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Funding structure and profitability as moderating variables strengthen the impact of eco-efficiency on firm value

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Abstract
The aim of this research is to empirically test the impact of eco-efficiency on companyvalue which is strengthened by the mediation of funding structure and profitability. Where eco-efficiency is proxied by the ISO 140001 certificate, company value is measured by the TOBINS'Q ratio, funding structure is measured by leverage, and for profitability it is proxied by return on assets (ROA). Testing this research usesModerate Regression Analysis (MRA) with secondary data from a sample of 225 manufacturing companies in various industrial sectors listed on the IDX for the period2028 - 2022. The results of this research show that the effect of eco-efficiency on company value is negatively significant, while for the media variable has a significant positive effect in strengthening the influence of eco-efficiency in company value.
Keywords: eco-efficiency, funding structure, profitability, company value

Abstrak
Tujuan penelitian ini untuk melakukan pengujian secara empiris dampak eco-efficiency atas nilai Perusahaan yang diperkuat mediasi struktur pendanaan dan profitabilitas. Dimana eco-efficiency diproksikan sertifikat ISO 140001, nilai Perusahaan diukur dengan rasio TOBINS'Q, struktur pendanaan pengukurannya dengan leverage, dan untuk profitabilitas diproksikan return on asset (ROA). Pengujian penelitian ini menggunakan moderate Regression Analysis (MRA) dengan data sekunder dari sampel 225 perusahaan manufaktur sektor aneka industry yang terdaftardi BEI periode tahun 2028 – 2022. Hasil penelitian ini menunjukkan bahwa pengaruh eco-efficiency terhadap nilai perusahaan secara negatif signifikan sedangkan untuk variabel mediasinya berpengaruh positif signifikan dalam memperkuat pengaruh eco-efficiency terhadap nilai perusahaan.
Keywords: eco-efficiency, struktur pendanaan, profitabilitas, nilai perusahaan

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1. Introduction

Current economic developments require companies to strive to improve quality to be competitive in the market, with various models being implemented to meet the demands of buyers and investors (Al Najjar & Anfimiadou, 2012). In 2015, Yastini and Mertha also argued that companies in running their businesses aim to maximize the value of the company. If the company is to be sold and there are prospective buyers willing to pay the price offered, that is what is called the company value (Husnan, 2013). The higher the prosperity value achieved by shareholders is indicated by the higher value of the company. The company's current performance and future opportunities can be shown in the high company value which will later create trust in the market (Wijaya and Sedana, 2015).

Putra and Lestari (2016) stated that investors intend to invest in a company, they will consider one factor, for that it is very important to increase the value of the company that will be competed for each company. The main goal of the company is to increase the value of the company by increasing the prosperity of the shareholders. The value of the company is the fair value of the company that describes the perception of investors towards the issuer concerned. The high value of the company is the desire of the company

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owner because it shows the level of prosperity of its shareholders is also high. A high company value will make the market believe not only in the company's current performance but also in the company's prospects in the future (Noor, 2016). As a parameter to measure the value of the company, this study uses an indicator called Tobin's Q, " is one of the most rational ratios and this ratio is considered capable of providing information about the market value of a good company because this ratio can explain various phenomena in company activities that compare the market value of a company's outstanding shares with the book value of equity ". In addition, Tobin's Q components of the company's liabilities and equity are also included, in other words all assets owned by the company are included (Seanturi, 2015).

The company's profit increases when investors' assessment of the company's stock price also increases. The company's value along with the increase in stock prices will make the market believe in the company's performance and its prospects in the future. The company's value also affects the interest of potential investors in the company's shares in the capital market. The company's value is a benchmark for investors to choose which company's stock decisions can be used as investors. The company's management is required to be able to improve the welfare of stakeholders and is also faced with the interests of improving their own welfare. The company will calculate the income that will be received during the operating period. This calculation tries the profits or benefits that will be obtained and the costs of losses that will be borne as a result of environmental maintenance. The company's profits are not necessarily beneficial to the community (Wusono and Matusin, 2019).

"The demands for companies are not only attention to the large profits obtained, but companies are also required to be able to pay attention to environmental conditions resulting from operational activities". The application of the eco-efficiency concept is one of the demands for handling environmental problems with the company's operational activities that occur and requires the fulfillment of management responsibilities. Eco-efficiency is "a concept that implements efficiency and includes aspects of natural resources and energy that minimize the use of raw materials, energy, water and minimize waste per unit of product from the production process (Ministry of Environment, 2003)".

eco-efficiency strategy are certainly inseparable from how company management plans funding structure. Full utilization of technological developments is one method to achieve eco-efficiency strategy (Schimidheiny in Pearce and Robinson, 2007). "Investment in technology required by companies to reduce the terrible effects on the surrounding environment and meet eco-efficiency requirements requires large costs" (Ingram and Frazier, Walley and Whitehead, 2016). Therefore, the addition of funding structure related to the implementation of eco-efficiency will strengthen the influence of eco-efficiency on company value.

eco-efficiency concept in companies really needs a large amount of funding support so that the best solution that can be taken by the company is by issuing shares or using debt. According to Jazulli and Witiastuti (2016) investors in making investments must consider two things, namely the income received (return) and the risk borne. Investors expect a higher return from the investment they make compared to the risk they will bear (Sudiatno & Suharmanto, 2011). If the company has high company performance and eco-efficiency strategy, the company's risk will be low, this will be seen well in the eyes of investors, so that investors are more confident in investing in the company than just giving debt.

One of the most debated issues in finance is the role of funding structure on investment policy. As research by Panggau & Aditya (2017) explains that funding structure moderates the relationship between Eco-efficiency and firm value. The research sample conducted by Panggau & Aditya (2017) was manufacturing companies listed on the Indonesia Stock Exchange during the period 2013-2015. The results of the study said that increasing dependence on debt would ensure that companies increase environmental activities present in order to meet creditors' expectations on environmental issues. These results explain that funding structure moderates the relationship between eco-efficiency and firm value.

Research that examines "the effect of profitability on firm value shows that profitability has a positive effect on firm value" (Rizqia, Aisjah, & Sumiati, 2013; Osazuwa & Che-Ahmad, 2016; Dwiastuti and Dillak, 2019; Kusumawati and Setiawan, 2019). The better the level of profitability of the company shows better performance so that it will increase the value of the company. In addition, evidence was found that profitability can be used as a moderating variable indicating that there is a positive effect of the interaction of eco-efficiency and profitability on firm value. Research by Sucuahi and Cambarihan (2017) shows that profitability affects firm value with the proxy " Tobin; s Q". According to Che-Ahmad (2016) good profitability will increase the effect of eco-efficiency on firm value. In addition, there is a positive influence between profitability (EPS and ROE), and environmental performance ratings. This research was conducted on manufacturing companies in the various industrial sectors listed on the Indonesia Stock Exchange for the 2018-2021 period. From the explanation above and the results of previous studies, the following problems can be formulated: 1) Does eco-efficiency affect company value in companies in the various industrial sectors? 2) Does profitability function as a moderating variable? Eco-efficiency affects company value in companies in various industrial sectors?, and 3) Does the funding structure strengthen the influence of eco-efficiency on company value in companies in various industrial sectors?. So the objective to be achieved in this study is to test the influence of eco-efficiency variables on company value moderated by profit ability and funding structure variables.

2. Literature review

Company values

According to Brighan and Houstom (2015), the general purpose of a company is the company value which is used as a measure of the company's success, because with added value the company can support the prosperity of the company's owners and shareholders. The company's value can be projected by using "Tobin's Q Ratio, PBV and Price Earning Ratio ".

PBV is used to measure the value that financial markets place on a company's management and organization as a growing company. A well-run company with strong management and an organization that operates efficiently should have a market value higher than the historical book value of its assets (Weston and Copeland, 2010) .

Eco-Efficiency

Eco-efficiency is a company strategy to improve the environment in the company's operational activities so that it can increase stock prices and increase company value. Eco-

efficiency is a benchmark for companies in implementing the environmental management concept carried out by the company. The company uses the eco-efficiency concept when the company has an "ISO-14001 certificate" on environmental management (Amaliia & Rosdianna, 2016).

According to Chei-Achmad and Ossazuwa (2016) stated that the purpose of eco-efficiency is to reduce the consumption of natural resources such as minimizing the use of energy, fuel and land. Reducing the harmful impacts of production involving the environment by reducing air pollution, reducing waste and the spread of toxic substances. Increasing the value of services and products by ensuring more benefits are provided to consumers related to flexibility, functionality and product formation.

Profitability

This ratio is used to measure a company in generating profits at a certain level of sales, assets, and share capital (Hannafi, 2017). According to Latifah and Luhur (2017), profitability is the company's ability to generate net profit from activities carried out in the accounting period. Profitability can be proxied by " Return on Asset " which is a ratio to measure the company's ability to generate profits obtained from investment activities.

The company's high ability to gain profit, makes the higher return pattern expected by investors so that the company's value will be better. In addition, this ratio can be used to measure the management's ability to gain profit as a whole. It is also important as a way to evaluate the effectiveness and efficiency of company management in managing company assets.

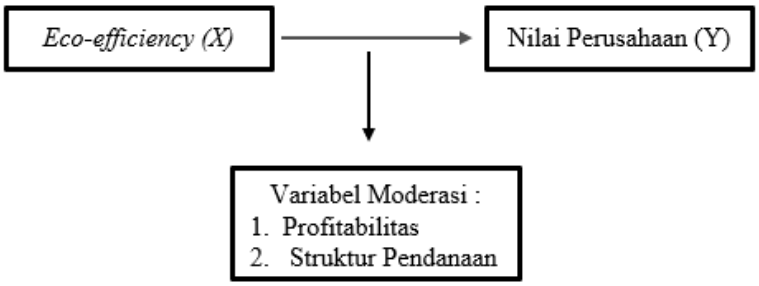
Funding Structure

There are several important things in the decision to spend on the company's financial management, one of which is the funding decision. Sutrisno (2009:6) said that "in making this decision, financial management is required to consider and analyze the combination of sources of funds that are economical for the company in order to achieve an optimum balance between foreign capital and its own capital, in order to finance investment needs and business activities in increasing company profits for the welfare of shareholders or owners".

The funding structure is reflected in the overall liabilities of the company's balance sheet, so the capital structure is only reflected in long-term debt and equity elements, both of which are permanent funds or long-term funds. So it can be concluded that the capital structure is only part of the funding structure. Roubert (1992) and Oriij (2012) stated that "funding structure is an increase in dependence on debt will ensure that the company increases its environmental activities and presents more environmental information to meet creditors' expectations on issues related to the environment." Martin, et al (1991:337) defines "funding structure as a combination or mix of all items that enter the right side of the company's balance sheet." Westton and Copeeland (1997:19) said that "funding structure is the way the company's assets are financed, which consists of short-term debt, long-term debt and equity". According to the opinions of the experts above, it can be interpreted that the funding structure is a company's way of financing its assets, through various different sources of funds, in the form of equity, short-term debt, and long-term debt (Puteri, 2019).

Framework

The description of the relationship between variables created in this study is contained in the framework of thinking about the influence of eco-efficiency on company value with leverage and profitability as moderating variables as follows:



Source: Data developed by researchers
Figure 1. Framework of Thought

3. Research methods

Population and Sample

The focus of this research population is all companies in the various industrial sectors listed on the Indonesia Stock Exchange, totaling 57 companies. The use of the purposive sampling method carried out in determining the sample based on the population criteria that have been determined in this study are companies in the various industrial sectors listed on the IDX for the period 2018 - 2022. Companies in the various industrial sectors that have complete data during the observation period 2018 - 2022 and companies in the various industrial sectors that use the rupiah currency in presenting financial reports during the period 2018 – 2022.

Table 1 Population Criteria

No	Information	2018	2019	2020	2021	2022	TOTAL
1.	Companies in the Miscellaneous Industry Sector listed on the IDX for the period 2018 - 2022	14	14	15	15	16	74
2.	Companies in the Miscellaneous Industry Sector that have complete data during the 2018 - 2022 observation period	15	17	18	18	19	87

3.	Companies in various industrial sectors that use the rupiah currency in presenting financial reports during the 2018-2022 period	17	20	20	22	22	101
	Total Population	46	51	53	55	57	262

Source: Data processed by researchers (2023)

Types and Techniques of Data Collection

This study uses secondary data obtained from " annual reports and audited financial statement" in basic and chemical industry sector companies in 2018-2022. www.idx.co.id and the official website of each related company are the data sources, and the documentation method is the data collection method. Various literatures used in collecting data such as annual reports and audited financial statements on the official BEI website and the official websites of various industry sector companies.

Data Analysis Methods

Simple Linear Regression Analysis

Statistical method to test the interaction between one dependent variable and one or more independent variables (Ghozali, 2016). Simple regression analysis studies whether two or more variables have an impact or not, measures the strength of the impact, and makes predictions based on the strength or weakness of the impact (Kadir, 2016). This study uses regression analysis to test the interaction between eco-effocoency variables and company value. The regression model is as follows:

$$\mathbf{NP} = \beta_0 + \beta_1 \mathbf{ECO}_{it} + \varepsilon_{it}$$

Information:

NP = Value of Company i in period t

ECO $_{it}$ = Eco-Efficiency of company i in period t

ε_{it} = Error of company i's equation in period t

Moderating Regression Analysis (MRA)

Moderating Regression Analysis (MRA) or interaction test is a multiple linear regression model in where the equation contains the multiplication of two or more independent variables. "A moderating variable is an independent variable that will strengthen or weaken the interaction between independent variables on the dependent variable" (Ghozali, 2016). To test whether the effect of eco-efficiency on company value with profitability and funding structure as moderating variables, the formulation model is as follows:

$$\mathbf{NP} = \beta_0 + \beta_1 \mathbf{ECO}_{it} + \beta_2 \mathbf{ECO}_{it} * \mathbf{PROF} + \beta_3 \mathbf{ECO}_{it} * \mathbf{LEV} + \beta_4 \mathbf{ECO}_{4} * \mathbf{DER} + \varepsilon_{it}$$

Information:

NP	=	Value of Company i in period t
ECO $_{it}$	=	eci-efficiency of company i in period t
ECO ∗PROF $_{it`}$	=	**Interaction of** eco-efficiency and profitability variables of company i in period t
ECO ∗LEV $_{it}$	=	**Interaction of** eco-efficiency and leverage variables of company i in period t
ECO ∗DER $_{it}$	=	**Interaction of** eco-efficiency variables and company i's funding structure in period t
ε_{it}	=	Error equation of company i in period t

Model Feasibility Test (F Test)

The F test is used to test whether the regression model used is feasible. The provisions used in the F test are as follows:

- If the calculated F is greater than the F table or the probability is less than the significance level (sig ≤ 0.05), then the research model can be used or the research model is feasible.
- If the calculated F test is smaller than the F table or the probability is greater than the significance level (sig > 0.05), then the model cannot be used or the model is not feasible.
- Comparing the calculated F value with the F value according to the table. If the calculated F is greater than the F value in the table, then the research model is said to be feasible (Ghozali, 2016).

Hypothesis Test t

The t-test is used to test how far the influence of the independent variables used in this study individually (partially) in explaining the dependent variable. The basis for making the t-test decision is as follows:

- If t count > t table, Ha is accepted.
- If t count ≤ t table Ha is rejected

Coefficient of Determination (R^2)

test aims to measure the extent to which independent variables can explain the variation of dependent variables, either partially or simultaneously. The value of this determination efficiency is between zero and one (0 < < 1). A small value means that the ability of the independent variable to explain the variation of the dependent variable is very limited. Conversely, a value that is close to one means that the independent variable provides almost all the information needed to predict the variation of the independent variable (Ghozali, 2016).

4. Results and Discussion

Model Analysis and Hypothesis Proof

This research will carry out several steps in the analysis of the model and proof of this hypothesis, where the steps of this analysis are as follows:

Normality Test

This test is conducted to determine the distribution of each variable whether normal or not normal, this test uses the kolgomorov-smirnov test. The normal distribution value is stated if the kolmogorov-Smirnov test value is significant, namely greater than 0.05.

Table 2 Normality Test Results

Information	N	Kolmogorov-Snirnov Z	Asymp.Sig, (2-tialed)	Conclusion
Model 1	225	1,156	0.143	Normal
Model 2	225	1,089	0.154	Normal
Model 3	225	1,174	0.138	Normal

Source: Data processed by researchers (2023)

Information:
Model 1: Impact of ECOEF on Firm Value
Model 2: Impact of ECOEF on Firm Value mediated by Funding Structure
Model 3: Impact of ECOEF on Firm Value mediated by Profitability

Based on table 2, it can be explained that the results of the Kolomogorov-Smironov test show that there are 3 models, where model 1 produces a Kolomogorov-Smironov value of 1.156 with a significance of 0.143; model 2 produces a Kolomogorov-Smironov value of 1.089 for a significance value of 0.154; and model 3 produces a Kolomogorov-Smironov value of 1.174 and its significance is at 0.138. From the three models, the results show that the data is normally distributed in the linear regression model formed in this study and the AsympSig (2- tailed) value is greater than 0.05.

Multicollinearity Test

This test is intended to prove whether there is a linear relationship or correlation between independent variables or not in the regression model and to avoid habits in the decision-making process. There will be no correlation between independent variables that a good regression model should have. By looking at the tolerance value or Variance Inflation Factor (VIF) value in conducting a multicollinearity test. If the tolerance value > 0.10 and the VIF value <10 then multicollinearity will occur.

Table 3 Multicollinearity Test Results

Variables	Model 1		Model 2	
	TOLERANCE	VIF	TOLERANCE	VIF
ECOEF	0.886	1,026	0.864	1,036
SP	-	-	0.798	1,328
ECOEF –⟶ SP	-	-	-	-
ROE	0.957	1,081	0.796	1,427

Source: Data processed by researchers (2023)

Information:
Model 1: NP is influenced by ECOEF
Model 2: NP is influenced by ECOEF through SP

Based on the results of the multicollinearity test in table 3 above, it shows that there

is no or free from symptoms of multicollinearity between the relationship between the independent variables with the dependent variables and the moderating variables in the regression model, this is because the test results show that the VIF value is <10 and the ni laitole rate is> 0.1, meaning that this model does not show symptoms of multicollinearity. In model 3, a multicollinearity test is not carried out because the correlation between Eco-Efficiency and the funding structure is formed in model 3 which will later have an impact on the possibility of very strong symptoms of multicollinearity.

Heteroscedasticity Test

The purpose of the Heteroscedasticity test is to prove in the regression model whether "there is inequality of variance from residuals for one observation to another". In this study, the Heteroscedasticity test utilizes the Glejser test. If all the data used has a significant value (Sig) > 0.05, it can be said that the data does not show symptoms of heteroscedasticity in the regression model for the residual values produced.

Table 4 Heteroscedasticity Test Results

Variables	Sig		
	Model 1	Model 2	Model 3
ECOEF	0.491	0.574	0.435
SP	-	0.467	0.326
ECOEF → SP	-	-	0.459
ROE	0.369	0.484	0.563
NP	0.452	0.094	0.343

Source: Data processed by researchers (2023)

Information:
Model 1: Impact of ECOEF on NP
Model 2: Impact of ECOEF, SP on NP
Model 3: Impact of ECOEF, SP and ROE on NP

Table 4 above shows that from the results of the heteroscedasticity test, all variable models have a significant value > 0.05. The conclusion is that all variable models are free from heteroscedasticity or there are no symptoms of heteroscedasticity.

Linear Regression Result Estimation

This linear regression analysis model is intended to determine the impact from very strong to very weak, by entering one change at a time into the equation.

The Influence of Eco-Efficiency on Company Value (Model 1)

The influence of eco-efficiency on company value can be seen in the measurement of this first model. The results of the regression equation test:

Table 5 Simple Linear Regression Test Results (Model 1)

Model	Unstandardized Coefficients	t	Sig	Conclusion
(Constant)	0.878	20,642	0,000	
ECOEF	-0.054	-2,179	0.048	Significant negative
ROE	-0.805	-5,906	0.004	Significant negative

(Constant)	0.878	20,642	0,000	Significant positive
R	0.374			
R^2	0.262			
Adjusted R^2	0.242			

Source: Data processed by researchers (2023)

The regression equation model of secondary data output from manufacturing companies in various industrial sectors with coefficient values based on the table above is as follows:

Model 1 :

$$NP = 0.878 - 0.054\ ECOEF - 0.805\ ROE + Ɛ$$

The unidirectional change between the independent variables and the dependent variables is indicated by a positive regression coefficient. The regression values above can be interpreted as follows:

a. Constant (α)
   The constant value (α) is 0.878, this value proves that all independent variables used are constant (will not change), which means that the company's value increases by 0.878 due to the use of other variables outside this study.

b. Regression Coefficient (β_1)
   eco-efficiency variable has a regression coefficient of β_1 -0.054, which means that if a decrease of one time is experienced by eco-efficiency, then a decrease of -0.054 times will be experienced by the Company's value, assuming that other variables are constant (no change).

c. Regression Coefficient (β_2)
   The return on equity (ROE) variable has a regression coefficient $\beta 2_{of}$ -0.805, which means that if there is a one-time increase in return on equity, there will be a decrease of -0.805 in the company's value, assuming there is no change in the other variables.

d. Coefficient of Determination
   The determination coefficient can be seen in table 5, which is the result of the determination coefficient test with a value of 0.242 or 24.2%, proving that 24.2% of the company's value can be explained by the ecp-efficiency variable, while other variables not used in the study explain the remaining 75.8%.

e. t-test
   The t-test was conducted to prove the hypothesis of this study. If the level of significance of the t-test <0.05 (p-value <5%) it can be concluded that $H1_{is}$ not rejected and between the independent variable and the dependent variable there is a significant effect. The results can be seen in the table below.

Table 6 Results of Hypothesis Testing with t-Test Model 1

Hypothesis	Sig	Information
H_1	0.048	Significant Impact

Source: Data processed by researchers (2023)

The significant value of the t-test based on the t-test results table above shows 0.048 significant influence of eco-efficiency on company value. Where the t-test significance is <0.05, from the results above, the conclusion is that company value is influenced by eco-efficiency significantly negatively in manufacturing companies in the various industry

sub-sectors listed on the IDX for the 2018-2022 period.

The Effect of Eco-Efficiency on Firm Value Moderated by Funding Structure (Model 2)

The influence of Eco-efficiency on company value moderated by funding structure, the research testing model can be known by using a regression equation.

Table 7 Results of Bergnda Linear Regression Test (Model 2)

Model	Unstandardized Coefficients	t	Sig	Conclusion
(Constant)	0.210	7,986	0.002	
ECOEF	-0.007	-0.710	0.504	Significant negative
SP	-0.024	-0.873	0.403	Significant negative
ROE	0.048	0.874	0.412	Significant positive
(Constant)	0.210	7,986	0.003	Significant positive
R	0.799			
R^2	0.698			
Adjusted R^2	0.697			

Source: Data processed by researchers (2023)

The regression equation in table 7 shows the coefficient values of the results of the regression equation model as follows:

Model 2: Model with moderating variables

$$NP = 0.210 - 0.007\ ECOEF - 0.024\ SP + 0.048\ ROE + Ɛ$$

The opposite direction change is marked with a negative symbol regression coefficient, conversely the same direction change is marked with a positive symbol regression coefficient. The interpretation for the regression equation value is as follows:

a. **Constants (α)**

Constant value (α) as big as 0.210 show that if independent variable and moderating variable do not change (constant), then the value company will experienced an increase of 0.210 times which was caused by other variables that were not used in research.

b. **Coefficient Regression (β 1)**

The eco-efficiency variable has a regression coefficient β1 of 0.007, which indicates that if eco-efficiency increases by one time, the company's value will increase by 0.007 times, assuming that other variables do not change (constant).

c. **Coefficient Regression (β2)**

Coefficient regression β 2 For funding structure variable (SP) of -0.024, shows that if the funding structure increases by one time, then the company value will increase by -0.024 times assuming the variable other unchanged (constant).

d. Coefficient Regression (β_3)

coefficient β 3 for the return on equity (ROE) variable is 0.048, shows that if return on equity increases by one time, the company value will decrease by 0.048 times assuming variable other constant (do not change).

e. Coefficient of Determination
This test can be explained based on table 7, it can be seen that the results show a figure of 0.697 (69.7%), which means that the dependent variable of company value can be explained by the independent variable ecoefficiency by 69.7%, while the remaining 30.3% of other variables not used in this study can also influence and explain.

f. Moderated Regerition Analysis (MRA)
The determination of the regression equation is intended to prove the impact of eco-efficiency on company value moderated by the funding structure. A moderated regression analysis test was carried out. The results of the moderated regression analysis test can be seen below:

Moderated Regression Analysis Test Output

Model	Unstandardized Coefficient		Sig	Conclusion
(Constant)	0.559	15,939	0.003	
ECOEF	-0.076	-2.686	0.022	Significant negative
SP	0.559	16,982	0.002	Significant positive
ECOEF → SP	0.324	2.162	0.038	Significant Positive
ROE	0.057	0.812	0.474	Significant Positive
(Constant)	0.559	15,939	0.003	Significant Positive
R	0.859			
R^2	0.699			
Adjusted R^2	0.715			

Source: Data processed by researchers (2023)

The results of table 8 can be obtained by the multiple linear regression equation with the moderating variables as follows:

$$NP = 0.559 - 0.076\ ECOEF + 0.659\ SP + 0.324\ ECOEF \rightarrow SP + 0.057\ ROE + Ɛ$$

The opposite direction change is indicated by a negative regression coefficient, while the direction change that is in line between the independent variable and the dependent variable is indicated by a positive regression coefficient. Based on the results of the moderated regression analysis test, it can be interpreted as follows:

a. Constant (α)
Mark constant (α) as big as 0.559 show that if independent variable and moderating variable do not change (constant), then the possible value the company will experience an increase of 0.559 which is caused by other variables which were not used in this study.

b. Regression Coefficient (β_1)
eco-efficiency variable with a regression coefficient of β_1 is -0.076, which means that the company's value will increase by -0.076 times if eco-efficiency increases by one

time, where the other variables are considered unchanged (constant).

c. Regression Coefficient (β_2)
The regression coefficient of the funding structure variable $\beta 2_{is}$ 0.659, indicating that the company's value will increase by 0.659 times if the funding structure increases once, where other variables are considered constant (unchanged).

d. Regression Coefficient (β_3)
$_3$ regression coefficient of the eco-efficiency variable with the funding structure (ECOEF→SP) of 0.224 is shown in a condition where the company value decreases by 0.224 if ECOEF→SP increases by one time, assuming that other variables remain constant.

e. Regression Coefficient (β_4)
The regression coefficient $\beta_{4\,of}$ the return in equity (ROE) variable is 0.057, indicating that if ROE increases by one time, the company value will decrease by 0.057, assuming that other variables remain constant.

f. t-test
The t-test was conducted to prove the hypothesis in this study, with the provision that if the significance of the t-test <0.05 (p- value < 5%), then the conclusion is that the influence of the independent variable on the dependent variable is significant with the presence of a moderating variable. Where the results of the t-test of this study are presented in the table below :

Table 9 Hypothesis Test Output with t-Test Model 2

Hypothesis	Sig	Description
H_2	0.038	Significantly Influential

Source: Data processed by researchers (2023)

Based on table 9, the results of the significant value of the t-test of the impact of eco-efficiency on the value of the Company with the mediation of funding structure are 0.038, where the significance of the t-test is <0.05, which means that the eco-efficiency variable in influencing the value of the company can be strengthened by the funding structure variable in manufacturing companies in the various industrial sectors listed on the IDX for the period 2018 - 2022.

Discussion of Research Results

The influence of Eco-Efficiency on company value

Hypothesis statement 1 of this study: company value is positively significantly influenced by Eco-Efficiency is not proven, this can be seen in the results of the hypothesis test where the t test of the eco-efficiency variable shows a result of -2.179 and the calculated significance value is less than 0.05 (0.048 <0.05). So from this statement it shows that hypothesis 1 cannot be accepted.

The concept of company value that is significantly negatively influenced by eco-efficiency based on the results of this study shows that from the management in this case the management in making the decision to implement the concept is not correct. Because very large costs are needed if the Company wants to apply the eco-efficiency concept, these costs include investment in technology to make the company environmentally friendly so that it can make products that can reduce the detrimental effects of the surrounding environment. By implementing the eco-efficiency concept, it will incur large

operational costs which will later have an impact on profit acquisition which will decrease

Fiedler's (1964) stated related to the contingency theory that is used as its basis that "the performance of a leader is determined by his understanding of the situation in which they lead". This is characterized by inappropriate management performance in decision making which has an impact on the application of the eco-efficiency concept which is also inappropriate. Thus, it will result in a decline in investor perception and a decline in company performance, where performance and investor perception are important factors in company value.

Videen (2010) has conducted a study on eco-efficiency and company value which empirically proves that company value is significantly negatively affected by eco-efficiency. The eco-efficiency concept that has been adopted by the company does not experience higher returns than companies that do not apply the eco-efficiency concept. This statement is proof of the results of this study. Investors will not invest their shares in a company if the promised return does not increase. Therefore, increasing company value is not enough to be done by producing performance alone.

The relationship between Eco-Efficiency and Firm Value moderated by funding structure.

Hypothesis statement 2 "Company Value is influenced by Eco-Efficiency and strengthened by the mediation variable Funding Structure". The test results prove that the funding structure mediates Eco-Efficiency in significantly influencing the company's positive value. This is indicated by the results of the hypothesis test using the t-test, where the magnitude of the influence is 16.982. The results of the t-value of the funding structure moderation variable are 2.162 and the significance value is 0.038, so H2 is accepted.

The results of the hypothesis test from this study prove that the positive influence of the relationship between eco-efficiency and company value can be mediated by the funding structure. It can be interpreted that the allocation of funding structures originating from debt as much as possible can be utilized to support the application of the eco-efficiency concept . The company management uses debt as a strategy to respond to and overcome conditions that occur from contingency problems.

If the strategy of funds with large debt is used by the company's management, then the application of the eco-efficiency concept will be increasingly supported. Where investment in technology requires large costs to apply the eco-efficiency concept by utilizing technological developments. The company's performance and the strategies implemented are higher due to the application of the eco-efficiency concept and can reduce the company's risk, so that it will increase the company's value from the investor's perspective.

Empirical evidence from research conducted by Panggau and Aditya (2017) "funding structure has a significant impact on company value". The analysis of this study on the variables of funding structure and company value uses price book value and earnings per share as control variables, with samples used of manufacturing companies in various industrial sectors listed on the Indonesia Stock Exchange for the period 2018-2022. "The results of this study state that the funding structure has a positive effect on company value ".

5. Conclusion

After conducting various theoretical studies, hypothesis testing, analysis and

discussion, it can be concluded: 1) Eco-efficiency has a significant negative effect on company value. The results of the testing and analysis that have been carried out in this study indicate that the company value will decrease if the application of the eco-efficiency concept is carried out in the company. The application of the eco-efficiency concept in the company will have an impact on large operational costs, the profit obtained by the company will decrease so that the company's performance and investor appreciation will also decrease. Where the company value factor is the company's performance and investor appreciation; 2) The funding structure has a significant positive effect to strengthen the impact of eco-efficiency on the company value of the statement of the results of the analysis and testing that have been carried out in this study, indicating that company management must plan its obligations in preparing the funding structure to manage the utilization of natural resources as efficiently as possible in order to avoid contingency problems that arise. Products produced in order to increase added value and help reduce the impact of the production process will be facilitated by the concept of eco-efficiency.

6. Directions for Future Research

Some suggestions given regarding the results of this study: 1) For the company management to be able to apply the eco-efficiency concept in strengthening the company's value, if it has been implemented properly, its consistency should be maintained and there needs to be periodic evaluation. Thus, the application of the eco-efficiency concept in the company continues to be improved; 2) Sample development is expected in further research on manufacturing companies that meet the specified criteria to be more perfect in its description.

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