

Research Article

## Key Determinant Factors of Firm Value for Energy Sector Companies

Marsella Dyah<sup>1</sup>, Lenni Yovita<sup>2</sup>, Herry Subagyo<sup>3</sup>, Vicky Oktavia<sup>4</sup>

<sup>1</sup> Universitas Dian Nuswantoro, Semarang, Indonesia  
e-mail : [marselladyah09@gmail.com](mailto:marselladyah09@gmail.com)

<sup>2</sup> Universitas Dian Nuswantoro, Semarang, Indonesia  
e-mail : [lenni.yovita@dsn.dinus.ac.id](mailto:lenni.yovita@dsn.dinus.ac.id)

<sup>3</sup> Universitas Dian Nuswantoro, Semarang, Indonesia  
e-mail : [herry.subagyo@dsn.dinus.ac.id](mailto:herry.subagyo@dsn.dinus.ac.id)

<sup>4</sup> Universitas Dian Nuswantoro, Semarang, Indonesia  
e-mail : [vicky.oktavia@dsn.dinus.ac.id](mailto:vicky.oktavia@dsn.dinus.ac.id)

\* Corresponding Author : Marsella Dyah

**Abstract,** The aim of this research is to analyze the determinant factors of Firm Value in Energy Sector Companies listed on IDX 2020-2023. the variable selected in this study were profitability, capital structure and firm size as an independent variable, and Firm Value as a dependent variable. data collection techniques use the purposive sampling method. using secondary data obtained from financial reports on IDX from 2020-2023 with a total of 34 companies. based on the result of the tests prove that profitability has positive significant effect on Firm value, Capital Structure has A significant effect on Firm value, and Firm Size has a positive significance effect o Firm Value. By bridging these concepts, this research explores a deeper understanding of how profitability, capital structure, and company size can have a positive impact on company value. The findings of this research have significant implications for financial management in determining the amount of company value by taking into account profitability, capital structure and company size in investment decisions.

**Keywords:** Profitability; Capital Structure; Firm Size; Firm Value; Energy Sector..

### 1. INTRODUCTION

Energy is among the primary sectors driving the economy in Indonesia. With resources found in natures including coal, oil and gas, iron ore, tin and various other metals, Indonesia is a country with abundant energy wealth. The energy sector is the main source of income for the Indonesian government by contributing to royalties, taxes and company dividends. Apart from being a source of state income, the energy sector is also an attractive indicator of firm value for investors. The value of energy sector companies in Indonesia experiences significant fluctuations from year to year.

Firm value is the outcome of management's efforts in a number of areas, including growth, capital costs, and net cash flow from investment choices (Khan et al., 2020) Firm value is a very important factor for investors in deterenergy the right company to invest in. A high firm value indicates high market demand. The primary objective of every company is to achieve and sustain its value, which in turn can enhance the wealth of shareholders and benefit the public

PBV, or price to book value, is a metric used to evaluate a firm value. The book value of the stock market for shares is known as market value, but the shares' intrinsic value is their actual worth, and book value, also known as price to book value, is the share value determined by the issuer's accountin (Alifian & Susilo, 2024) g. PBV is a ratio that can be used to evaluate a stock, general indications of PBV value are undervalued and overvalued, share prices can be said to be undervalued if the PBV value is <1, conversely share prices can be said to be overvalued if the PBV value is >1.

Received: January, 6<sup>th</sup> 2025

Revised: February, 6<sup>th</sup> 2025

Accepted: February, 28<sup>th</sup> 2025

Published: March, 05<sup>th</sup> 2025

Curr. Ver.: March, 05<sup>th</sup> 2025



Copyright: © 2025 by the authors.  
Submitted for possible open access publication under the terms and conditions of the Creative Commons Attribution (CC BY SA) license (<https://creativecommons.org/licenses/by-sa/4.0/>)

The valuation of energy sector companies listed between 2020 and 2023 on the Indonesia Stock Exchange is shown in a graph bellow.



*Source: Statistic IDX (www.idx.co.id)*

**Figure 1. Average of PBV of energy sector companies 2020-2023**

Graph 1 provides an explanation regarding the fluctuating movement of the average PBV of energy companies from 2020 to 2023. It can be seen from this graph that the firm value tends to decrease from year to year. In 2020, the Company's value was recorded at 2.01 and it could be said that the company is in an overvalued condition, which then experienced a decline in the Company's value, reaching 1.10, after experiencing a very drastic decline. The company then experienced a slight increase in the firm value figure in 2022 amounting to 1.13, then experienced a decrease again in the following year to 1.03. Several aspects that can influence the rise and fall of firm value include profitability, capital structure and firm size.

The capacity of the company to generate revenue from its operations is known as profitability. activities which is quantified using the Return on Assets ratio. As stated by Kasmir (2012) A ratio called return on assets (ROA) shows the return on the quantity of assets utilized by the company. According to (Setiawanta et al., 2021) The value of a firm is positively impacted by return on assets. Profitability is a reflection of firm value. A large profit or profit value might serve as a signal of the company's promising future, encouraging (Maulana et al., 2020) The research also gave the same results, namely Firm value was significantly positively impacted by return on assets.

The capital structure is the proportion of the business's debt to its own capital, as displayed in the year-end financial statements. The debt to equity ratio (DER) can be used to quantify the capital structure. As long as the trade-off theory's optimal point hasn't been reached by the DER, a higher DER will result in a higher firm value (Hirdinis, 2019). According to (Dang & Do, 2021) in his research revealed that capital structure significantly impact the firm value. However, based on studies carried out by (Rambe et al., 2023) actually revealed that the DER had no significant influence on firm value. Firm size is the company's size as indicated by its total assets. If the company has large assets, management will have more flexibility in using existing assets for the company's operational needs (Yusmaniarti et al., 2023). According to studies carried out by (Tri et al., 2023) and (Sudrajat & Setiyawati, 2021) states that firm size with the LnTA ratio has a positive influence on firm value. inversely correlated with studies carried out by (Firdaus & Dwi Artati, 2023) which states that Firm value is negatively impacted by the LnTA ratio.

Based on the findings and inconsistencies of prior studies, this research will aim to determine the effect of profitability, capital structure and firm size on the value of firm in the energy sector 2020–2023 listed on IDX.

## 2. RESEARCH METHODS

### Signalling Theory

Signaling Theory was first developed by (Stephen A Ross 1977), in his findings Ross revealed that internal parties who have more in-depth knowledge about the Company will be motivated to share this knowledge with prospective investors in an attempt to raise the share price of the company. According to Brigham and Houston (2011:184) in (Sadewo et al., 2017) research explain that signalling theory is known as an action by management that instructs investors on how management perceives the prospects of the company. Signaling theory explains that all actions contain information, and this is due to information asymmetry (Alam, 2022).

### Trade Off Theory

Longterm financing, which includes both long-term debt and own capital, is part of the capital structure. In capital structure, there are several theories developed by experts, one of which is the Trade Off Theory. (Myers, 1984) in the trade off theory explains that companies will become indebted to a certain level, where the tax savings from additional debt equal the cost of financial distress.

### Firm value

An investor's opinion of a firm is known as its firm value, and it is frequently linked to the stock price. The primary goal of a company, as determined by its theory, is to increase the company's wealth or value (Hirdinis, 2019). To measure the value of energy sector companies, price to book value will be used.

$PBV = \frac{\text{market price per share}}{\text{book value per share}}$

### Profitability

Profitability is often interpreted as a financial ratio that can evaluate a business's capacity to turn a profit. Profitability ratios demonstrate a company's uses its assets to turn a profit and show its capacity to generate earnings against costs over a specified time period. This is supported by the results of (Husna & Satria, 2019) Finding that firm value is significantly impacted by profitability. The value of profitability will be assessed using return on assets, or ROA.

$ROA = \frac{\text{Net Income}}{\text{Total Assets}}$

### Capital structure

Retained earnings, shares, and reserves provide the company with the funds it needs to meet its capital needs. If funding using your own capital is still insufficient, you can consider using capital that comes from outside, namely debt. The capital structure concept describes When debt and equity are combined utilized to fund the business's assets. The capital structure of the business is evaluated using the Debt to Equity Ratio, or DER by describing the comparison between liabilities and equity.

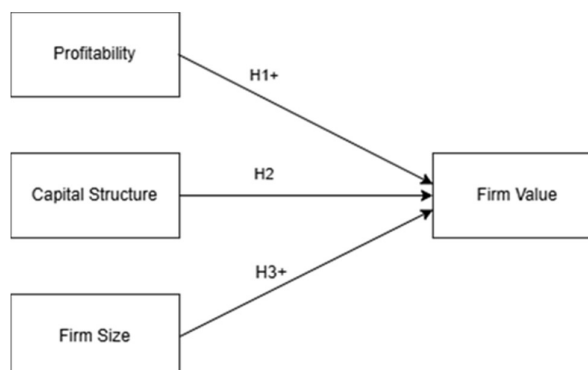
$DER = \frac{\text{Total Debt}}{\text{Total Equity}}$

### Firm size

Firm size is the size of a firm which can influence the capital structure, and the total amount of assets the company owns shows how big it is. The larger the company, the greater its total assets (Siti Nuridah et al., 2023). Ln Total Assets is usually used as a company measurement indicator.

$\text{Size} = \ln(\text{Total Asset})$

### Conceptual Framework



**Figure 2. conceptual framework**

The conceptual framework is described by researchers using firm value as the dependent variable as well as profitability, capital structure, and firm size as independent variables. The following is an overview of the conceptual framework used:

#### **The Effect of profitability on firm value**

High profitability indicates promising business possibilities, which will encourage investors to react positively and raise the firm's worth (Husna & Satria, 2019) The findings of their study, which show that profitability significantly affects firm value, support this. According to (Rachmawati et al., 2022) Price to book value is impacted by return on assets. This shows that a one-unit improvement in return on assets, it means that the price to book value will increase. This finding is supported by the results of study by (Widiastuti et al., 2023) which states that Price to book value is positively impacted by return on assets. H1: There is a positive influence and significant of profitability on firm value

#### **The Influence of capital structure on firm Value**

Trade off theory in capital structure plays a role in balancing the benefits and sacrifices arising from the use of debt. According to (Lestari, 2023) research Debt to Equity Ratio has a significant impact to Firm Value. This finding is in line with the research conducted by (Liong & Uluputty, 2023) and (Kurnia Zebua, 2023), but it is inversely proportional to the (Nainggolan et al., 2023a) study which reveals that DER has no effect on firm value H2: Capital structure has a significant effect on Firm Value

#### **The Effect of firm size on firm value**

According to Tri et al., (2023) in her research stated that firm size has a positive influence on price to book value. The statement are in line with the findings of studies conducted by (Sudrajat & Setiyawati 2021) and (Chabachib et al., 2019) which shows that firm value is positively impacted by firm size.

H3: There is a positive influence and significant of firm size on firm value

### **3. METHODS**

#### **Population and Sample**

The Indonesia Stock Exchange lists every energy company between 2020 and 2023 are included in the research population. The sample was chosen using the purposive sampling technique, with reference to companies that met the research criteria, namely those listed on IDX, had published financial reports for four consecutive years, and published financial reports during the 2020-2023 period. From this method, the following samples were obtained:

**Table 1. population and sample energy sector companies**

Criteria	Total
Energy firms listed between 2020 and 2023 on the IDX	<b>66</b>
Energy firms listed between 2020 and 2023 on the IDX that do not report financial reports	<b>(10)</b>
Energy firms listed between 2020 and 2023 on the IDX that have negative ROA 2 years in a row	<b>(22)</b>
Number of samples of energy companies in 2020-2023	<b>34 x 4 years = 136 samples</b>

Source: IDX 2024

#### The result data analysis techniques

Using E Views 12 software as a data processing tool, researchers will apply the multiple linear regression analysis method in this study. The analysis model that will be used is as follows:

$$y = \alpha + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + e_i$$

$$y \text{ (PBV)} = \alpha + \beta_1(\text{ROA}) + \beta_2(\text{DER}) + \beta_3(\text{LnTA}) + e_i$$

y = PBV (firm value)

$\alpha$  = constanta

$\beta_1, \beta_2, \beta_3$  = regression coefficient

X1 = ROA (profitability)

X2 = DER (capital structure)

X3 = LnTA (firm size)

$e_i$  = galat error

## 4. RESULTS AND DISCUSSION

### Descriptive Statistics

A sample of energy companies listed between 2020 and 2023 on the Indonesia Stock Exchange was used in this study. It was found that there were 34 companies that passed the purposive sampling, with a total of 136 data analyzed.

**Table 2. Descriptive Statistic**

	ROA	DER	TA	PBV
Mean	4.471618	1.044485	29.26625	2.613824
Median	0.320000	0.900000	29.23000	1.185000
Maximum	53.00000	6.830000	32.71000	33.60000
Minimum	-21.00000	0.060000	23.67000	0.200000
Std. Dev.	9.633449	0.934872	1.832013	4.669778

*Source: Descriptive Statistic processed by Eviews, 2025*

The profitability variable during the 2020-2023 research period has a maximum value of 53,0000 in 2023 obtained by PT Bayan Resources Tbk. And it has a minimum value of -21,000 obtained by PT Artha Mahiya Investama in 2023. According to Birken 2021, a good ROA value for a company is 5% or more, and above 20% is considered a very good ROA value. Overall, the average value is 4.47161 and the value of standard deviation is 9.63344.

The capital structure variable during the 2020-2023 research period has a maximum value of 6.83 in 2023 obtained by PT Dian Swastika Sentosa Tbk. and has a minimum value of 0.06 obtained by PT Alami Resources Indonesia Tbk. In 2023. In general, a good DER value is in the range of 1 to 1.5 times. Overall, The capital structure's average value is 0.972941 and the value of standard deviation is 0.930067.

The firm size variable during the 2020-2023 research period has a maximum value of 160979.0 in 2023 obtained by PT Adaro Andalan Indonesia Tbk. And it has a minimum value of 19,00000 obtained by PT Artha Mahiya Investama Tbk in 2020 and 2023. Overall, the variable average value for firm size is 18612.56 and the standard deviation value is 31951.86. Firm size is often used as an indicator of financial strength.

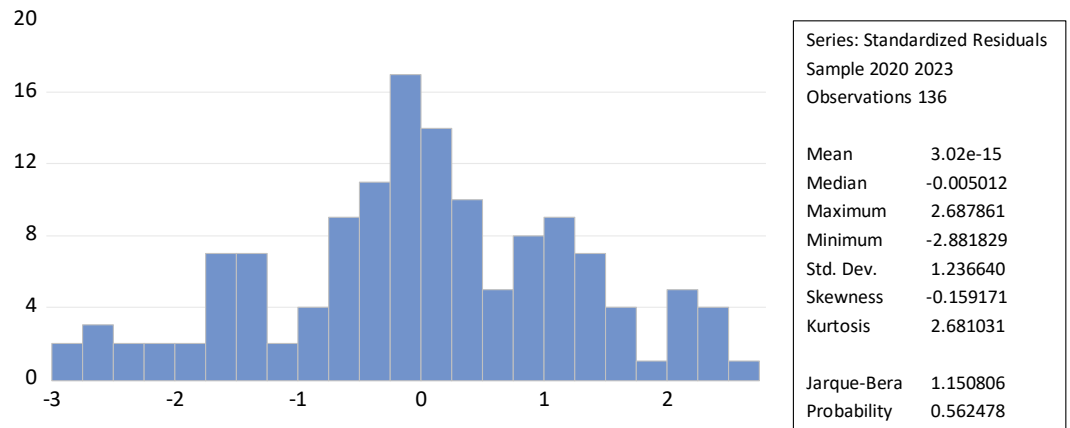
The Firm value variable during the 2020-2023 research period has a maximum value of 33.600000 in 2021 obtained by PT Transcoal Pacific Tbk and has a minimum value of 0.200000 obtained by PT Itamarya Tbk in 2020. Overall, The firm value variable's average value is 2.613824 as well as the standard value deviation is 4.669778.

### **Panel Data Regression Analysis**

Panel data regression analysis is used to determine the panel data regression model. Test results using three models (Common Effect Models, Fixed Effect Models, and Random Effect Models) and selected The Random Effect Model (REM) can be said to be valid based on the author's findings from the Chow, Hausman and LM test which used as a model for panel data regression to test the equation of the panel data regression hypothesis.

### Normality Test

normality test is a statistical procedure that determines if the distribution of data is normal.



**Figure 3. Normality test**

according the table of normality test above, The Jarque-Bera probability value is  $0.562478 > 0.05$ , showing that the study's residuals are distributed normally.

### Multicollienarity Test

A multicollienarity test is a statistical procedure that checks for a correlation between independent variables in a regression model.

**Table 3. Multicollienarity Test**

Variable	Coefficient Variance	Uncentered VIF	Centered VIF
C	0.481816	395.2851	NA
ROA	0.016159	1.291473	1.156688
DER	0.004842	3.701283	1.161368
LNTA	0.000570	406.1550	1.081726

Source: secondary data processed, 2025

Based on the Multicollienarity test above, if the the VIF value  $< 0,10$  its indicates that there is no multicollienarity. It can be concluded that the correlation coefficient value are  $< 0.10$ , indicating that there is no multicollienarity.

**Autocorrelation Test****Table 4. Autocorrelation Test**

Breusch-Godfrey Serial Correlation LM Test:

Null hypothesis: No serial correlation at up to 2 lags

F-statistic	1.203185	Prob. F(2,42)	0.3104
Obs*R-squared	2.601107	Prob. Chi-Square(2)	0.2724

*Source: secondary data processed, 2025*

Based on the table of Autocorrelation Test above, it shows that the value of probability Obs\*R-Squared is 0.2724 ( $>0.05$ ) Consequently, the autocorrelation test can be said that has been passed.

**Heteroscedasticity Test****Table 5. Heteroscedasticity Test**

Heteroskedasticity Test: White

Null hypothesis: Homoskedasticity

F-statistic	0.650487	Prob. F(9,38)	0.7470
Obs*R-squared	6.407803	Prob. Chi-Square(9)	0.6985
Scaled explained SS	6.485001	Prob. Chi-Square(9)	0.6906

*Source: secondary data processed, 2025*

Since the Obs\*R-Squared probability value is 0.6985 ( $>0.05$ ), it can be said that the data has passed the heteroscedasticity test and this test has been fulfilled

**Analysis of Panel Data Regression Results****Table 6. Results of panel data regression**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.000505	0.250502	0.002014	0.9984
ROA	0.846039	0.283001	2.989529	0.0046
DER	-0.266645	0.070204	-3.798141	0.0004
LNTA	0.436440	0.074210	5.881149	0.0000

*Source: Secondary data processed, 2025*

The author's findings from the Chow, Hausman and LM test which used as a model for panel data regression to test the equation of the panel data regression hypothesis.



### Regression analysis equations

$$PBV = 0.000505 + 0.846039 (ROA) - 0.266645 (DER) + 0.436440 (LnTA) + e$$

The constant value obtained is 0.000505, which means that if the independent variable increases by one unit on average, the firm value variable will increase by 0.000505 times. The ROA regression coefficient value is positive at 0.846039, which means that if ROA increases one point, PBV will also increase by 0.846039 point. The DER regression coefficient value is negative at -0.266645, which means that if ROA increases, PBV will decrease by -0.266645 and vice versa. The LnTA regression coefficient value is positive at 0.436440, which means that if LnTA increases by 1 Rupiah, PBV will also increase by 0.436440 times.

### Simultaneous F Test

**Table 6. Results of F test and Adjusted R square**

R-squared	0.695669	Mean dependent var	1.070417
Adjusted R-squared	0.674919	S.D. dependent var	0.468928
S.E. of regression	0.267364	Akaike info criterion	0.279240
Sum squared resid	3.145263	Schwarz criterion	0.435174
Log likelihood	-2.701765	Hannan-Quinn criter.	0.338168
F-statistic	33.52640	Durbin-Watson stat	1.407796
Prob(F-statistic)	0.000000		

*Source: Secondary data processed, 2025*

The F statistic value is known to be 33.52640 with a probability value 0.0000 (<0.05), so it can be concluded that the Dependent Variable (Y) is significantly impacted by the Independent Variable (X) simultaneously.

### Analysis of Determination Coefficient Test Results

Based on the Adjusted R Square value of 0.674, it can be inferred that the independent variable influences the dependent variable by 67.4% while other variables excluded in this research influence the remaining 32.6%.

### T-Test Result

Variable	Coefficient	t-Statistic	Significance	Hypothesis Decision
C	0.000505	0.002014	0.9984	-
ROA	0.846039	2.989529	0.0046	H1 is accepted
DER	-0.266645	-3.798141	0.0004	H2 is accepted
LnTA	0.436440	5.881149	0.000	H3 is accepted

*Source: Secondary data processed, 2025*

From the table above, it shows the significance value of ROA  $0.046 < 0.05$ , as well as the Unstandardized value B 0.846039 as a result the first hypothesis can be accepted. The significance value of DER  $0,0004 < 0,05$ , and the value of Unstandardized B is -0.266645 as a result the second hypothesis can be accepted. The significance of LnTA is 0.0000 and the value of unstandardized B is 0.436440 as a result the third hypothesis can be accepted.

## 5. DISCUSSION

In the T-Test above we can see the significance value of the ROA variable of  $0.0046 < 0.05$  and the t-statistic value is 2.989529. These findings indicate that the profitability variable (ROA) has a positive and significant impact on firm value (PBV), so it is possible to accept the first hypothesis. The results of this test confirm the findings in previous research by Widiastuti et al., (2023), Rachmawati et al., (2022) and Wulan Dewi et al., (2022) which suggests that ROA has a positive and significant impact on firm value. This is different from the research results from (Purnomo et al., 2024) which revealed that ROA had no effect on PBV.

This finding is in line with the concept of signalling theory developed by Brigham & Houston (2011) which states that a higher level of profitability indicates a company has positive long-term performance and potential. In this case, investors can indicate that the company has the potential to provide high returns on investment. With an increase in ROA, it will affect the level of desire to invest in energy companies because an increase in ROA can indicate that firm value has increased, so that the Company is able to provide good stock returns.

The significance value for the capital structure variable (DER) is  $0.0004 < 0.05$ . These findings indicate that firm value (PBV) is significantly impacted by the capital structure variable (DER), so the second hypothesis can be accepted. This finding is related to the trade-off theory developed by Myers (1984), the use of debt will be allowed only to a certain point, more than that it will actually reduce the value of the company. The results of this test confirm the findings in previous research by Zebua (2023) and Liong et al., 2023 which suggests that capital structure (DER) has impact on firm value (PBV). This is different from the research results from Nainggolan et al., (2023) which revealed that DER has positive impact to PBV.

In the table above you can see the significance value of the firm size variable (LnTA) of  $0.0000 < 0.05$  and the t-statistic value is 5.881149. These findings indicate that the firm size variable (LnTA) has a positive and significant impact on firm value (PBV), so the third hypothesis can be accepted. With the increase in the value of the company's total assets, this can give a positive signal to investors to invest their capital in the company. This has to do with signalling theory which reveals that a company has a lot of information about the company's condition and gives a positive signal to potential investors. The results of this test confirm the findings in previous research by Chabachib et al., (2019) and Tri et al., (2023) which reveals that Firm value (PBV) is positively impacted by firm size (LnTA).

## 6. CONCLUSION

Based on the result of the research of the effect of ROA, DER, LnTA on PBV in the energy sector listed on Indonesia Stock Exchange (IDX) in 2020-2023, Therefore, it can be said that ROA significantly and positively affects PBV. in the energy sector which is listed on the Indonesia Stock Exchange (IDX) in 2020-2023. The result showed that the higher Return on Assets applied by energy sector listed in IDX will increase the Price to Book Value. such that H1, which claims that return on assets has a significant and positive impact, can be approved.

DER significantly affects PBV. in the energy sector which is listed on the Indonesia Stock Exchange (IDX) in 2020-2023. The result showed that the value of Debt to Equity Ratio applied by energy sector listed in IDX will affects the Price to Book Value. in order

to accept H2, which claims that Debt to Equity Ratio has a significant impact to Price to Book Value.

LnTA significantly and positively affects PBV. in the energy sector which is listed on the Indonesia Stock Exchange (IDX) in 2020-2023. The result showed that the higher Ln Total Assets applied by energy sector listed in IDX will increase the Price to Book Value. so that H3, which claims that return on assets has a significant and positive impact, can be approved.

## References

- [1] Alifian, D., & Susilo, D. E. (2024). Pengaruh Profitabilitas, Likuiditas, Ukuran Perusahaan Dan Struktur Modal Terhadap Nilai Perusahaan. *Owner*, 8(1), 46–55. <https://doi.org/10.33395/owner.v8i1.1914>
- [2] Chabachib, M., Hersugondo, H., Ardiana, E., & Pamungkas, I. D. (2019). Analysis of Company Characteristics of Firm Values: Profitability as Intervening Variables. *International Journal of Financial Research*, 11(1), 60. <https://doi.org/10.5430/ijfr.v11n1p60>
- [3] Dang, T. D., & Do, T. V. T. (2021). Does capital structure affect firm value in Vietnam? *Investment Management and Financial Innovations*, 18(1), 33–41. [https://doi.org/10.21511/imfi.18\(1\).2021.03](https://doi.org/10.21511/imfi.18(1).2021.03)
- [4] Hirdinis, M. (2019a). Capital Structure and Firm Size on Firm Value Moderated by Profitability. In *International Journal of Economics and Business Administration: Vol. VII (Issue 1)*. [www.idx.co.id](http://www.idx.co.id),
- [5] Husna, A., & Satria, I. (2019). EFFECTS OF RETURN ON ASSET, DEBT TO ASSET RATIO, CURRENT RATIO, FIRM SIZE, AND DIVIDEND PAYOUT RATIO ON FIRM VALUE. *International Journal of Economics and Financial Issues*, 9(5), 50–54. <https://doi.org/10.32479/ijefi.8595>
- [6] Khan, A., Qureshi, M. A., & Davidsen, P. I. (2020). How do oil prices and investments impact the dynamics of firm value? *System Dynamics Review*, 36(1), 74–100. <https://doi.org/10.1002/sdr.1649>
- [7] Kurnia Zebua, D. (2023). Return On Aseet (ROA), Return On Equity (ROE), Debt Equity Ratio (DER), Firm Value (PER). In *IJEET ( INDONESIA JOURNAL ENGINEERING AND EDUCATION TECHNOLOGY (Vol. 1, Issue 1)*.
- [8] Lestari, E. (2023). DEBT TO EQUITY RATIO (DER) AND FIRM SIZE TOWARD FIRM VALUE : THE MEDIATING ROLE OF RETURN ON ASSET.
- [9] Liong, H., & Uluputty, N. F. (2023). Capital Structure, Financial Performance, Investment Decision and Firm Value 1 Harlina Liong, 2 Nurdjanna Fadjrin Uluputty Sekolah Tinggi Ilmu Ekonomi AMKOP Makassar.
- [10] Maulana, I., Wijayanti, A., & Dewi, R. R. (2020). CAHAYA AKTIVA DER, ROA AND OPERATING CASH FLOW AGAINST FIRM VALUE IN VARIOUS INDUSTRIAL COMPANIES LISTED ON THE IDX 2015-2019.
- [11] Muhammad Fadel Ul Alam. (2022). SIGNALING THEORY.
- [12] Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*.
- [13] Nainggolan, Y., Maksum, A., & Erwin, K. (2023a). Analysis of the Influence of Debt to Equity Ratio (DER), Earnings Per Share (EPS), and Dividend Payout Ratio (DPR) on Stock Price with Firm Value as an Intervening Variable (Case Study of LQ45 Stock Index 2015-2021 Period). *International Journal of Research and Review*, 10(9), 226–241. <https://doi.org/10.52403/ijrr.20230925>
- [14] Noor Faizah Rachmawati, Edi Murdiyanto, & Zulfia Rahmawati. (2022). PENGARUH TATO, DAR DAN ROA TERHADAP PBV PERUSAHAAN YANG TERDAFTAR DIINDEKS LQ45 BEI 2018-2020.
- [15] Purnomo, A. K., Kartika Sari, U., & Nuralizah, A. (2024). Pengaruh Return on Asset (ROA) dan Debt to Equity Ratio (DER) Terhadap Price to Book Value (PBV) Pada Perusahaan Sub Sektor Makanan dan Minuman yang Terdaftar Di Bursa Efek Indonesia Periode 2016-2022. *Owner*, 8(2), 1759–1767. <https://doi.org/10.33395/owner.v8i2.1969>
- [16] Rambe, I. R., Elwisam, E., & Digidowiseiso, K. (2023). The Influence of ROA, DER, Total Asset Turnover and Sales Growth on Firm Value (Study of Companies in the Consumption Goods Industrial Sector Listed on The IDX for The 2017-2021 Period). *Jurnal Syntax Admiration*, 4(3), 359–407. <https://doi.org/10.46799/jsa.v4i3.857>
- [17] Rifqi Adhitama Firdaus, & Dwi Artati. (2023). Pengaruh Struktur Modal, Profitabilitas dan Ukuran Perusahaan Terhadap Nilai Perusahaan pada Perusahaan Sektor Transportasi yang Terdaftar di BEI Periode 2019-2021.
- [18] Ross, S. A., Cox, J., Rubinstein, M., Jaynes, G., & Grossman, S. (1977). The determination of financial structure: the incentive-signalling approach.
- [19] Sadewo, I. B., Suparlinah, I., & Widianingsih, R. (2017). PENGARUH UKURAN PERUSAHAAN DAN KEPUTUSAN PENDANAAN TERHADAP NILAI PERUSAHAAN DENGAN PROFITABILITAS SEBAGAI VARIABEL MEDIASI.
- [20] Setiawanta, Y., Utomo, St. D., Pamungkas, I. D., Jumanto, & Ifada, L. M. (2021). The Impact of Profitability on Firm Value: Does Environmental Performance Play a Mediation Role? *Journal of Hunan University*, 48(7), 220–228. [www.idx.co.id](http://www.idx.co.id)
- [21] Siti Nuridah, Joelianti Dwi Supraptiningsih, Sopian, & Mutiara Indah. (2023). PENGARUH PROFITABILITAS DAN UKURAN PERUSAHAAN TERHADAP STRUKTUR MODAL PADA PERUSAHAAN RITEL.
- [22] Sudrajat, J., & Setiyawati, H. (2021). Role of Firm Size and Profitability on Capital Structures and Its Impact Over Firm Value. 2(1). <https://doi.org/10.38035/dijefa.v2i1>
- [23] Tri, A., Sukanti, W., Rahmawati, M. I., Jurnal, J., Akuntansi, I., & Keuangan, D. (2023). Sekolah Tinggi Ilmu Ekonomi Indonesia (STIESIA) Surabaya. <https://doi.org/10.24034/jiaku.v2i1>
- [24] Widiastuti, S., Yovita, L., Chasanah, A. N., & Santi Samasta, A. (2023). Pengaruh Profitabilitas, Struktur Modal, dan Ukuran Perusahaan terhadap Nilai Perusahaan (Studi pada Perusahaan Makanan dan Minuman yang Terdaftar di Bursa Efek Indonesia Periode 2018-2022). In *JEKOBIS (Vol. 2, Issue 4)*.

- 
- [25] Wulan Dewi, K., Herlinawati, E., Suryaningprang, A., & Sudaryo, Y. (2022). Pengaruh CR, DER, TATO, dan ROA Terhadap PBV Pada PT Indomobil Sukses Internasional Tbk. *Journal of Business Finance and Economic (JBFE)*, 3(2).
- [26] Yusmaniarti, S., Astuti, A., & Ananda, B. (2023). Pengaruh Ukuran Perusahaan dan Struktur terhadap Nilai Perusahaan yang dimoderasi Corporate Social Responsibility. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(1), 11. <https://doi.org/10.37676/ekombis.v1i1>
- [27]