

The Influence of Leverage and Capital Intensity on Effective Tax Rate (ETR) Through Profitability

Nurifa Laksmításari Azizah¹, Imtiyaz Farras Mufidah²

¹Economic and Business, Selamat Sri University, nurifalaksmításari@gmail.com

²Economic and Business, Selamat Sri University, imtiyazfarras@gmail.com

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Abstract

The company aims to maximize profits by implementing various methods, one of which is tax management through the effective tax rate (ETR) in order to minimize the effective tax rate of a company. The population of this study is manufacturing companies listed on the Indonesia Stock Exchange for the 2016-2018 period with a total of 185 companies. Sampling was carried out using the purposive sampling method and obtained a final sample of 93 companies. The data analysis technique used in this study is descriptive statistical analysis and inferential statistical analysis, namely regression analysis with moderating variables using the absolute difference value test method. Based on the results of the study, it shows that leverage affects the effective tax rate, so the higher the leverage, the higher the effective tax rate. Capital intensity affects the effective tax rate, so the higher the capital intensity, the higher the effective tax rate. Profitability has an effect on the effective tax rate, so it can be said that the higher the profitability, the higher the effective tax rate. Profitability is able to moderate the effect of leverage and capital intensity on the effective tax rate.

INTRODUCTION

Indonesia is a developing country that stretches from Sabang to Merauke. Indonesia is a country that has a very large population capacity and this is a potential object in the tax sector. The high number of company growth in Indonesia such as manufacturing companies and service companies, causes the wheels of the economy to move quickly and can improve the welfare of the community around the company.[1].

According to the Republic of Indonesia Law Number 28 of 2007 Article 1 paragraph (1), tax is an important part of state revenue. Tax is a mandatory

contribution that must be paid by individual or corporate taxpayers to the state which is mandatory, without receiving direct compensation and is used for the prosperity of the people.[2]. Taxes collected by the state are a source of funds used to finance government spending and to implement policies in both the social and economic fields aimed at the prosperity of the people. Although it has been considered a mandatory contribution to the state, in reality tax revenues are still below the set target.

The latest data shows that tax revenues during 2018 reached Rp1,618.1T. The revenues were recorded at 86.14% of the target of the Revised State Budget (APBNP) 2018 of Rp1,878.4T, the realization grew by 7.37% when compared to tax revenues in the previous year. This shows that revenues from the tax sector are not as expected, although larger than the previous year (www.kemenkeu.go.id, 2018).

The role of tax in a company gets quite significant attention, because for a company tax is a burden that reduces the amount of net profit that will be received by the company, so that the company will suppress the amount of tax payments as low as possible. In contrast to the government which considers tax to be quite important state revenue so that the government will collect the highest possible tax.[3].

According to Zain[4]Tax avoidance is an action that is considered legal, because it does not violate the law and can obtain tax savings, namely by utilizing the relaxation of the rules that have been set so that it can save tax expenses, in practice tax avoidance is a unique problem because on the one hand it is not desired by the government. However, on the other hand tax avoidance is an action that does not violate the law, because basically the methods and techniques used are only by utilizing the loopholes contained in the applicable tax regulations[5]. The Directorate General of Taxes is not authorized to prosecute tax avoidance practitioners in the legal realm, so it can be concluded that the applicable Tax Laws and Regulations are still not strict enough, thus it can support and provide opportunities for companies to carry out tax avoidance practices. This is what can trigger many cases of tax avoidance practices that occur in public companies.

Based on tax data submitted by the Directorate General of Taxes in 2012, there were around 4,000 companies that avoided taxes in Indonesia by reporting zero tax value, as a result of which there were companies that experienced losses

for up to 7 consecutive years. Companies that experienced losses were generally companies engaged in the manufacturing and raw material management sectors (DGT, 2017). One of the efforts that can be made by the company is to minimize the tax burden within the specified limits or not violate the rules, because tax is one of the profit reducers. As we know, the amount of tax collected by the government from the company depends on the amount of income received by the company, therefore the company needs proper tax planning so that the company can pay taxes efficiently[6].

According to Rachmitasari[6]The effective tax rate is a percentage of the amount of tax borne by the company. The effective tax rate can be calculated or assessed based on the financial information produced by the company, so that the effective tax rate is a form of tax rate calculation in the company. The effective tax rate is a comparison between the real tax we pay and the commercial profit before tax. The effective tax rate is used to measure the impact of changes in tax policy on the company's tax burden. According to Lubis[7]Effective tax rate can be calculated by dividing income tax expense by profit before tax and does not distinguish between current tax expense and deferred tax expense. This means that the higher the effective tax rate of a company, the higher the tax burden borne by the company and vice versa, the lower the effective tax rate of a company, the lower the tax burden borne by the company, so the lower the effective tax rate, the better the effective tax rate of a company and the good value of the effective tax rate indicates that the company has succeeded in carrying out tax planning.

METHODS

The type of data in this study uses a deductive-quantitative approach with a hypothesis testing study research design that aims to analyze, describe and obtain empirical evidence of the influence and role between variables that have been hypothesized in this study. The data used in this study is panel data, while the data source in this study uses secondary data. The secondary data is presented in the form of annual financial reports of manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2021-2023 and has been published on the official website of the Indonesia Stock Exchange, namely www.idx.co.id. The data used in this study are Debt to Asset Ratio (DAR), Capital Intensity Ratio (CIR) and Return On Assets (ROA). The population used in this study is all

manufacturing companies listed on the Indonesia Stock Exchange (IDX) in 2021-2023 as many as 185 companies. Sampling in this study used a non-random sampling technique with a purposive sampling method, namely 93 companies. The data analysis techniques used are descriptive tests, classical assumption tests, direct influence tests and indirect influence tests.

RESULTS AND DISCUSSION

The results of the descriptive statistical analysis of the research variables are as follows:

Table1. Descriptive Analysis

Descriptive Statistics					
	N	Minimum	Maximum	Mean	Std. Deviation
Leverage	279	.08	2.06	.4457	.24843
Capital Intensity	279	.03	.80	.3780	.17723
Effective Tax Rate	279	.00	.53	.0758	.08088
Profitability	279	.00	7.68	.3403	.57789
Valid N (listwise)	279				

Based on the results above, it shows that the leverage variable has a minimum value of 0.08, a maximum value of 2.06, an average of 0.445, and a standard deviation of 0.248. The Capital Intensity variable has a minimum value of 0.03, a maximum value of 0.8, an average of 0.4378, and a standard deviation of 0.177. The ETR variable has a minimum value of 0.00, a maximum value of 0.53, an average of 0.075, and a standard deviation of 0.08. The Profitability variable has a minimum value of 0.00, a maximum value of 7.68, an average of 0.340, and a standard deviation of 0.577.

The classical assumption test is a requirement that must be met in order to produce a BLUE (Best, Linear, Unbiased Estimator) research model consisting of normality test, multicollinearity test, autocorrelation test and heteroscedasticity test (Ghozali, 2016). The results of the normality test with Kolmogorov-Smirnov (KS) showed a significance value of 0.746. The significance value is greater than the error tolerance value of 0.05, so it can be concluded that the residual value is normally distributed. The results of the multicollinearity test indicate that the research data is free from multicollinearity symptoms. This is evidenced by the VIF value <10 and the tolerance value > 0.10. The results of the heteroscedasticity

test using the Glejser test show that the significance value of each research variable is greater than the error tolerance value of 0.05, so it can be concluded that the research data is free from heteroscedasticity problems.

After the classical assumption test is fulfilled, a hypothesis test is conducted on the research data. The hypothesis test in this study uses the absolute difference value test. The absolute difference value test is used to determine the effect of the independent variable on the dependent variable and the effect of the interaction of the independent variable with the mediating variable which is measured by the absolute difference value between the standardized independent variable and the standardized moderating variable on the dependent variable. The results of the absolute difference value test are presented in the following table.

Table2. Absolute Difference Value Test Results

	244,690	4.144		59,051	.000
	1.151	2,052	.046	.561	.576
	5.026	2.106	.200	2.386	.018
	6.209	2,539	.210	2.446	.016
	2.446	2.354	.089	1,039	.300

Table 2 shows that the regression constant value is 244.690. The regression coefficient value of the independent variable leverage (X1) symbolized by Zscore(CO_X1) is 1.151. The regression coefficient value of the independent variable capital intensity (X2) symbolized by Zscore(CO_X2) is 5.026. The results of the absolute difference test are summarized in the following regression equation:

$$Y = 244,690 + 1,151 X1 + 5,026 X2 + 6,209 |ZX1-ZZ| + 2,446 |ZX2-ZZ| + e$$

The results of the hypothesis testing are presented in Table 5 as follows.

Table3. Results of Direct Effect Hypothesis Test

Model	Coefficientsa			t	Sig.
	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta		
(Constant)	.105	.015		6.901	.000
1 Profitability	.013	.008	.094	1,565	.009
Leverage	.029	.020	.089	1,473	.002

Capital Intensity	.030	.027	.067	1.107	.009
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a. Dependent Variable: Effective Tax Rate

Based on the results above, it shows that the significance value of the leverage variable is 0.002, so it can be said that leverage has a positive and significant effect on the effective tax rate. While capital intensity has a significance value of 0.009, so it can be said that capital intensity has a significant positive effect on the effective tax rate. While profitability has a significance value of 0.009, so it can be said that profitability has a positive and significant effect on the effective tax rate.

Meanwhile, indirect or mediation influences can be seen in the following table:

Table4. Results of Indirect Effect Test

Coefficients ^a						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
	(Constant)	244,690	4.144		59,051	.000
	X1_X2_ZZ	6.209	2,539	.210	2.446	.016

Based on the results above, it shows that the significance value of 0.016 is smaller than 0.05, so it can be said that profitability is able to mediate leverage and capital intensity on the effective tax rate.

The Effect of Leverage on the Effective Tax Rate (ETR)

The first hypothesis test stating that leverage has an effect on the Effective tax rate (ETR) is rejected because the test results show that leverage has a significance value smaller than the error tolerance level (α). This provides empirical evidence that leverage has an effect on the company's Effective tax rate (ETR).

The results of this study are in accordance with stakeholder theory which assumes that the existence of a company requires stakeholder support. Creditors are one of the stakeholders who can support the sustainability of the company through debt given to the company. Loan interest is one of the costs that can reduce taxable income as regulated in Paragraph 1 Article 6 of Law Number 36 of 2008 concerning income tax. Thus, companies will consider using debt to fund their businesses as a tax management action so that they can minimize the amount

of tax burden borne by the company without violating applicable tax regulations. The results of this study are in accordance with research conducted by Rodriguez, et al.[8]which provides empirical evidence that leverage has an effect on the effective tax rate (ETR) with a negative coefficient, besides that this research is also not in accordance with the research conducted by Andreas & Enni Savitri[9]which provides empirical evidence that leverage has an effect on the effective tax rate (ETR) with a positive coefficient.

The Effect of Capital Intensity on Effective Tax Rate (ETR)

The results of the study indicate that the second hypothesis test stating that capital intensity has an effect on the effective tax rate (ETR) is rejected. This provides empirical evidence that capital intensity has a positive effect on the effective tax rate (ETR).

The results of this study are in accordance with the agency theory which assumes that the depreciation of a company's fixed assets can be utilized by managers to reduce the amount of the company's tax burden. Managers will utilize idle company funds by investing these funds in fixed assets, so that the company will gain benefits in the form of depreciation arising from fixed assets that can be used by the company to reduce its tax burden. The results of this study support the results of research conducted by Rahmawati & Titik[6]which provides empirical evidence that capital intensity has an effect on the effective tax rate (ETR) with a positive coefficient. However, the results of this study do not match the research conducted by Putri & Maya[10]which provides empirical evidence that capital intensity has an effect on the effective tax rate (ETR) with a negative coefficient, besides that this research is also not in accordance with the research conducted by Juliani & Vidyarto[8]which provides empirical evidence that capital intensity has no effect on the effective tax rate (ETR).

The Influence of Profitability on Effective Tax Rate (ETR)

The results of the study show that profitability has an effect on the effective tax rate. This provides empirical evidence that profitability has a positive effect on the effective tax rate (ETR). According to Yudha Aditya[11]Companies with high profitability levels tend to have lower tax burdens, because high corporate income can be used to obtain tax incentives and other tax deductions that can cause the effective tax rate to be lower. The results of this study are also in accordance with stakeholder theory which assumes that the existence of a

company requires stakeholder support, one of the company's stakeholders is shareholders. Shareholders support the company's survival through funding, where the funding will be used by management as funding related to fixed assets, because fixed assets are one of the largest capital in the company. Increasing the profitability of a company can be caused by increasing the company's capacity for funding sources in carrying out its business activities, one of which is fixed assets[7].

The Effect of Leverage and Capital Intensity on Effective Tax Rate (ETR) Through Profitability

The fourth hypothesis test stating that profitability mediates by strengthening the influence of leverage and capital intensity on the effective tax rate (ETR) is accepted. The test results show that the significance value is smaller than the error tolerance level (α). This provides empirical evidence that profitability is able to mediate the influence of leverage and capital intensity variables on the effective tax rate (ETR).

This result is in accordance with the agency theory which assumes that the depreciation of a company's fixed assets can be utilized by managers to reduce the amount of the company's tax burden. Managers will utilize idle company funds by investing these funds in fixed assets, so that the company will gain benefits in the form of depreciation arising from fixed assets that can be used by the company to reduce its tax burden. Increasing the profitability of a company can be caused by increasing the company's capacity for funding sources in carrying out business activities, one of which is fixed assets.[7].

CONCLUSION

"Based on the results of the study, it shows that leverage has an effect on the effective tax rate, so the higher the leverage, the higher the effective tax rate. Capital intensity has an effect on the effective tax rate, so the higher the capital intensity, the higher the effective tax rate. Profitability has an effect on the effective tax rate, so it can be said that the higher the profitability, the higher the effective tax rate. Profitability is able to mediate the effect of leverage and capital intensity on the effective tax rate.

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