



Increasing Company Value in Times of Environmental Uncertainty

Heru Sulistiyo ^{a*}, Sutono ^a and Sodikin Manaf ^a

^a STIE Dharmaputra, Semarang, Central Java, Indonesia.

Authors' contributions

This work was carried out in collaboration among all authors. All authors read and approved the final manuscript.

Article Information

DOI: 10.9734/AJEBA/2023/v23i231179

Open Peer Review History:

This journal follows the Advanced Open Peer Review policy. Identity of the Reviewers, Editor(s) and additional Reviewers, peer review comments, different versions of the manuscript, comments of the editors, etc are available here: <https://www.sdiarticle5.com/review-history/110101>

Original Research Article

Received: 02/10/2023

Accepted: 08/12/2023

Published: 12/12/2023

ABSTRACT

Aims: This study tries to enhance the company's value by influencing the company's size, leverage and profitability on property and real estate business listed on the Indonesia Stock Exchange in times of uncertainty in a high environment.

Study Design: Correlational.

Place and Duration of Study: property and real estate business listed on the Indonesia Stock Exchange in 2021-2022.

Methodology: Population study This property and real estate business is listed on the Indonesia Stock Exchange; in 2021, there will be 76 companies, and in 2022, there will be 85 companies, totalling 161. As for the sample determined based on the method census, however, after the Normality test was carried out, there were 45 outlier data, so the sample end is 116. Data in study This was collected with method studies documentation and analysis using a solved structural equation model with SPSS 24.

Results: Research shows that the company's size influences the company's profitability, leverage and profitability influence the value company, and profitability mediation influences the company's size to the value company.

Conclusion: The research contributes to signal theory by providing empirical evidence of the influence of company size, leverage and profitability on company value during times of high environmental uncertainty.

*Corresponding author: E-mail: sulistiyoheru0@gmail.com;

Keywords: Size; leverage; profitability and company value.

1. INTRODUCTION

2020-2022 is the COVID-19 pandemic period; at that time, environmental uncertainty is high because there are restrictions on activity in society and business. In 2020-2021, the Indonesian Central Statistics Agency (BPS) reported that 36.56% of businesses closed their efforts [1]. Connection with matter Accordingly, property and real estate businesses listed on the Indonesian Stock Exchange (IDX) were also affected by the COVID-19 pandemic, experiencing a drastic drop in value the company being measured with price book value (PBV). 2019, the average PBV was 2.42, becoming 1.4 in 2020, 0.65 in 2021 and 0.52 in 2022 [2-5]. The phenomenon continues, and the world will experience a crisis economy in 2023 [6].

Need presented here that the main goal of a public company is to increase prospects for owners by increasing the company's value [7]. High company value will increase shareholder prosperity [8]. Therefore, increasing the company's value is a real positive for investors in the capital market. The company's value can be measured with ratio price book value (PBV) that compares price share with mark book per sheet stock [8].

It is important to find a solution for the drastic decline in company value in property and real estate businesses in IDX so that it does not continue in the future. This research proposes using company size, leverage and profitability to increase company value based on the research results described below.

Company size is big and small companies that can be measured through big small sales, total assets and equity. The bigger the company, the greater the source of power [9], so the potential to obtain a high income. Enhancement size companies will respond positively to the market to increase the company's value. This is per the results of previous research that company size has a significant positive effect on company value [10-12].

Owolabi and Inyang [13] revealed that publishing debt with a large amount can show signals of positive investor confidence, so price share can increase, which in turn increases the value of the company increase. One of the ratio debt is

leverage, namely the ability of a company to fulfil its obligations period short and term long [14]. Leverage matters positively to the value company proposed by Budiharjo [15]; Zuhroh [16]. That matters. It means that if leverage increases, then the value of the company will increase.

Profit is a positive signal for the market, as proposed by Komara et al. [17]. Previous research results also show that profitability was positive and significantly affects company value [18-21]. This positive influence indicates that the company value will increase if profits increase.

Natsir and Yusbardini [22] revealed that profitability is a mediation influence of leverage and size company to value companies in the industry goods consumption recorded on the IDX. In accordance, Rizki et al. [23] reveal that profitability mediates the effect of company leverage to value the company, and Chabachib et al. [24]; Monoarfa [25] revealed that profitability as mediation influences the size of the company to the value of a company.

Contribution study This contribution to management finance provides proof of empirical How to increase Company value through enhancement of size company, leverage and profitability.

2. STUDY LIBRARIES AND DEVELOPMENT HYPOTHESIS

2.1 Signal Theory

Signalling theory is closely related to company financial information; company executives will be encouraged to convey good information to investors [26]. Leverage and profitability with the value of a company can give a positive signal to the market whenever increasing the stock price [17].

Owolabi and Inyang [13] stated that issuing large amounts of debt shows a positive signal for investor confidence so that share prices can increase, increasing company value. Another aspect that is related to signal theory is company size. A large company size will, of course, be responded well by the market. Simply put, the larger the company size, the more positive the signal from investors [27].

2.2 The Effect of Company Size on Profitability

Company size is big small companies that can be measured through big small total assets owned by the company [9]. The source of power owned by the company can also become an estimation of the size of the company, increasingly so the great source of its power [9] can be used to obtain income.

Rahman and Yilun [28]; Al Nawaiseh [29]; Kartiningih and Daryanto [30] revealed that company size has a positive effect on profitability. This statement means that the profitability will also increase if the company's size grows. Logically, the bigger the company, the more abundant resources it can manage to increase its profits. On base information, Hypothesis 1 is formulated as follows: company size positively affects profitability.

2.3 The Effect of Leverage on Profitability

Leverage is the company's ability to pay all its short-term and long-term obligations [14]. A company with more debt is big and used for profitable investment, which can increase the profit. This aligns with the research results of Margono and Gantino [31] and Markonah et al. [32] that leverage significantly positively affects profitability.

Logically, if the debt is used for productive investment, it will increase revenue and, in turn, a profit increase. On base information, Hypothesis 2 is formulated: leverage positively affects profitability.

2.4 The Influence of Company Size on Company Value

The market will respond to an increase in company size so that company value will increase. The company's large size results in investors paying more attention so that the share price rises, which will cause the company's value to rise.

Based on research by Lambey et al. [10], Hapsoro and Falih [11], and Husna and Satria [12] stated that company size has a significant positive effect on company value. Therefore, Hypothesis 3 is formulated: Company size positively affects company value.

2.5 The Effect of Leverage on Company Value

Issuing large amounts of debt shows a positive signal for investor confidence so that share prices can increase, increasing company value [13]. The results of previous research show that leverage has a positive effect on company value [15,16]. This means that if solvency increases, the company value will also increase. Therefore, Hypothesis 4 is formulated: Leverage positively affects company value.

2.6 The Effect of Profitability on Company Value

Profitability is a company's ability to generate profits from its assets, capital and at a certain level of sales [8]. Profit is news Good for investors so it will impact increasing company value [17]. Previous research shows that profitability significantly positively affects company value [18-21]. This positive influence indicates that company value will also increase if profits increase. Logically, a company whose ability to generate high profits will have a high share price. The share price is high due to a positive market response, and the company value will increase sequentially over time. On base information, Hypothesis 5 is formulated as follows: Profitability positively affects company value.

2.7 Profitability Mediates the Effect of Company Size on Company Value

Size companies that can increase profit will respond positively to the market, increasing the company's value. Prediction by the research results of Chabachib et al. [24], Natsir and Yusbardini [22] and Monoarfa [25] revealed that profitability mediates the influence of company size on company value. This research means whether profitability can mediate the influence of company size on company value. On base information, Hypothesis 6 is formulated as follows: Profitability can mediate the influence of company size on company value.

2.8 Profitability Mediates the Effect of Leverage on Firm Value

Possible leverage increases profit, then will respond positively by the market so that mark company will increase. Prediction This is by the research results of Natsir and Yusbardini [22]

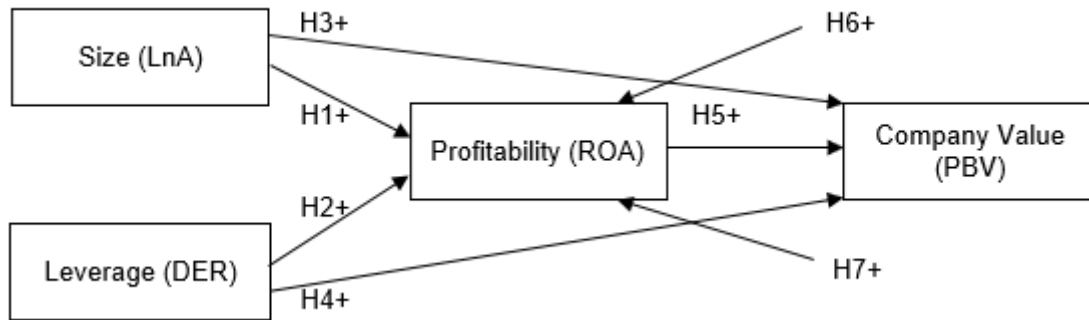


Fig. 1. Framework Research

Notes: DER: Debt to Equity Ratio; LnA: Ln Assets; ROA: Return on Assets; PBV: Price Book Value
 Source: Chabachib et al. (2020), Natsir and Yusbardini (2019), Monoarfa (2018) and Rizki et al. (2018)

and Rizki et al. [23], which reveal that profitability mediates the influence of company leverage on company value. On base information, Hypothesis 7 is formulated as follows: Profitability can mediate the effect of leverage on company value.

On base review of the literature and hypotheses prepared, the research framework is as above:

3. METHODS

The data in this research includes quantitative data sourced from reports statistics annually on the Indonesian Stock Exchange (BEI) in 2021 and 2022. The population is 76 real estate companies registered in 2021 and 85 companies in 2022, totalling 161 companies [4,5]. The sample is determined based on the census method. However, there were 45 outlier data after the Normality test, so the sample end is 116. Data in the study got this with method studies documentation. Data was analyzed using a completed structural equation model with SPSS 24. The structural equation is:

$$\text{Equation 1: } ROA = \alpha_1 + \beta_1 DER + \beta_2 LnA + \epsilon_1$$

$$\text{Equation 2: } PBV = \alpha_2 + \beta_3 DER + \beta_4 LnA + \beta_5 ROA + \epsilon_2$$

Information:

PBV: Price Book Value is price share divided by company book value [8].
 DER: Debt Equity Ratio is debt shared equity in percentage [8].
 LnA: Ln Assets is the size of the company as measured by the Ln - assets indicator [10].

ROA: Return on Assets is net profit divided by total assets in percentage [8].

α : constant

$\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$: regression coefficients

ϵ : standard error

The structural equation model covers steps: assumptions classic test, model feasibility test, hypothesis test and mediation test, with criteria explained in the chapters next.

4. RESULTS AND DISCUSSION

4.1 Classical Assumption Test Results of Multiple Linear Regression

4.1.1 Normality test results

The Normality Test aims to test whether the dependent and independent variables have a normal distribution in the regression model. A good regression model is a normal data distribution. This test is carried out by looking at the results of the histogram graph, which shows all data is located inside the curve line, and then the data distribution is called normal [33]. Fig. 2 shows the data in equations 1 and 2 in an arch curve, so the data is normally distributed.

4.1.2 Heteroscedasticity test results

A regression criterion is free from heteroscedasticity if the scatterplot of points resulting from data processing between ZPRED and SRESID spreads below or above the origin point (number 0) on the Y axis and does not have a regular pattern [33]. Fig. 3 shows the criteria of the research data. This is free from the heteroscedasticity problem.

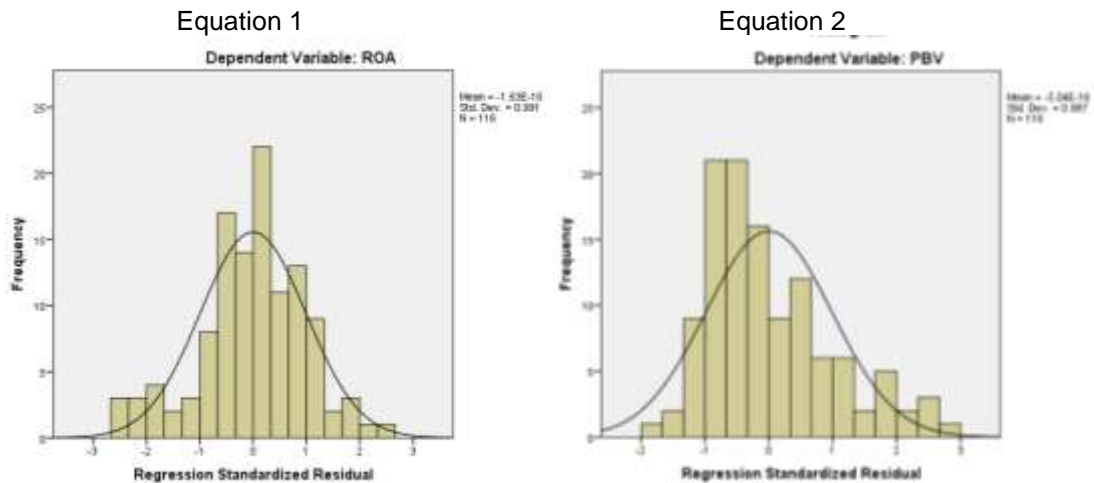


Fig. 2. Histogram
Source: Secondary data processed (2023)

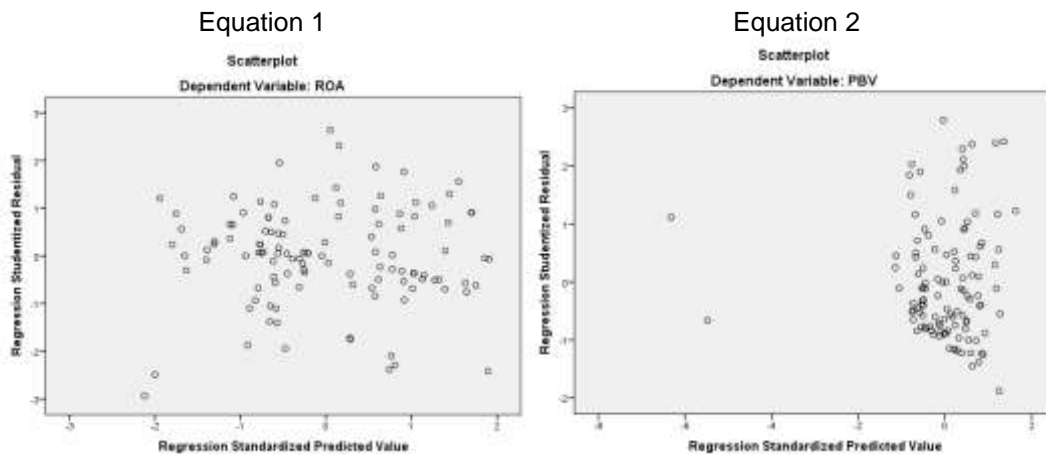


Fig. 3. Heteroscedasticity test results
Source: Secondary data processed (2023)

4.1.3 Autocorrelation test results

Based on Table 1, equation 1, Durbin Watson's value is 2.012. Durbin Watson table value $n = 116$, number of independent variables = 2, with degrees 5% significance is known to be $DL = 1.6622$ and $DU = 1.7323$. Provision No autocorrelation problem exists if $DU < D < 4 - DU$ [33], then $4 - DU = 4 - 1.7323 = 2.2677$. The results of the autocorrelation test equation 1 is $1.6622 < 2.012 < 2.2677$, so there is no problem with autocorrelation in equation 1.

Based on Table 2, equation 2 Durbin Watson's value is 1.867. Durbin Watson table value $n = 116$, number of independent variables = 3, with degrees 5% significance, is known to be $DL = 1.6445$ and $DU = 1.7504$. Provision No autocorrelation problem exists if $DU < D < 4 - DU$

[33], then $4 - DU = 4 - 1.7504 = 2.2496$. The autocorrelation test equation 2 results are $1.6445 < 1.867 < 2.2496$, so there is no symptom autocorrelation in equation 2.

4.1.4 Multicollinearity test results

The multicollinearity test determines the independent regression model from a correlation between independent variables. One method to diagnose the emergence of multicollinearity is to analyze the *tolerance value* and *variance inflation factor* (VIF), an indication that there is no multicollinearity problem if the number VIF_{10} and $TOLERANCE > 0.1$ [33]. Tables 3 and 4 show the criteria for the research data; this is free from the multicollinearity problem.

4.2 Model Feasibility Test Results

Test the feasibility of the model aims for know results equality regression worthy used For analyze the data that has been processed. Test the feasibility of the model using statistics F; if

the significance of the F value is small instead of 0.05, then the model is worthy or fit. [33]. Tables 5 and 6 show that sig value. Equation 1 is 0.035, and Equation 2 is 0.000 less than 0.05, so the regression model study is feasible.

Table 1 Model summary equation 1^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.226 ^a	,051	,036	.036780	2,012

a. Predictors: (Constant), DER, LnA
b. Dependent Variable: ROA

Source: Secondary data processed (2023)

Table 2. Model summary equation 2^b

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.478 ^a	,228	,209	.66536	1,867

a. Predictors: (Constant), ROA, DER, LnA
b. Dependent Variable: PBV

Source: Secondary data processed (2023)

Table 3. Coefficients equation 1^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	-.030	,015		-2,005	,047		
LnA	,005	,002	,202	2,337	,021	,996	1,004
DER	1.660E-5	,000	,089	1,028	,306	,996	1,004

a. Dependent Variable: ROA

Source: Secondary data processed (2023)

Table 4. Coefficients equation 2^a

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
	B	Std. Error	Beta			Tolerance	VIF
1 (Constant)	2,034	,283		7,196	,000		
LnA	,169	,036	,386	4,683	,000	,956	1,046
DER	,001	,000	,186	2,290	,024	,987	1,013
ROA	5,937	1,635	,300	3,632	,000	,949	1,053

a. Dependent Variable: PBV

Source: Secondary data processed (2023)

Table 5 ANOVA equation 1^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	,009	2	,005	3,429	.035 ^b
	Residual	.173	113	,001		
	Total	,182	115			

a. Dependent Variable: ROA

b. Predictors: (Constant), DER, LnA

Source: Secondary data processed (2023)

Table 6. ANOVA equation 2 ^a

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	15,599	3	5,200	11,746	,000 ^b
	Residual	52,681	112	,443		
	Total	68,281	115			

a. Dependent Variable: PBV
 b. Predictors: (Constant), ROA, DER, LnA

Source: Secondary data processed (2023)

4.3 Hypothesis Test Results and Discussion

Hypothesis testing uses criteria reception sig value is less than 0.05 [33], while results from the hypothesis study Are as follows:

- a. The variable LnA or company size (Table 3) has a sig value of 0.021, less than 0.05, and has a positive coefficient of 0.005, meaning that company size significantly positively affects ROA; thus, hypothesis 1 is accepted. This positive and significant influence indicates that the higher the company size, which is proxied by total assets, the more investment can be made in productive assets that can be immediately sold to make a profit, thereby increasing the company's profitability. Therefore, the larger the company size, the more positive signals it can provide. The results of this research support the research of Rahman and Yilun [28], Al Nawaiseh [29] and Kartiningsih and Daryanto [30], who stated that company size has a significant positive influence on the company's Return On Assets (ROA).
- b. The variable DER or debt-equity ratio (Table 3) has a sig value of 0.306, which is greater than 0.05 and has a positive coefficient of 1.660E-5, meaning that DER has a positive and insignificant effect on ROA; thus, hypothesis 2 is rejected. This positive and insignificant effect indicates that the higher the DER, the greater the ROA is insignificant. This can be caused by increasing debt; the interest expense increases, so profits cannot increase optimally. The results of this study do not support research conducted by Margono and Gantino [31] and Markonah et al. [32] that leverage has a significant positive effect on profitability.
- c. The variable LnA or company size (Table 4) has a sig value of 0.000, less than 0.05, and has a positive coefficient of 0.169, meaning that company size significantly positively affects PBV; thus, hypothesis 3 is accepted. This positive and significant influence indicates that the larger the company size, the greater the company value (PBV). The results of this study support research from Lambey et al. [10], Hapsoro and Falih [11], and Husna and Satria [12], who revealed that company size has a significant positive effect on company value.
- d. The DER variable (Table 4) has a sig value of 0.024, less than 0.05 and has a positive coefficient of 0.001, meaning that DER has a significant positive effect on PBV; thus, hypothesis 4 is accepted. Based on Signal Theory, issuing large amounts of debt shows a positive signal for investor confidence so that share prices can increase, increasing company value [13]. The results of this research support the research of Budiharjo [15], and Zuhroh [16] 's research that leverage positively affects company value.
- e. The ROA variable (Table 4) has a sig value of 5,937, less than 0.05 and has a positive coefficient of 5,937, meaning that ROA significantly positively affects PBV; thus, hypothesis 5 is accepted. The greater the profit value, the more positive the signal is given so that the share price will rise. The results of this study support research from Bon and Hartoko [18], Handayani et al. [19]; Jihadi et al. [20]; Fajaria and Isnalita [21]; profitability has a significant positive effect on company value.
- f. Profitability (ROA) mediates the effect of company size (LnA) on company value (PBV) determined by calculating the significance of the indirect effect of LnA on ROA, then the effect of ROA on PBV. The results of the Sobel test are as shown in Fig. 4; the one-tailed probability value of 0.019 is less than 0.05, which means that ROA significantly mediates the influence of company size on company value. Based on this information, hypothesis 6 is

accepted. These results indicate that company size, which can increase profitability, will also increase company value.

The results of this study support the research of Chabachib et al. [24]; Natsir and Yusbardini [22]; Monoarfa [25], which revealed that profitability mediates the influence of company size on company value.

- g. Profitability (ROA) mediates p effect of DER (leverage) to company value (PBV) determined with method count significance from influence No DER directly against

ROA, next the influence of ROA on PBV. Sobel test results shown in Fig. 5, the value of the one-tailed probability is more than 0.167 of 0.05, meaning that ROA does not mediate influence the size of the company to value the company. On base information, hypothesis 7 is rejected. The results indicate that enhancement debt is Incapable of increasing profitability, so neither does the value of the company increase. Debt enhancement will impact the improvement burden and lower interest acquisition profit, decreasing the company's book value.

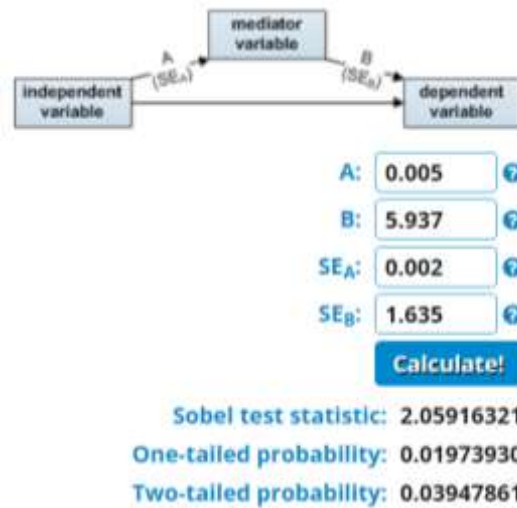


Fig. 4. Mediation test results hypothesis 6

Source: <https://www.danielsoper.com/statcalc/calculator.aspx?id=31> [34]

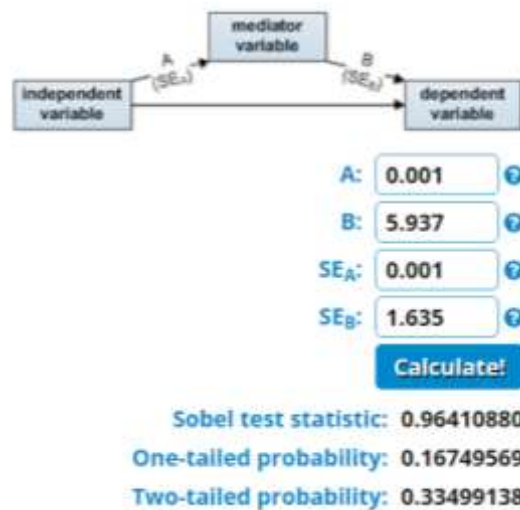


Fig. 5. Mediation test results hypothesis 7

Source: <https://www.danielsoper.com/statcalc/calculator.aspx?id=31> [34]

Results study This No supports a study by Natsir and Yusbardini [22] and Rizki et al. [23], which revealed that profitability mediates the influence of company leverage on company value.

5. CONCLUSION

The theme of this research is that company value, as proxied by price to book value (PBV), is influenced by leverage and company size with the mediation of profitability studied from the Signal Theory approaches. Based on the results and discussion, company size affects profitability, company size, leverage, and profitability have a limited effect on company value, and profitability mediates the effect of company size on company value. Apart from that, leverage does not affect profitability, and profitability does not mediate the effect of leverage on company value.

This research is limited because the sample of companies studied is only property and real estate companies on the Indonesia Stock Exchange. Hence, the results need to be sufficiently representative of all companies in Indonesia. Besides that, the Adjusted R Square result of equation 1 (Table 1) is 0.036, meaning that company size and DER can explain its influence on ROA by 3.6%, and other variables explain the remaining 96.4%. The Adjusted R Square result of equation 2 (Table 2) is 0.209, indicating that it is only 20.9% Ln. Assets, DER and ROA can explain their influence on PBV; other variables explain the remaining 79.1%. Therefore, future research can expand the company's objectives and add variables.

The results of this research contribute to the application of signalling theory by providing empirical evidence of the influence of company size and leverage on company value mediated by profitability, as well as as an additional reference for similar research in the future. For business practitioners, the results of this research contribute to policies to increase company value through increasing company size, leverage and profitability.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

REFERENCES

1. Indonesian Central Bureau of Statistics (BPS). Analysis of survey results on the

- impact of Covid-19 on Business Actors. 2021;2.
2. Indonesia Stock Exchange (IDX) -Data Services Division. IDX Statistics; 2019.
 3. Indonesia Stock Exchange (IDX) - Data Services Division. IDX Statistics; 2020.
 4. Indonesia Stock Exchange (IDX) - Data Services Division (2021). IDX Statistics; 2021.
 5. Indonesia Stock Exchange (IDX) - Data Services Division (2022). IDX Statistics; 2022.
 6. World Bank Group. Is a global recession imminent?; 2022.
 7. Salvatore D. Managerial economics in the global economy. New York: Oxford University Press; 2007.
 8. Brigham EF, Houston JF. Fundamentals of financial management. USA: Cengage learning; 2015.
 9. Choi BB, Lee D, Psaros J. An analysis of australian firm carbon emission disclosures. Pacific Accounting Review. 2013;25(1):58-79. Available:<https://doi.org/10.1108/01140581311318968>
 10. Lambey, et al. The effect of profitability, firm size, Equity ownership and firm age on firm value (Leverage Basis): Evidence from the Indonesian manufacturer companies. Archives of Business Review. 2021;9(1):128-139.
 11. Hapsoro D, Falih ZN. The effect of firm size, profitability, and liquidity on the firm value moderated by Carbon Emission Disclosure. Journal of Accounting and Investment. 2020;21(2):240-257.
 12. Husna A, Satria I. Effects of return on assets, Debt to asset ratio, current ratio, firm size, and dividend payout ratio on firm value. International Journal of Economics and Financial Issues. 2019;9(5):50-54.
 13. Owolabi SA, Inyang UE. International pragmatic review and assessment of capital structure determinants. Kuwait Chapter of Arabian Journal of Business and Management Review. 2013;2(6):82-95.
 14. Jeleel A, Olayiwola B. Effect of leverage on firm performance in Nigeria: A case of listed chemicals and paints firms in Nigeria. Global Journal of Management and Business Research. 2017;17(2):14-24.
 15. Budiharjo R. Effect of environmental performance, good corporate governance and leverage on firm value. American

- Journal of Humanities and Social Sciences Research. 2020;4(8):455-464.
16. Zuhroh I. The effects of liquidity, firm size, and profitability on the firm value with mediating leverage. The 2nd International Conference on Islamic Economics, Business, and Philanthropy (ICIEBP). 2019;203-230.
 17. Komara A, Ghozali I, Januarti I. Examining the firm value based on signaling theory. Advances in Economics, Business and Management Research. 2019;123:1-4.
 18. Bon SF, Hartoko S. The effect of dividend policy, investment decision, leverage, profitability, and firm size on firm value. European Journal of Business and Management Research. 2022;7(3):7-13.
 19. Handayani RH, Indarto, Santoso A. Determinants of firm value with profitability as intervening variables. Asian Management and Business Review. 2022;2(1):74-89.
 20. Jihadi, et al. The effect of liquidity, leverage, and profitability on firm value: Empirical evidence from Indonesia. Journal of Asian Finance, Economics and Business. 2021;8(3):423-431.
 21. Fajaria AZ, Isnalita. The effect of profitability, liquidity, leverage and firm growth of firm value with its dividend P. olicy as a Moderating Variable. International Journal of Managerial Studies and Research. 2018;6(10):55-69.
 22. Natsir K, Yusbardini Y. The effect of capital structure and firm size on firm value through profitability as intervening variable. 8th International Conference on Entrepreneurship and Business Management; 2019.
 23. Rizki A, Lubis AF, Sadalia I. The influence of capital structure to the firm value with profitability as intervening variables. The 2018 International Conference of Organizational Innovation; 2018.
 24. Chabachib M, et al. Analysis of company characteristics o. f Firm Values: Profitability as Intervening Variables. International Journal of Financial Research. 2020;11(1):60-70.
 25. Monoarfa. The role of profitability in mediating the effect of dividend policy and company size on company value. Business and Management Studies. 2018;4(2):35-44.
 26. Ross SA. The determination of financial structure: The incentive signaling approach. Bell Journal of Economics and Management Science. 1977;8(1):23-40.
 27. Brau JC, Carpenter JT. Small-firm uniqueness and signaling theory. Journal of Business, Economics & Finance. 2012;1(1):50-63.
 28. Rahman MJ, Yilun L. Firm size, firm age, and firm profitability: Evidence from China. Journal of Accounting, Business and Management. 2021;28(1):101-115.
 29. Al Nawaiseh MALI. The effect of firm's age, size and growth on its profitability: Evidence from Jordan. European Journal of Business and Management. 2020;12(5):88-93.
 30. Kartiningsih D, Daryanto WM. The effect of firm characteristics on profitability of food and beverages companies listed in Indonesia stock exchange. International Journal of Business, Economics and Law. 2020;22(1):69-76.
 31. Margono FP, Gantino R. The influence of firm size, leverage, profitability, and dividend policy on firm value of companies in Indonesia Stock Exchange. Copernican Journal of Finance & Accounting. 2021;10(2):45-61.
 32. Markonah M, Salim A, Franciska J. Effect of profitability, leverage, and liquidity on the firm value. DIJEFA Journal. 2020;1(1):83-94.
 33. Ghozali I. Multivariate analysis application with IBM SPSS Program. Edition 8. Semarang: Diponegoro university publishing agency; 2016.
 34. Available: <https://www.danielsoper.com/statcalc/calculator.aspx?id=31>

© 2023 Sulistiyo et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

Peer-review history:
The peer review history for this paper can be accessed here:
<https://www.sdiarticle5.com/review-history/110101>