A. (2024). Kontribusi Penerapan Good Corporate Governance Dan Eco-Efficiency Terhadap Nilai Perusahaan Dengan Kinerja Keuangan Sebagai Pemoderasi. Jesya, 7(1), 1029–1036. https://doi.org/10.36778/jesya.v7i1.1512

Brigham, E. F., & Houston, J. F. (2019). *Fundamentals of financial management* (15th ed.). Cengage Learning.

Clarkson, M. B. E. (1995). A stakeholder framework for analyzing and evaluating corporate social performance. *The Academy of Management Review, 20*(1), 92–117. https://doi.org/10.2307/258888

Damas, D., Maghviroh, R. EL, & Meidiyah, M. (2021). Pengaruh Eco-Efficiency, Green Inovation Dan Carbon Emission Disclosure Terhadap Nilai Perusahaan Dengan Kinerja Lingkungan Sebagai Moderasi. *Jurnal Magister Akuntansi Trisakti*, 8(2), 85. https://doi.org/10.25105/jmat.v8i2.9742

Dewantari, N. L. S., Cipta, W., & Susila, G. P. A. J. (2019). Pengaruh Ukuran Perusahaan dan Leverage serta Profitabilitas terhadap Nilai Perusahaan pada Perusahaan Food and Beverages di BEI. *Jurnal Prospek, 1*(2), 74.

Farizki, F. I., Suhendro, S., & Masitoh, E. (2021). Pengaruh Profitabilitas, Leverage, Likuiditas, Ukuran Perusahaan Dan Struktur Aset Terhadap Nilai Perusahaan. *Ekonomis: Journal of Economics and Business*, 5(1), 17. https://doi.org/10.33087/ekonomis.v5i1.273

Franjaya, F., & Viriany, D. (2024). FAKTOR YANG MEMPENGARUHI FIRM VALUE PADA PERUSAHAAN MANUFAKTUR. In Jurnal Multiparadigma Akuntansi (Issue 4).

Freeman, R. E. (2015). *Stakeholder theory* (Vol. 2). Business Ethics. https://doi.org/10.1002/9781118785317.weom020179

Gray, R., Kouhy, R. and Lavers, S. (1995) Corporate Social and Environmental Reporting: A Review of the Literature and a Longitudinal Study of UK Disclosure. *Accounting, Auditing & Accountability Journal*, 8, 47-77. http://dx.doi.org/10.1108/09513579510146996

Hapsoro, D., & Falih, Z. N. (2020). The Effect of Firm Size, Profitability, and Liquidity on The Firm Value Moderated by Carbon Emission Disclosure. *Journal of Accounting and Investment*, 21(2). https://doi.org/10.18196/jai.2102147

Hersaputri, L. D., Yeganyan, R., Cannone, C., Plazas-Niño, F., Osei-Owusu, S., Kountouris, Y., & Howells, M. (2024). Reducing Fossil Fuel Dependence and Exploring Just Energy Transition Pathways in Indonesia using OSeMOSYS (Open-Source Energy Modelling System). https://doi.org/10.33774/coe-2024-8stz1

He, W., Liu, C., Lu, J., & Cao, J. (2015). Impacts of ISO 14001 adoption on firm performance: Evidence from China. *China Economic Review, 32*, 43–56.

Ilham, R. N., Irawati, H., Nurhasanah, N., Inuzula, L., Sinta, I., & Saputra, J. (2022). Relationship of Working Capital Management and Leverage on Firm Value: An Evidence from the Indonesia Stock Exchange. *Journal of Madani Society*, 1(2), 64– 71. https://doi.org/10.56225/jmsc.v1i2.129

Iman, C., Sari, F. N., & Pujiati, N. (2021). Pengaruh likuiditas dan profitabilitas terhadap nilai perusahaan. *Perspektif: Jurnal Ekonomi & Manajemen Universitas Bina Sarana Informatika, 19*(2), 191.

Indonesia. (2007). *Undang-Undang Republik Indonesia Nomor 30 Tahun 2007 tentang Energi.*

Indonesia. (2014). *Rencana Energi Nasional Tahun 2014.*

International Energy Agency. (2021). An energy sector roadmap to net zero emissions in Indonesia. International Energy Agency. https://www.iea.org/reports/an-energy-sector-roadmap-to-net-zero-emissions-in-indonesia

Ispriyahadi, H., & Abdulah, B. (2021). Analysis of the effect of profitability, leverage, and firm size on firm value. *Journal of Business, Management, and Accounting, 3*(2). Retrieved from http://e-journal.stie-kusumanegara.ac.id

Jovanović, D., Vuković, I., & Todorović, M. (2024). The impact of ISO 14001 standards and non-financial reporting on companies' financial performance. *The Annals of the Faculty of Economics in Subotica, 60*(52), 77–91.

Kasmir. (2019). *Analisis laporan keuangan* (Edisi Revisi). PT RajaGrafindo Persada.

Kristy, H. N., Bagus, I., & Bhayangkara, K. (2024). Pengaruh Environmental Performance dan Pengungkapan Akuntansi Karbon terhadap Nilai Perusahaan Sektor Energi High Value di Bursa Efek Indonesia Tahun 2021-2022. *Jurnal Ilmu Pendidikan Dan Ekonomi*, 9(1). http://journal.staidenpasar.ac.id/index.php/wb/issue/view/44

Kurnia SH., & Pardistya IY. (2021). Effect Of Profitability And Liquidity On Company Value. *Jurnal Ilmu Manajemen* p-ISSN: 2714-6332–e-ISSN: 2714- 6324 Vol.5 Nomor 2.

Lindenberg, E. B., & Ross, S. (1981). Tobin's q ratio and industrial organization. *The Journal of Business, 54*(1), 1–32. http://dx.doi.org/10.1086/296120

Maulidina, F. I., Paramita, R. W. D., & Taufiq, M. (2021). The Effect of Leverage, Earnings per Share, and Dividend Policy on Company Value. Assets : *Jurnal Ilmiah Ilmu Akuntansi, Keuangan Dan Pajak*, 5(2), 80–87. https://doi.org/10.30741/assets.v5i2.693

Munawir. (2014). *Analisa laporan keuangan*. Yogyakarta: Liberty.

Ong, T. S., Teh, B. H., Ng, S. H., & Soh, W. N. (2016). Environmental Management: Environmental Accounting and Financial Performance. *Institutions and Economies*, 8(2), 26– 52.

Panggau, N. D., & Septiani, A. (2017). Pengaruh Eco-efficiency terhadap Nilai Perusahaan dengan Leverage dan Profitabilitas sebagai Variabel Moderasi. Pengaruh Eco-Efficiency Terhadap Nilai Perusahaan Dengan Leverage Dan Profitabilitas Sebagai Variabel Moderasi, 6(4), 421–428.

Panjaitan, I. V., & Supriati, D. (2023). The effect of profitability and leverage on firm value with firm size as a moderating variable. *Research of Finance and Banking, 1*(1), 34–46. https://doi.org/10.58777/rfb.v1i1.34

Pradana, I. Y., & Yudha Pradana, I. (n.d.). Effect of Leverage, Growth, Firm Size, Dividend Policy, and Interest Rate on Company Value. https://doi.org/10.38035/dijefa.v2i3

Prena, G. das, Dewi, P. P., Kustina, K. T., Dewi, I. A. O., & Wirsa, I. N. (2019). Pengaruh Eco Efficiency, Corporate Social Responsibility dan Accrual Quality Terhadap Nilai Perusahaan. *STATERA: Jurnal Akuntansi Dan Keuangan*, 1(2), 32–43. https://doi.org/10.33510/statera.2019.1.2.32-43

Rahelliamelinda, L., & Handoko, J. (2024). Profitabilitas sebagai Moderating Pengaruh Kinerja Esg, Green Innovation, Eco-Efficiency terhadap Nilai Perusahaan. *Jurnal Informasi, Perpajakan, Akuntansi, dan Keuangan Publik*, 19(1), 145–170. https://doi.org/10.25105/jipak.v19i1.19191

Reschiwati, R., Syahdina, A., & Handayani, S. (2020). Effect of liquidity, profitability, and size of companies on firm value. *Utopia y Praxis Latinoamericana*, 25(Extra 6), 325–332. https://doi.org/10.5281/zenodo.3987632

Sa'diah, N. H., Manik, E., & Danasasmita, W. M. (2023). Effect of Liquidity and Profitability on Company Value. *Acman: Accounting and Management Journal*. https://api.semanticscholar.org/CorpusID:258826466

Saputri, D. R., & Bahri, S. (Year). The Effect of Leverage, Profitability, and Dividend Policy on Firm Value. *International Journal of Educational Research & Social Sciences*.

Sartono, A. (2014). *Manajemen keuangan: Teori dan aplikasi* (Edisi ke-4, Cetakan ke-7). Yogyakarta: Penerbit BPFE.

Siti Nurjanah, & Ceacilia Srimindarti. (2023). Pengaruh Likuiditas, Ukuran Perusahaan, dan Profitabilitas terhadap Nilai Perusahaan. *CURRENT: Jurnal Kajian Akuntansi Dan Bisnis Terkini*, 4(1), 62–71. https://doi.org/10.31258/current.4.1.62-71

Suharto, R. I. A., & Rosyadi, I. (2023). The effect of profitability, leverage, and liquidity on company value. *Assets: Jurnal Ilmiah Ilmu Akuntansi, Keuangan dan Pajak, 7*(2), 72.

Syofia, I. Y., & Hamdani, D. (2023). The role of liquidity ratio, profitability ratio, and leverage ratio in affecting the value of manufacturing companies listed on the Indonesia Stock Exchange. *Jurnal Akuntansi dan Keuangan Universitas Jambi, 8*(2), 134-143.

Wahyudi, S. M. (2020). Effect of leverage, profitability, sales growth toward company values. *International Journal of Management Studies and Social Science Research, 2*(4), 161.

Wicaksono, R., Tinggi, S., Ekonomi, I., Sekolah, M., Ilmu, T., & Putra Bangsa, E. (2020). Analisis Pengaruh Profitabilitas dan Kebijakan Dividen Terhadap Nilai Perusahaan dengan

Struktur Modal sebagai Variabel Mediasi. *Owner: Riset Dan Jurnal Akuntansi*, 4(2). https://doi.org/10.33395/owner.v4n2.237

Yuliandhari, W. S., Saraswati, R. S., & Rasid Safari, Z. M. (2023). Pengaruh Carbon Emission Disclosure, Eco-Efficiency dan Green Innovation Terhadap Nilai Perusahaan. *Owner: Riset Dan Jurnal Akuntansi*, 7(2), 1526–1539. https://doi.org/10.33395/owner.v7i2.1301