

## **Effect of Profitability and Operating Leverage on Capital Structure in Property, Real Estate, and Building Construction Companies**

**Muhammad Kurniawan<sup>1</sup>, Erna Retna Rahadjeng<sup>2</sup>, Sandra Irawati<sup>3</sup>**  
Management Department, Universitas Muhammadiyah Malang, Indonesia  
Corresponding E-mail: [kurniawan209@gmail.com](mailto:kurniawan209@gmail.com)

### ***Abstract***

*The purpose of this research is to determine the effect of profitability and operating leverage on the capital structure. This type of research is associative research with the object of research in property, real estate, and building construction companies listed on the Indonesia Stock Exchange for the period 2017-2019. This study uses a purposive sampling method, namely all companies listed on the Indonesia Stock Exchange for the 2017-2019 period of 126 obtained a sample of 96 companies. The data analysis technique uses Multiple Linear Regression Analysis with the help of SPSS26 software. The results showed that profitability and operating leverage simultaneously influence the capital structure and profitability has a parallel effect on the capital structure while operating leverage has no partial effect on the capital structure.*

***Keywords*** — *Capital structure, profitability, and operating leverage*

### **Abstrak**

Tujuan dari penelitian ini adalah untuk mengetahui pengaruh profitabilitas dan leverage operasi terhadap struktur modal. Jenis penelitian ini adalah penelitian asosiatif dengan objek penelitian pada perusahaan properti, real estate dan konstruksi bangunan yang terdaftar di Bursa Efek Indonesia periode 2017-2019. Penelitian ini menggunakan metode purposive sampling yaitu seluruh perusahaan yang terdaftar di Bursa Efek Indonesia periode 2017-2019 sebanyak 126 diperoleh sampel sebanyak 96 perusahaan. Teknik analisis data menggunakan Analisis Regresi Linier Berganda dengan bantuan software SPSS26. Hasil penelitian menunjukkan bahwa *profitabilitas* dan *operating leverage* secara simultan berpengaruh terhadap struktur modal dan profitabilitas berpengaruh paralel terhadap struktur modal, sedangkan *operating leverage* berpengaruh secara parsial terhadap struktur modal. Sedangkan variabel yang paling berpengaruh adalah *operating leverage*

**Kata kunci:** Struktur modal, profitabilitas dan leverage operasi operating

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Corresponding Email: [kurniawan209@gmail.com](mailto:kurniawan209@gmail.com)

## INTRODUCTION

The development of the times cannot be avoided which can have a major impact on the development and progress of the property real estate and building construction sectors. For the economic sector of a country, this sector shows the economic development of a society and in people's lives, this sector will always be needed by the community. Wijaya, E., & Jessica, (2018) As the community grows, the need for property, real estate, and building construction will also increase because this sector is one of the basic or basic needs for the community. The role of the financial manager is very important in determining the right funding decisions. A good financial manager is required to be able to observe the capital structure in making a company's funding decisions carefully and precisely because this will have a big impact on the company's finances. Capital structure decisions taken by a manager will affect the profits obtained by the company and affect the financial risks borne by the company itself.

Profitability is a ratio that can be used in estimating the ability of a company to be able to realize profits or increase capital. In the research of profitability that is the ratio used to assess the level of effectiveness of financial management and measure the competence of a company in obtaining profit or profit. This profitability ratio can be measured by NPM (*Net Profit Margin*) which functions to estimate the company's competence to obtain profit (profit) from sales. Operating leverage is a measurement of the high or low capability of the company in financing its funding. In the research of Maulina *et al* (2018) the greater the operating leverage (DOL) within the company will indicate a decrease in the company's debt level. It can be concluded that the greater the operating leverage, the higher the company's ability to obtain profit or profit, which refers to what percentage of fixed costs the company has. The object of this research is the property, real estate, and building construction sector companies listed on the Indonesia Stock Exchange. The reason is that the growth in this sector is very fast, stated that this sector is one of the options or options for investors to invest in the long term and can be a guarantee because assets can be used in various types of financing immediately or quickly. However, in the property and real estate sector, there is a high risk of inflation, exchange rates, and fluctuations affecting the purchasing power of investors or the public.

Muslimah *et al.*, (2020) In his research, the property business is very difficult to predict because when economic growth declines, this sector will also experience a very significant decline and vice versa when the economy experiences a very drastic increase, the property industry will also experience a very high increase. . It can be concluded that this property business has a high risk, where the main source of funds is obtained from external sources (credit funding), with the company's operating activities requiring fixed assets (land and buildings).

**Tabel 1.** Total Debt and Equity for 2017-2019

Year	Total Amoun Of Debt	(%)	Total Equity	(%)
2017	Rp.377.042.983.222.824	0	Rp.326.920.750.474.176	0
2018	Rp.714.349.366.116.239	89	Rp.367.520.202.989.532	12
2019	Rp.7.967.260.868.474.210	1015	Rp.388.971.636.449.064	6
Amount	Rp.9.561.532.202.673.590		Rp.1.517.666.711.862.910	

Source: [www.idx.co.id](http://www.idx.co.id)

Judging from the comparison of debt and equity within the company, the company's financing activities use debt more than equity (own capital) every year. The amount of debt used by the company has a negative impact, namely an increase in financial risk borne by the company such as being required to immediately pay debts as

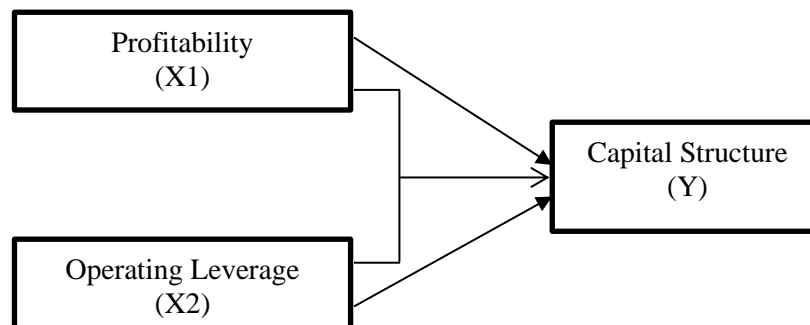
well as interest from loans made at a mutually agreed time. Based on previous studies, there are different results regarding the effect of profitability and operating leverage on capital structure. Primantara and Goddess (2016) in their research stated that the profitability variable had no significant negative effect on the capital structure in a partial. In his research, the profitability variable has a partial influence on the capital structure. Maulina *et al.*, (2018) In his research, the profitability variable influences the capital structure, but partially operating leverage does not affect the capital structure.

Operating leverage has a partial effect on capital structure. Hamidah *et al.*, (2016) In his research, there is no significant relationship between operating leverage and capital structure. Based on the problems above, this research takes the title "The Effect of Profitability and Operating Leverage on Capital Structure in Property, Real Estate, and Building Construction Companies". This study aims to examine the effect of profitability and operating leverage on capital structure in property, real estate, and building construction companies listed on the Indonesia Stock Exchange for the 2017-2019 period. This research is a modification of the research of Muslimah *et al.*, (2020), but this study adds the operating leverage variable as an independent variable that is used with different research objects.

## LITERATURE REVIEW

Brealey *et al.*, (2008) said that profitability is a ratio whose function is as a measure of the company's ability to earn profits. Where small-scale companies will get low profits too, but large companies will expect large profits or profits as well. Operating leverage serves to estimate changes in sales or income on operating profits. It is corroborated by the results of research by Maulina *et al.*, (2018) that profitability and operating leverage have a simultaneous effect on capital structure. The results of research by Santoso and Priantinah (2016) Profitability has a significant influence on the capital structure together. Partial influence between profitability and operating leverage on capital structure Operating leverage serves to provide an assessment of how high operating costs are borne by a company's fixed costs. The purpose of this operating leverage is to estimate uncertain earnings (up and down) that have an impact on the company's operating profit. The company is carrying out its operations utilizing its fixed assets which result in the guarantee of fixed assets.

The research of profitability and operating leverage have a significant effect on capital structure. While Liestyasih and Yadnya (2015) In their research, operating leverage has a partial influence on the capital structure. Strengthened by the results of Dahlena Nst's research (2017) profitability has an influence on the capital structure. The most influential variable on the capital structure is Yadnya (2015). The result is that the operating leverage variable has an influence on the capital structure. From that research, the results of this study are in line with the research of Dahlena Nst(2017) namely the operating leverage variable has a significant and significant effect on the capital structure.



**Figure 1.** Conceptual Framework

## RESEARCH METHODS

This study uses associative research, which is to determine the relationship between the independent variables of profitability and operating leverage with the dependent variable of capital structure. The population of this research is property, real estate and building construction companies listed on the IDX in 2017-2019. Sampling techniques in this study are using the *purposive sampling* method, which is technical sampling by determining the characteristics that are by the study. The data in this study were processed using statistical methods with the help of a statistical software tool called SPSS. The technique used in this study is a double linear regression analysis technique that has the function to test and analyze the influence of independent variables (free) and dependent variables. Before double linear regression analysis must perform a classical assumption test first. The classical assumption test is the basis for performing regression analysis techniques. Classical assumption tests in this study include normality tests, multicollinearity tests, autocorrelation tests, and heteroskedasticity tests. Then use the dominant variable test to find out the most influential variables.

## RESULTS AND DISCUSSION

**Table 2.** Overview of Average NPM, DOL and DER

Year	Net Profit Margin (NPM)	%	Degree Of Operating Leverage (DOL)	%	Debt To Equity Ratio (DER)	%
2017	1,106	0	0,237	0	4,575	
2018	1,058	5	0,209	3	4,374	20
2019	1,044	1	0,130	8	3,361	101

Source: Appendix II

Based on the table above, it can be concluded that the average profitability projected by NPM has decreased every year where in 2017-2018 it decreased by 5% and in 2019 it also decreased by 1%. This means that the company's ability to generate or obtain profits from 2017-2019 experienced a decline which means the company's ability to earn profits is getting lower. The operating leverage condition projected with the degree of operating leverage (DOL) is in accordance with the table which shows that in 2017-2019 DOL always decreased in 2017-2018, DOL decreased by 3% while in 2019 it decreased by 8%. It can be concluded that the use of fixed assets in the company's operational activities is lower than in previous years so that the risk of fixed costs borne by the company is lower. The condition of the capital structure is projected using the debt to equity ratio (DER) according to the table which shows that every year it has decreased by 20% in 2017-2018 while in 2019 it decreased by 101%. It can be concluded that the funding for the company's operations every year has decreased, which will have an impact on decreasing the value of the company from previous years.

**Table 3.** Normality Test

One-Sampel Kolmogorov-Smirnov Test		
N		Unstandardized Residual
		126
<b>Normal Parameter<sup>a,d</sup></b>	Mean	.0000000
	Std. Deviation	1169.20718519
Most Exrteme Differences	Absolute	.064
	Positive	.055
	Negative	-.064
Test Statistic		.064
Asymp. Sig. (2-tailed)		.200 <sup>c,d</sup>

Based on table 3, it shows that there is a significance value of 0.20, so it can be said that the data is normally distributed which is caused by a significance value of more than 0.05 so that it meets the requirements of the normality assumption (the data is said to be valid).

**Table 4.** Multicollinearity Test

Model	Collinearity Statistics		
1	(Constant)	Tolerance	VIF
	Profitabilitas	.753	1.329
	Operating Leverage	.753	1.329

The test results in table 4 show that the tolerance value is  $0.999 > 0.10$ . While the VIF value of 1.001 indicates no more than 10. It can be concluded that the data from the two variables of profitability and operating leverage are not multicollinear.

**Table 5.** Autocorrelation Test

Model Summary							
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbi-Watson	Du	4-du
1		.643	.638	1159.41853	2.002	1.745	2.2585

The test results of table 5 above see the value of (du)  $1.7116 < \text{Durbin Watson}$  of  $1.938 < \text{value of 4-du}$  2.2884, so it can be concluded that there is no autocorrelation symptom.

**Table 6.** Glejser Test

Coefficients						
Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig
		B	Std. Error	Beta		
1	(Constant)	-1610	.411		3.919	.000
	Profitabilitas	-.054	.037	-.134	-1.461	.147
	Operating Leverage	-.086	.052	-.150	-1.635	.105

Based on table 6, the significance value between the independent variable profitability is 0.147 and operating leverage is 0.105 with absolute residual  $> 0.05$ , so it can be interpreted that there is no symptom of heteroscedasticity.

**Tabel 7.** Coefficient of Determination

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1		.643	.638	1159.41853

From the results of the data above, it shows that the value of R Square is 0.643, meaning that the independent variables of profitability and operating leverage used in this study are only able to explain 64.3% of the dependent variable, namely capital structure.

**Tabel 8.** Multiple Linear Regression Test

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	Collinearity Statistic
	B	Std. Error	Beta		Tolerance
(Constant)	506.039	193.477		2.895	.004
Profitabilitas	.972	.113	.552	8.519	.000
Operating Leverage	.401	.076	.341	5.264	.000

$$Y = 506,039 + 0,972 X_1 + 0,401 X_2 + e \quad (1)$$

**Tabel 9.** F Test Results

ANOVA						
Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	266320055.546	2	133160027.773	93.689	
	Residual	174819906.494	123	1421300.053		
	Total	441139962.040	125			

The F statistical test table above shows a significance value of 0.000 so it can be interpreted that the significance value is less than 0.05, then the independent variables, namely profitability and operating leverage, have simultaneous effects on the capital structure.

**Tabel 10.** T Test Results

Model	Unstandardized Coefficients	Standardized Coefficients	T	Sig.	T Tabel
	B	Std. Error	Beta		
(Constant)	506.039	193.477		2.895	.004
Profitabilitas	.972	.113	.552	8.519	.000
Operating Leverage	.401	.076	.341	5.264	.000

The table above shows the results of the partial test with the following information that the significance value of  $0.000 < 0.05$ , it can be concluded that partially profitability affects the capital structure. The significance value of  $0.000 < 0.05$ , it can be concluded that partially operating leverage affects the capital structure. The results of the analysis from the table above show that profitability has a bigger role with a standardized coefficient B value of 0.972 which means that profitability is able to increase the capital structure of 0.972.

## CONCLUSION

The conclusion of this study is that the variables of profitability and operating leverage simultaneously affect the capital structure. In part, profitability and operating leverage variables can affect the capital structure. The most influential variable on the capital structure in this study is operating leverage. The limitations of the research include that some companies do not publish financial reports and the data in this study only uses the 2017-2019 period. Suggestions for companies can provide real information to investors. For further research, other variables that are not found in this study can be used and the research period can be added to get a larger sample.

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