



**International Journal of Education, Social Studies,
And Management (IJESSM)**

e-ISSN : 2775-4154

Volume 3, Issue 1, February 2023

The International Journal of Education, Social Studies, and Management (IJESSM) is published 3 times a year (**February, Juny, November**).

Focus : Education, Social, Economy, Management, And Culture.

LINK : <http://lppipublishing.com/index.php/ijessm>

**The Impact Of Profitability, Asset Structure, and Firm Size On
Debt Policy On Property and Real Estate Companies Listed
On The Indonesia Stock Exchange (IDX)
For The 2015 - 2020 Period**

Sophie Hestia Putri¹, Agung Dharmawan Buchdadi², Destria Kurnianti³

¹ State University of Jakarta, Indonesia

² State University of Jakarta, Indonesia

³ State University of Jakarta, Indonesia

ABSTRACT

This study aims to empirically examine the effect of profitability, asset structure, and firm size on debt policy in property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2015 - 2020 period. The independent variables used in this study consist of profitability using return on assets (ROA), asset structure are proxied by the value of total assets divided by fixed assets, and company size is proxied by the value of Ln of total assets. The dependent variable used is debt policy. The data used as samples in this study are financial reports and annual reports of property and real estate companies listed on the Indonesia Stock Exchange for the period 2015-2020. The sampling method used in this study is a purposive sampling technique with 39 companies that meet the criteria used as samples. This research uses panel data regression analysis model. The model used in this study is the random effect model (REM). The results of this study indicate that profitability has a negative and significant effect on debt policy. Asset structure has a positive and insignificant effect on debt policy. Meanwhile, firm size has a positive and significant effect on debt policy.

Profitability, Asset Structure, Firm Size, Debt Policy

ARTICLE INFO

Article history:

Received

10 January 2023

Revised

20 January 2023

Accepted

04 February 2023

Keywords

Doi

Corresponding

Author 

sophiehestia@gmail.com

INTRODUCTION

Debt policy is one of the things that needs to be taken by company management in order to obtain funding sources so that it can be used to finance the company's operational activities. The growth in population in Indonesia increases the need for housing, offices, city centers, and the need for the property and real estate sector. This increase can be seen in the large number of housing developments, shops, apartments, world centers and offices. Based on

the projection of the Central Statistics Agency in Zonautara.com (2021) it states that in 2019 the growth rate of Indonesia's population is 1.15% compared to the previous year with a population of 268.1 million people. This shows that there is a sizeable market in the Indonesian industry in the property and real estate sector. The current problem is that many property and real estate companies fund their projects with their own money and find it difficult to achieve them.

According to Bank Indonesia survey data on residential property prices, it shows that on average the property and real estate industry in Indonesia in the fourth quarter of 2015-2020 utilized the largest source of funding from internal company funds (own funds) in the range of 50-65%, while funds from outside only ranges from 22 - 49%. This Bank Indonesia survey shows that property and real estate companies in general use more internal sources of funds (own funds). Meanwhile, based on the financial reports of Property and Real Estate companies listed on the Indonesia Stock Exchange (IDX), the average ratio of debt to total equity held is in the range of 64-69%. This shows the phenomenon of the gap between debt ratios from the results of a Bank Indonesia survey on the property and real estate industry in general and debt ratio data from 39 samples of financial statements of property and real estate companies listed on the Indonesia Stock Exchange that have been processed by researchers.

The property and real estate sector is a sector that is also important in improving the country's economy or a sector that is able to encourage an increase in Gross Domestic Product (GDP). Data from the Central Statistics Agency show that the growth rate in the real estate sector and economic growth in 2015 decreased from the previous year. The decline in GDP was from 5.02% in 2014 to 4.79% in 2015 (Databoks.co.id, 2015). Cnbcindonesia.com (2019) states that since 2015 growth in the property sector has always been lower than economic growth. This can be seen in 2018 growth in the property sector occupied the lowest position during 2015 - 2019, which was 3.58% and was far below the economic growth at that time of 5.17%. However, in 2019 the growth of the property sector finally increased by 5.74% above the economic growth of 5.02%. The explanation above shows that there is a gap between the data from the Bank Indonesia survey and the financial reports of the property and real estate sector listed on the Indonesia Stock Exchange regarding the use of external sources of funds for companies. In addition, it can be seen that the growth of the property and real estate sector has also slowed down, so companies need to plan their capital structure properly. As for studies on the influence of profitability, asset structure, and company size on debt policy, quite a lot has been done, but the results still do not show consistency.

Debt policy is one of the decisions taken to meet the company's funding needs. Profitability is one of the factors that influence a company's debt policy. The results of research conducted by Tatengkeng et al. (2018), Anindhita (2017) and Sari et al. (2021) states that profitability has a significant positive effect on debt policy. Research by Nurfathirani & Rahayu (2020) and (Prathiwi & Yadnya (2017) also found positive and significant results between profitability and debt policy. The difference in the results of the study by (Peranginangin et al. (2018) who found results where profitability has a negative and insignificant effect on debt policy. Another factor that can affect a company's debt policy is asset structure. Research conducted by Ehikioya (2018) and Asiyah & Khuzaini (2019) states that asset structure has a positive and significant effect on debt policy. However, in contrast to the results of research conducted by Desmintari & Yetty (2016), Nurdani & Rahmawati (2020), Nurfathirani & Rahayu (2020) found that asset structure has a negative and insignificant effect on debt policy. The third factor in this study is company size. Research conducted Nurdani & Rahmawati (2020), Sari et al. (2021), Sunardi et al. (2020) found that company size has a positive and significant influence on debt policy. However, in contrast to research conducted by Afiezan et al. (2020), Lumapow (2018), Mukhibad et al. (2020), Umbarwati (2018) shows that company size has a negative and insignificant effect on debt policy.

Based on the description and problems in the background above, the researcher is interested in conducting research with the title "The Impact of Profitability, Asset Structure, and Company Size on Debt Policy in Property and Real Estate Companies Listed on the Indonesia Stock Exchange (IDX) 2015 - 2020 Period".

RESEARCH METHODE

Data and Samples

The unit of analysis in this study is property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2015 - 2020 period. The population in this research is property and real estate companies listed on the Indonesia stock exchange (IDX) for the 2015 - 2020 period. Sampling used in this study using nonprobability sampling method. The type of sampling technique used by researchers in this study is purposive sampling technique. The following are the criteria used in determining the research sample:

1. Property and real estate company listed on the Indonesia Stock Exchange (IDX).
2. Property and real estate companies listed on the Indonesia Stock Exchange (IDX) consecutively during the 2015 - 2020 period.

3. Property and real estate company that publishes financial reports for the period 2015 – 2020.
4. Property and real estate companies that have debts during the 2015 – 2020 period.
5. Property and real estate companies that use the rupiah currency in their financial statements for the 2015 – 2019 period.

Based on the criteria in determining the sample, there are 39 property and real estate sector companies listed on the Indonesia Stock Exchange for the 2015–2020 period that have meet threse criteria, so the number of observations in this study is 234 data. The analytical method used in this research is panel data regression and the data is processed using E-views 10.

The Regression Model

The regression equation model in this study is as follows:

$$DER_{it} = \beta_0 + \beta_1ROA_{it-1} + \beta_2SA_{it} + \beta_3SIZE_{it} + e_{it}$$

In which Debt to Equity Ratio (DER_{it}) is the dependent variable; ROA_{it} – Profitability; SA_{it} – Asset Structure; $SIZE_{it}$ – Firm Size; β_0 - constant; e - error; i - companies and t -time; β_{1-3} – regression coefficient.

Research Variables

Dependet Variables

The dependent variable is debt policy. Kebijakan utang dapat diukur dengan dua proksi, yaitu Debt to Equity Ratio (DER) dan Debt to Assset Ratio (DAR) (Mardiyati et al., 2018). The debt policy measurement ratio in this study uses a Debt to Equity Ratio (DER) proxy. DER is a ratio that shows the amount of debt to equity.

Independent Variables

The dependent variable in this study is debt policy (DER). While the independent variables in this study are profitability (ROA), asset structure (SA), and firm size (SIZE).

Table 1.
Operational Variables

	Variables	Measures	References
Dependent Variable	Debt to Equity Ratio	Total Debt / Total Equity	(Puspitasari & Manik, 2016)
	Return On Asset	Net Income / Total Assets	(Khafifah, 2021)
Independent Variables	Assets Structure	Fixed Asset / Total Assets	(Manoppo et al., 2018)
	Firm Size	Ln (Total Assets)	(Lumapow, 2018)

RESULT AND DISCUSSION

Descriptive Statistics

Table 2.
Descriptive Statistics

	Y_DER	X1_ROA	X2_SA	X3_SIZE
Mean	0.794915	0.054615	0.098120	2929.547
Median	0.625000	0.040000	0.040000	2951.500
Maximum	3.700000	0.350000	2.290000	3167.000
Minimum	0.040000	-0.060000	0.000000	2569.000
Std. Dev.	0.646263	0.053872	0.189967	133.3313
Skewness	1.789044	1.525229	7.347954	-0.511048
Kurtosis	7.341139	7.171119	78.53506	2.668654

Table 2 above shows the number of observations made on 39 companies in the property and real estate sector listed on the Indonesia Stock Exchange with 6 years of observation (2015-2020) totaling 234 observations. The table also shows that the debt equity ratio (DER) has a mean (average) value of 0.794915 and has a standard deviation value of 0.646263. The maximum DER value obtained by Lippo Karawaci Tbk is 3.700000. With a minimum DER value of 0.040000. The variable return on assets (ROA) shows an average of 0.054615 while the standard deviation value of ROA is 0.053872. The maximum ROA value was obtained by the company PT Lippo Karawaci Tbk in 2018 which was 0.350000. Meanwhile, the minimum ROA value obtained by the company PT Pudjiadi Prestige Tbk in 2020 is -0.060000. In the SA variable (asset structure) it can be seen that the average SA value is 0.098120 with a standard deviation value of 0.189967. In addition, SA has a maximum value of 2.290000 which was obtained by PT Agung Podomoro Land Tbk in 2019. The table above also shows the SA variable has a minimum value of 0.000000. The company size variable (SIZE) shows an average of 2929.547 while the standard deviation value of SIZE is 133.3313. The maximum SIZE variable value is 3167,000 by PT Lippo Karawaci Tbk in 2017. In the table above the SIZE variable also shows the results of a minimum value of 2569,000 obtained from the total assets of PT Fortune Mate Indonesia Tbk in 2015.

Classic Assumption Test

The classical assumption test in this study was conducted to examine whether the regression model used was feasible to be tested or not. The classic assumption test carried out in this study is the multicollinearity test.

Multicollinearity Test

The multicollinearity test aims to test whether the regression model found a correlation between the independent variables. The regression model is said to be good if there is no correlation between the independent variables. In this study, if the tolerance value is < 0.90 , it means that there is no multicollinearity problem and vice versa (Ghozali & Ratmono, 2017).

Table 3.
Multicollinearity Test

	X1_ROA	X2_SA	X3_SIZE
X1_ROA	1.000000	-0.035802	-0.049696
X2_SA	-0.035802	1.000000	-0.151175
X3_SIZE	-0.049696	-0.151175	1.000000

Based on table 3, the multicollinearity test results show that there is no multicollinearity problem or there is no correlation between the independent variables. This is because the tolerance value or correlation coefficient between variables is < 0.90 . These results can be concluded that the sample data of property and real estate companies does not indicate multicollinearity between the independent variables.

Hypothesis Test t

The t hypothesis test is used to determine the effect of the independent variable on the dependent variable. The decision on the results of the determination of the results of the t hypothesis test will be seen if the significance value or probability is < 0.05 or 0.1 , meaning that this indicates that the independent variable individually (partially) has a significant influence on the dependent variable. However, if the significance or probability value is > 0.05 or 0.1 , the independent variables individually (partially) do not have a significant effect on the dependent variable.

Table 4.
Hypothesis Test t

Variable	Coefficie	nt Std. Error	t-Statistic	Prob.
C	-2.783155	0.921852	-3.019090	0.0028
X1_ROA	-1.408551	0.763870	-1.843966	0.0665
X2_SA	0.254983	0.218872	1.164990	0.2452
X3_SIZE	0.001239	0.000312	3.971090	0.0001

Discussion

The Effect of Profitability on Debt Policy

The ROA coefficient value in the property and real estate sector is -1.408551, which means that ROA has a negative effect on DER. Judging from the probability value, it shows a value of $0.0665 < 0.1$. This means that ROA has a significant effect on debt policy. Thus H1 which states that ROA has a significant effect on DER is accepted. This suggests that companies with declining prospects will prefer to sell shares and reduce debt more. Increasing profitability will have an impact on reducing the use of corporate debt (Mukhibad et al., 2020).

The Effect of Asset Structure on Debt Policy

The SA coefficient value is 0.254983 which means that the asset structure has an influence of 25.49% in a positive direction, which means an increase in asset structure causes an increase in debt policy. From table 4 it can also be seen that the probability value is 0.2452 which is greater than 0.05 indicating that asset structure has no significant effect on debt policy. The results of the research on asset structure have no significant effect on debt policy. In addition, if the company uses debt as its main source of financing, the cost of capital generated will be higher so that the company does not use debt. This indicates that asset structure is not an important factor to consider in debt policy.

The Effect of Firm Size On Debt Policy

Based on table 4 above, company size (SIZE) has a coefficient value of 0.001239 which means that company size has an influence of 0.12% in a positive direction, which means an increase in company size is followed by an increase in debt. From table 4.6 above it can also be seen that the probability value is $0.0001 < 0.05$ indicating that company size has a significant effect on debt policy. Thus, H3 which states that company size has a positive and significant effect on accepted debt policy. This is because the bigger the company, the more debt it uses. The positive value in the statistical test also explains that large companies will definitely need more funds compared to small companies (Sunardi et al., 2020). Larger company sizes result in increased financing needs to support company operations, sales, investments, and encourage companies to make the best use of debt (Sari et al., 2021).

Coefficient of Determination

The coefficient of determination shows how big the proportion of the independent variable is in the influence of the dependent variable. The coefficient of determination takes into account the adjusted R-squared value, which is between zero and one.

Table 5.
Coefficient of Determination

Weighted Statistics			
		Mean dependent	
R-squared	0.082576	var	0.794915
		S.D. dependent	
Adjusted R-squared	0.070609	var	0.646263
S.E. of regression	0.623029	Sum squared resid	89.27809
		Durbin-Watson	
F-statistic	6.900623	stat	0.846395
Prob(F-statistic)	0.000181		

Source: Data processed by the researcher

The adjusted R-squared value that appears is 0.07 (7%). These results indicate that all independent variables used in this study can only affect the dependent variable by 7% and the remaining 83% (100% - 7%) are influenced by variables outside the study.

CONCLUSION

Based on the results of the research that has been described in the following conclusions drawn in this study:

- (1) Profitability (ROA) has a negative and significant effect on debt policy (DER) in property and real estate companies listed on the IDX for the period 2015 - 2020. This shows that if the level of company profitability is high, then the company will function to cover obligations thereby reducing the level of use of debt.
- (2) Asset structure (SA) has a positive and significant effect on debt policy (DER) in property and real estate companies listed on the IDX for the period 2015 - 2020. This shows that the size of small assets is still not a benchmark for companies in determining debt levels. Companies that have a high asset structure also sometimes don't necessarily want to use collateral to get debt.

Company size (SIZE) has a positive and significant effect on debt policy in property and real estate companies listed on the IDX for the period 2015 - 2020. This shows that the bigger the company, the more debt it uses. Large companies find it easier to get sources of financing because they have great guarantees to

obtain funds, therefore management needs to manage debt well in order to influence the company's growth.

ACKNOWLEDGEMENT

This research is expected to help companies as a material consideration in making funding policy decisions by considering profitability ratios, asset structure, and company size. Companies that generate profits will be more likely to use funds from retained earnings and share capital to finance their operational activities rather than external funding through external means. This is because the risks that the company will face are smaller.

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