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Research Paper

Effect of Profitability and Asset Structure on The Capital Structure

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ABSTRACT: *This study examines the effect of profitability and asset structure on the company's capital structure. Profitability in this research is measured by Return on Assets (ROA). The ratio between fixed and total assets measures asset structure in this study. The capital structure used in this research is measured through Debt Equity Ratio (DER). This study uses data on insurance companies listed on the Indonesia Stock Exchange, as many as 15 companies. The research data period used is 2018-2022. The test results show that the two hypotheses proposed are supported.*

KEYWORDS: *Profitability, Asset Structure, Capital Structure*

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I. INTRODUCTION

In this era of globalization, each company, both small and large, competes to maintain and advance its stability. To face this competition, companies are currently doing many things to develop their companies, including increasing profitability. A company's profitability is its ability to profit from its business operations. A high level of profitability can affect the company's capital structure because a profitable company tends to have more internal sources to finance its business operations. In other words, companies that generate large profits can use the funds to finance new investments or obtain loans at lower interest rates. A company that has high profitability is also attractive to investors and creditors. Investors tend to trust a company that generates stable profit, so they may be more willing to inject capital into it. Creditors also tend to provide loans at lower interest rates to profitable comp companies because they see that the company can pay its loans. Another important factor is the company's capital structure.

The company's capital structure is how it finances its business operations by combining sources of funds from its capital [equity] and loans [debt].Capital structure refers to the differences in the choices used to finance a company's capital (Chen et al., 2019). Abeywardhana (2017)reveals that determining the optimal capital structure balances the risks and benefits achieved in achieving the goal is to maximize stock prices. The different view expressed in theory by Modigliani & Miller (1958)is that how a company finances its organization means nothing, so the capital structure is irrelevant.

Various factors affect the capital structure: profitability, asset structure, asset growth, tax company size, ownership structure, and market conditions (Saif-Alyousfi et al., 2020). Profitability is the company's ability to earn profits from sales, total assets, and equity. One of the theories of Modigliani & Miller (1958) said that using debt would be more profitable when compared to using own capital in financing companies' activities. Hence, this theory encourages companies that have high profitability, tend to use debt first, and are relatively large in their capital structure to get profit from taxes; because, according to this theory, paying interest on debt can reduce the tax burden should be paid by the company so there are savings in paying taxes.

Research on the factors that influence capital structure has been done a lot. However, from several previous studies, there were still inconsistencies in their results, especially regarding the variables studied, namely the effect of the level of profitability, asset structure, and growth opportunity towards the capital structure. Besides that, there are differences in the result of research with existing capital structure theory. Research by Singh & Bagga (2019)shows that profitability negatively and significantly affects capital structure. Still, this study's results differ from the research conducted by Wijaya & Hadianto (2008), which statedthat profitability positively and significantly affects capital structure. The results of the research conducted by

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(Wijaya & Hadianto, 2008) said that companies with high profits would use more debt to get greater benefits from tax repetition, thus encouraging companies to use debt first to get savings on paying taxes.

This research takes a sample of insurance companies that go public on the Indonesia Stock Exchange (IDX) because there is a problem that those companies are facing. This reflects the dependence of insurance companies in Indonesia that go public on IDX to outsiders is very large. If this situation persists and is not immediately corrected, it will endanger the survival of those companies.

II. LITERATURE REVIEW AND HYPOTHESIS

The Pecking Order Theory proposed by Myers & Majluf (1984) argues that companies tend to follow a specific financing order or a certain hierarchy in selecting their funding sources. This theory contradicts the assumptions put forward in traditional theory, which assumes that companies choose the optimal capital structure. According to Pecking Order Theory, companies prefer internal funding sources before considering external funding. Internal funding sources can be retained earnings, namely profits generated from the company's operational activities, not distributed to stockholders. This is because using retained earnings does not require additional costs such as interest on debt or issuing new shares. In Pecking Order Theory, the company's capital structure is explained by the company's internal factors, such as cash flow generated from the company's operations, dividend policy, and investment needs. This theory emphasizes that a company's capital structure decisions are more influenced by internal factors than external factors, such as financial market conditions (Agyei et al., 2020).

Profitability is the return on capital investment. It is calculated from profit divided by capital investment (Alarussi & Alhaderi, 2018). Companies with a high rate of return on investment use relatively sm. The high rate of return makes it possible to finance most funding needs with internally generated funds. The more profitability indicates that the profit earned by the company has a large enough source of internal funds so that the company requires less debt. In addition, if retained earnings increase, debt risk will naturally decrease, assuming that the company does not increase the amount of debt. Based on the explanation above, the hypothesis proposed is:

H1: Profitability has a positive effect on the company's capital structure.

A Company with a high asset structure has a large fixed asset. Mueller & Sensini (2021) state that the company with larger long-term fixed assets will use much long-term debt with expectations that these assets can be used to cover their bills. Conversely, a company whose assets are mostly in the form of receivables and inventories whose value is highly dependent on short-term financing and more dependent on short-term financing. Based on the explanation above, the hypothesis proposed is:

H2: Asset structure positively affectsa company's capital structure.

Based on the hypothesis above, the research model can be shown in this Figure 1.

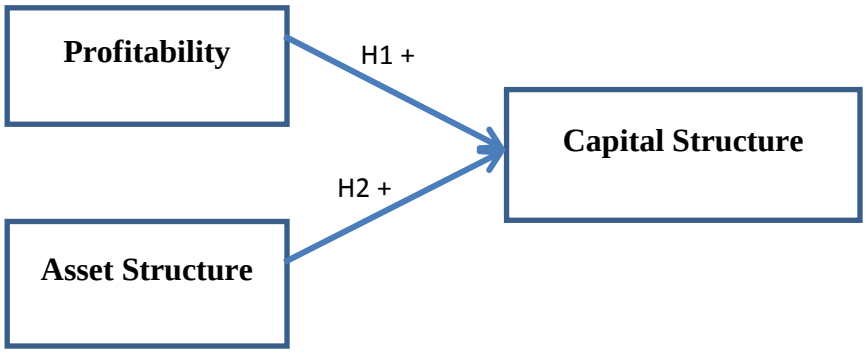

Figure. 1
Research Model

III. RESEARCH METHOD

This research uses secondary data, namely data obtained by the researcher indirectly from the company. The data used in this study were taken from the financial statement of insurance companies listed on the Indonesia Stock Exchange through www.idx.co.id. The data type used is *time series* data from all insurance companies, namely 15 listed on the Indonesia Stock Exchange, included in the sample criteria from 2018-2022. Profitability in this study is measured by Return on Asset [ROa], the extent to which the company's abicompany can utilize all of its assets to get net.Besides,et structure in this research is measured by comparing fixed and total assets—the capital structure used in this study is measured by Debt Equity Ratio [DER]. DER is the ratio used to measure the leverage level toward the total shareholder's equity owned by the company. Data analysis used in this study is multiple linear regression using SPSS 23 software to determine how much profitability and asset structure affect the Company's Capital Structure.

IV. RESULT AND DISCUSSION

This research uses secondary data, chained by the researcher indirectly from the company. Data used in this study were taken from financial statements of insurance companies listed on the Indonesia Stock Exchange through www.idx.co.id. The data type used is *time series data* from all insurance companies, namely 15 listed on the Indonesia Stock Exchange, included in the sample criteria from 2018-2022. The sample used in this study is 15 insurance companies listed on the Indonesia Stock Exchange during 2018-2022, the company which published the financial statement during 2018-2022, and the company which recorded consecutive profits during 2018-2022.

Because this study used the regression model, the classical assumption test was previously carried out so that the models met the requirements of the regression model; classical assumption testing includes testing data normality, multicollinearity, autocorrelation, and heteroscedasticity. Testing data normality aims to examine whether, in the regression model, the confoundingor residual variables have a normal distribution or haven't (Hair et al., 2019). T-test and F- test assumes that the residual values are normally distributed. If these assumptions are not met, then the statistical test is invalid for a few samples. The method used to test the formality of the data in this study is the non-parametric Kolmogorov Test – Smirnov Test. The result of the data normality test can be seen in Table 1.

Table 1
Data Normality Test Results

		Unstandardized Residual
N		45
Normal Parameters[a,b]	Mean	.0000000
	Std. Deviation	.42904767
Most Extreme Differences	Absolute	.094
	Positive	.094
	Negative	-.072
Kolmogorov-Smirnov		.632
Asymp. Sig. (2-tailed)		.820

The normality Test Result, as seen in Table 1, shows that the value amp. Sig/asymptotic significance on both sides is 0.159 or probability above 0.05 (0.820 > 0.05)(Stock & Watson, 2020). Thus the data used in multiple regression is normally distributed.]]Multicollinearity test was conducted to see whether there is a correlation between independent variables. The regression model is not multicollinear if the tolerance value is more than 0.1 or the Variance Inflation Factor (VIF) is less than 10. Tolerance measures the variability of the selected independent variables, which are not explained by other independent variables.

Table 2
Multicollinearity Test Result

Independent Variable	*Tolerance*	Variance inflation Factor (VIF)
Debt Equity Ratio	.539	1.854
Asset Results	.539	1.854

Based on that result test noted that there is no correlation between tested independent variables. This can be seen from a tolerance value greater than 0.1 and a VIF value less than 10. Thus, the aggression model does not occur in multicollinearity.

The heteroscedasticity test aims to determine whether, in the regression model, there is an inequality of variance from one residual observation to another. If the variance from the residual of one observation to another remains, it is called homoscedasticity; if it is different, it is called heteroscedasticity. The method used for the heteroscedasticity test is to look at the graph plot between the predicted value of the dependent variable, namely ZPRED, and the residual SRESID. A certain regular pattern, like the existing dots from a certain regular pattern (wavy, widens, and then narrows), indicates heteroscedasticity(Stock & Watson, 2020). The result of heteroscedasticity can be seen in Figure 2.

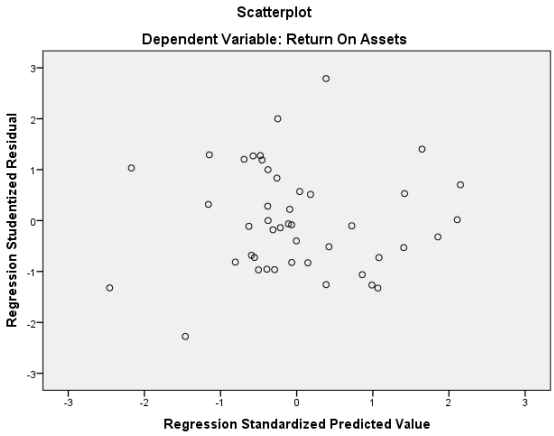

Figure 2
Scatterplots of Heteroscedasticity Test

The scatterplot graph shows that the points are spread randomly above and below the number 0 on the *y-axis*. These dots do not form a certain regular pattern. Then there is no heteroscedasticity in that regression model tested.

Autocorrelation testing is a condition with a correlation from the residual observations arranged according to a time series. A good regression model implies no autocorrelation problem. The impact caused by autocorrelation is that the sample variance cannot describe the population variance. To detect whether there is autocorrelation with the Durbin-Watson Test is as follows:

The significant level used is 0.05. The result of the Dubin-Watson calculation (according to the model summary attachment) based on the regression result is 1.811. The value of dL and dU on significance is 0.05. n = 45 (the number of sample) and k = 2 (the number of independent sample) obtained dL = 1.430 and dU = 1.615. From the calculation results can be seen that the value d (Dubin Watson) is located in the area dU < d < 4-dU (1.615 < 1.811 < 2.385). Thus the conclusion is that there is no autocorrelation in the regression model.

Hypothesis Testing Results

This research was conducted to see the influence of the independent variable, Profitability (X1) and Asset Structure (X2), towards the dependent variable, Company's Capital Structure. The result of this research can be seen in Table 3.

Table 3
The Effect of Profitability and Asset Structure on Company's Capital Structure

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.321	.433		-.534	.596
Return on Assets	.332	.156	.332	2.124	.040
Asset Results	.430	.169	.397	2.541	.015
Dependent Variable: Debt Equity Ratio					

Source: Test Result/Processed

The test results, which used multiple regression, found that Profitability and Asset Structure positively influence the dependent variable, Company's Capital Structure. Simultaneous testing shows the results with a significance level 0.000 (profitability < 0.05), where the F-test equals 22,114. It shows that both independent variables, namely Profitability and Asset Structure, simultaneously significantly affect Company's Capital Structure. There is reinforced by the R^2 value of 0.513. it means that the influence of the independent variable is 51.3%, and other factors outside the model influence the remaining 48.

The results of this test using multiple regression also show that partially Profitability and Asset Structure positively influence the dependent variable, Company's Capital Structure. The resulting test shows that Profitability positively influences the Company's Capital Structure, which is indicated by a significant value as big as 0.040 (profitability < 0.05) with a T-test value of 2.214. This result testing indicated that ***Hypothesis 1 is accepted.*** This result aligns with Yazdi & Mohammadian (2017), which obtains the probability that results affect the capital structure. According to the *pecking order theory*,Myers & Majluf (1984) expressed that to obtain an internal fund, a company with high profitability can use internal funds before using debt to fulfill the company's funding decisions.

Test results indicated that Asset Structure positively influences the Company's Capital Structure, shown by a significant value of 0.001 (probability < 0.05) with a T-test of 3.611. The result of this test indicated that ***Hypothesis 2 is accepted.*** The higher the asset structure indicates that the debt taken by the company is also getting bigger. Assuming other things are constant, if the company's tangible assets increase, the use of debt will also increase. In addition, the higher the guarantee given by the company to creditors, the greater the amount of debt that can be given by creditors to the company. Creditors will be very careful in giving debt to companies, and creditors may only give new debt to the company when these creditors get guarantees that provide certainty of protection for their interest. The company's fixed or intangible assets are collateral that can assure protection for creditors.

V. CONCLUSION

The research result indicated that Profitability positively influences the Company's Capital Structure,shown by a significant value of 0.040 (profitability < 0.05) with aT-test value of 2.214. Then shows that the capital structure positively influences the Company's Capital Structure, which is indicated by a significant value of 0.001 (profitability < 0.05) with a T-test of 3.611. Suggestions that can be raised in further research are expected to use a relatively longer observation period than this study, which is only five years, and it is also hoped that for each variable, not only one policy is used so the research results can be better.

REFERENCES

[1]. Abeywardhana, D. K. . (2017). Capital Structure Theory: An Overview. Accounting and Finance Research, 6(1), 133. https://doi.org/10.5430/afr.v6n1p133

[2]. Agyei, J., Sun, S., & Abrokwah, E. (2020). Trade-Off Theory Versus Pecking Order Theory: Ghanaian Evidence. SAGE Open, 10(3). https://doi.org/10.1177/2158244020940987

[3]. Alarussi, A. S., & Alhaderi, S. M. (2018). Factors affecting profitability in Malaysia. Journal of Economic Studies, 45(3), 442–458. https://doi.org/10.1108/JES-05-2017-0124

[4]. Chen, Z., Harford, J., & Kamara, A. (2019). Operating leverage, profitability, and capital structure. Journal of Financial and Quantitative Analysis, 54(1), 369–392. https://doi.org/10.1017/S0022109018000595

[5]. Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., Black, W. C., & Anderson, R. E. (2019). Multivariate Data Analysis. https://doi.org/10.1002/9781119409137.ch4

[6]. Modigliani, F., & Miller, M. H. (1958). The Cost of Capital, Corporation Finance and the Theory of Investment. The American Economic Review, 48(3), 261–297.

[7]. Mueller, A., & Sensini, L. (2021). Determinants of Financing Decisions of SMEs: Evidence from Hotel Industry. International Journal of Business and Management, 16(3), 117. https://doi.org/10.5539/ijbm.v16n3p117

[8]. Myers, S. C., & Majluf, N. S. (1984). Corporate financing and investment decisions when firms have information that investors do

not have. Journal of Financial Economics, 13(2), 187–221. https://doi.org/10.1016/0304-405X(84)90023-0

[9]. Saif-Alyousfi, A. Y. H., Md-Rus, R., Taufil-Mohd, K. N., Mohd Taib, H., & Shahar, H. K. (2020). Determinants of capital structure: evidence from Malaysian firms. Asia-Pacific Journal of Business Administration, 12(3–4), 283–326. https://doi.org/10.1108/APJBA-09-2019-0202

[10]. Singh, N. P., & Bagga, M. (2019). The Effect of Capital Structure on Profitability: An Empirical Panel Data Study. Jindal Journal of Business Research, 8(1), 65–77. https://doi.org/10.1177/2278682118823312

[11]. Stock, J. H., & Watson, M. W. (2020). Introduction to econometrics. In Pearson Education Limited (4th ed.). https://doi.org/10.2307/1926635

[12]. Wijaya, M. S. V., & Hadianto, B. (2008). Pengaruh Struktur Aktiva, Ukuran, Likuiditas, dan Profitabilitas Terhadap Struktur Modal Emiten Sektor Ritel di Bursa Efek Indonesia: Sebuah Pengujian Hipotesis Pecking Order. In Jurnal Ilmiah Akuntansi (Vol. 7, Issue 1, pp. 71–84).

[13]. Yazdi, H. K., & Mohammadian, M. (2017). Advances in mathematical finance & applications. Department of Management and Accounting, Islamic Azad University, South Tehran Branch, Tehran, Iran, 2(3), 1–11. www.amfa.iau-