

THE IMPACT OF FIRM SIZE, CAPITAL INTENSITY RATIO, INVENTORY INTENSITY RATIO AND LEVERAGE TOWARD EFFECTIVE TAX RATE ON CONSUMER GOODS COMPANIES LISTED ON THE INDONESIA STOCK EXCHANGE

Jeniefer Lu¹, Yanuar Dananjaya²

^{1,2}Department of Management Study Program, UPH Surabaya Campus

ABSTRACT

Effective Tax Rate is an indicator of tax management as measured by comparing tax burden to pre-tax income. The effective tax rate is used to measure the amount of tax that is borne by the company against the company's accounting profit, so the company can know the performance of its tax management. The objective of this research is to analyze the impact of firm size, capital intensity, inventory intensity, and leverage toward effective tax rate in consumer goods companies listed on Indonesia Stock Exchange (IDX) during the period 2018-2021. The population of this research is the state-owned enterprises listed on Indonesia Stock Exchange during 2018-2021. Further, with the employed purposive sampling and determined criteria, 32 companies are chosen as the samples. The data analysis method applied is multiple linear regression which is processed through SPSS 26th version. The result of this research shows that firm size, capital intensity have no impact toward effective tax rate. However, inventory intensity has an insignificant positive impact toward effective tax rate. Furthermore, leverage has a significant positive impact toward effective tax rate.

Keywords - **Capital Intensity Ratio, Effective Tax Rate, Firm Size, Inventory Intensity Ratio, Leverage.**

INTRODUCTION

Indonesia is categorized as a country with a growing economy. In this regard, taxation serves as a key factor in transforming Indonesia's status. Tax is an important source of country contribution which comes from taxpayers (individuals or entities). Hence, the government may need a large amount of funding by collecting taxes as the state revenue's most significant source of funding. This is because the greater the amount of tax received by the state, the better its financial condition. To minimize the tax burden, the company as a taxpayer can legally reduce the effective tax rate assessed to taxpayers by utilizing the applicable tax provisions. Companies typically create a transaction plan that is as methodical as feasible to reduce the effective tax rate. The company's capacity to manage taxes can be gauged by the effective tax rate. The effective tax rate is unique because of its ability to compile the effects of numerous tax breaks and adjustments to corporate tax rates, where the lower the effective tax rate, the lower the tax burden borne by the taxpayer so that it can save on paying corporate taxes. According to Putu and I Made (2021) taxes within the company get significant attention due to corporate tax being a burden that can reduce total profit or net income obtained by the company, so the company will try to pay taxes as low as possible. The company can do tax planning with various policies implemented in the company to minimize the tax burden that must be paid by the company (Darsani & Sukartha, 2021).

In this research, the object is the consumer goods business which, composed of stock companies involved in the sale of goods for individuals and households, has historically been considered stable, making it attractive for long-term investment. However, the COVID-19 pandemic revealed that this sector is not immune to economic shocks. Many consumer goods companies, particularly in the cosmetics and household goods sub-sectors, experienced substantial financial strain. Fluctuations in demand, supply chain disruptions, and financial pressures, as highlighted in recent studies, caused

IConEnt

The 4th International Conference on Entrepreneurship

volatility in what was once seen as a stable investment. Thus, while consumer goods remain essential, their financial performance has proven vulnerable to external crises like the pandemic (Desshyfa & Purwanto, 2024). Currently, this sector consists of 80 companies that contribute to producing consumer goods with several sub-sectors such as houseware, food and beverages, cosmetics and household, pharmaceuticals, tobacco, and other sectors.

From the background above, there are several factors that can impact the effective tax rate such as firm size, capital intensity ratio, inventory intensity ratio, and leverage. Firm size is the first variable that can impact the effective tax rate. A scale known as “firm size” depicts a company’s size based on its total assets, market value, stock value, and other factors. The results of earlier studies indicated that the effective tax rate could be influenced by a firm’s size. Comparatively, the findings from other studies indicate that the firm size has no impact on the effective tax rate (Widati, Asiah, Kamela, & Hidayat, 2024). Capital intensity is a ratio used to measure the amount of capital in the form of assets that used to yield income from the sale of goods (Waluyo, 2019). The findings of earlier studies indicated that capital intensity can have an impact on the effective tax rate. The effective tax rate is unaffected by capital intensity, according to an additional study. Inventory intensity is a ratio used to measure the firm’s inventory compared to the firm’s total assets. Firms with high inventory intensity can reduce the amount of tax burden the firm pays (Syamsudin & Suryarini, 2020). The results of previous studies stated that inventory intensity affects the Effective Tax Rate. Other research shows that the inventory intensity does not affect the Effective Tax Rate. Leverage is a ratio used to gauge whether a firm’s assets are bear by debt. The financing can be in the form of investments (internal parties) and creditors (third parties). Obligations to third parties will incur interest, so the firm’s obligations will be increased (Kasmir, 2019) . The results of previous studies stated that leverage affects the effective tax rate. In contrast, other research shows that the leverage does not affect the effective tax rate. Departing from the description above, the formulation of the problems raised in this study are: Does firm size, capital intensity ratio, inventory intensity ratio, and leverage significantly influence the effective tax rate in the Consumer Goods Sector Listed on the Indonesia Stock Exchange Year 2018-2021.

LITERATURE REVIEW

Based on Agency Theory Jensen & Meckling, (1976) describes an agreement between parties in which the principal acts as granting authority and an agent acts as receiving authority to take decisions in running the company. The principal assigns specific tasks to the agent; then, the agent agrees to carry out the task by giving some consideration to the principal. So, it can be said that the principal is usually the shareholder in the company while the agent is the company manager. In taxation, agency theory appears when a firm's supervision tries to minimize taxes to earn a large company value. Otherwise, the agent assumes that tax avoidance will increase profits and firm’s value, attract investors, so that the agent’s prosperity is obtained.

The term "firm size" refers to a metric used to categorize businesses as large or small based on various factors, including total assets, logarithmic size, or stock market value. Larger organizations often benefit from economies of scale and have more access to resources, which enables them to implement more sophisticated tax planning strategies. This can result in a lower effective tax rate as these companies can allocate significant resources to tax avoidance or reduction strategies. Firm size positively influences the effective tax rate, suggesting that as companies grow, their tax obligations may increase proportionally (Batmomolin, 2018). However, this view contrasts with other studies, who argue that business size negatively affects the effective tax rate. They suggest that larger firms

IConEnt

The 4th International Conference on Entrepreneurship

have more opportunities to minimize their tax liabilities, leading to a lower effective tax rate as firm size increases (Gazali & Damayanti, 2020).

H1: Firm size has a significant effect on Effective Tax Rate

Depreciation charges play a significant role in offsetting earnings and reducing taxable income, particularly as a company's fixed asset base grows. As companies invest in more capital assets, their depreciation expenses increase, further lowering their taxable income. Given that depreciation expenses are tax-deductible, higher capital intensity often correlates with a lower effective tax rate, as companies can claim more depreciation deductions. Leverage positively affects the effective tax rate, indicating that firms with higher debt levels may experience an increase in their tax obligations (Rahmawati, 2021). However, this is contested by other studies, who argue that leverage negatively impacts the effective tax rate (Sjahril, Yasa, & Dewi, 2020). Their findings suggest that firms with greater leverage might benefit from interest tax shields, which reduce the effective tax rate as debt levels rise.

H2: Capital intensity has a significant effect on Effective Tax Rate

Large firm inventories, combined with sporadic turnover, result in higher inventory-related expenditures, including rental, maintenance, and supervision costs. High inventory intensity can lead to a lower effective tax rate since storage costs can be used as deductions from taxable income. While higher inventory levels increase company costs and taxable income, they are followed by a reduction in the effective tax rate. Inventory intensity positively impacts the effective tax rate (Syamsudin & Suryarini, 2020). However, other studies discover that inventory intensity negatively affects the effective tax rate (Rahmawati, 2021).

H3: Inventory intensity has a significant effect on Effective Tax Rate

In equity funding, returns are received in the form of dividends, which cannot be treated as company expenses. Consequently, many companies prefer debt financing over equity, as higher debt levels lead to increased interest expenses. These interest expenses can be deducted from taxable income, resulting in a lower effective tax rate (ETR). Therefore, companies with higher debt financing are expected to have lower ETRs since interest costs are included in operating expenses, reducing both operating and fiscal profits, and ultimately the tax burden. The results of earlier studies show that leverage negatively affects the effective tax rate (Gazali & Damayanti, 2020).

H4: Leverage has a significant effect on Effective Tax Rate

The effect of firm size, capital intensity, inventory intensity, and leverage may be significant factors influencing the effective tax rate (ETR). These elements reflect key aspects of a company's financial and operational strategy, which in turn shape how tax obligations are managed. Larger firms often possess more flexibility in tax planning, while higher capital and inventory intensities directly impact deductions, such as depreciation and storage costs. Additionally, leverage plays a crucial role in reducing taxable income through interest expenses. Understanding the combined influence of these variables is essential not only for optimizing tax efficiency but also for aligning financial strategies with corporate goals. Therefore, the following hypotheses are proposed to explore their simultaneous effects on financial performance among these factors.

IConEnt

The 4th International Conference on Entrepreneurship

H₅: Firm Size, Capital Intensity, Inventory Intensity, and Leverage simultaneous have significant effects towards Effective Tax Rate

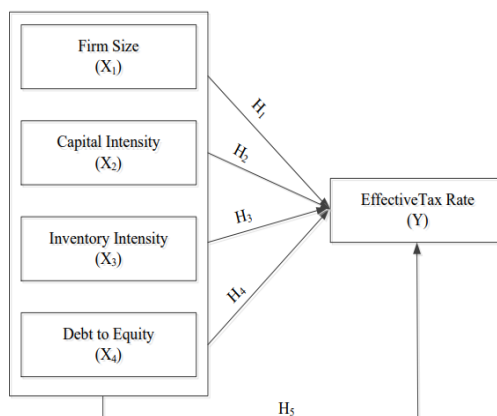


Fig. 1. Conceptual Framework

METHODOLOGY

All companies selling consumer goods that were listed between 2018 and 2021 on the website of the IDX make up the population. All businesses that have registered with the Indonesia Stock Exchange are trustworthy since anyone with access to the internet can view their financial information and as a result verify the data's openness. Since the study used data from the previous four years, its credibility is still very high. The sample is a subset of the population in terms of size and characteristics. Samples drawn from the population must be representative of the population being studied (Sugiyono, 2018). As a result, the writer should verify that samples drawn from the population accurately reflect the population.

In order to measure a variable using an instrument, the variable must be defined as an Operational Definition of a variable. This operational definition is important and necessary so that the measurement of a variable or data collection is consistent between one data source and another. In this research, the dependent variable is the Effective Tax Rate. The independent variables are Firm Size, Capital Intensity ratio, Inventory Intensity ratio, and Leverage.

Effective Tax Rate is a tool for calculating the impact of tax policy changes on a company's tax burden. Effective Tax Rate (ETR) is measured by the following formula:

$$ETR = \frac{\text{Income Tax Expense}}{\text{Income before Income Tax Expense}}$$

Firm size is a scale that can be used to categorize the size of the firm. Total assets or net sales can be used to convey the firm size, which is the size of the business. In this study, firm size is calculated as the ln of the firm's total assets. Firm size is measured by the following formula:

$$\text{Firm Size} = \ln(\text{Total Asset})$$

Depreciation costs may be used by the business to lower its profit. Capital Intensity Ratio is total fixed assets vs total assets of the company are compared. The capital intensity ratio is calculated using the following formula:

$$\text{Capital Intensity Ratio} = \frac{\text{Total Fixed Assets}}{\text{Total Asset}}$$

IConEnt

The 4th International Conference on Entrepreneurship

Inventory Intensity Ratio is a tool to know the company's efficiency level between the goods that have been sold and the existing in the company. Inventory intensity is the value of existing inventory in the form compared to the total assets of the company. The inventory intensity ratio is calculated using the following formula:

$$\text{Inventory Intensity Ratio} = \frac{\text{Total Inventory}}{\text{Total Asset}}$$

Leverage is a ratio used to gauge the extent of a firm's assets financed with debt. Leverage ratio is used to measure the firm's ability to fulfill all its obligations, both short-term and long-term obligations. The leverage (DER) is calculated using the following formula:

$$\text{Debt-to-Equity Ratio (DER)} = \frac{\text{Total Liabilities}}{\text{Total Equity}}$$

Financial analysis and statistical analysis are the methods of data analysis that are employed. The independent and dependent variable are both calculated using financial analysis. The 26th version of the SPSS application was used as the statistical tool for data analysis in this research. A data set's trends, patterns, and relationships are found through statistical analysis, which is also utilized to determine whether or not the hypotheses are correct. Descriptive statistics analysis, traditional assumption tests, multiple linear regression analysis, and hypothesis testing comprise the statistical analysis in this report (Ghozali, 2017).

There are several stages in this research. The first is descriptive statistics which is useful for providing an overview of the data description of all variables in research seen from the minimum value, maximum value, average (mean) and standard deviation (Ghozali, 2017). Furthermore, the classical assumption test is also carried out and aims to determine whether the data meets the basic assumptions. It is important to avoid biased estimates. Classic assumption tests in research include: a) Normality Test, b) Multicollinearity Test, c) Heteroscedasticity Test and d) Autocorrelation Test. The hypothesis test in research includes: a) Partial T-test, b) Simultaneous F-Test, and c) Coefficient of Determination. Furthermore, to find out the relationship between the independent variables and dependent variable, performed Multiple Linear Regression Analysis. As for the formula analysis Multiple regression used in this study is as follows:

$$Y = a + b_1 X_1 + b_2 X_2 + b_3 X_3 + b_4 X_4 + e$$

- Y : Effective Tax Rate
- α : Constanta
- β_1 - β_4 : Regression Coefficient
- X₁ : Firm Size
- X₂ : Capital Intensity
- X₃ : Inventory Intensity
- X₄ : Leverage
- e : Error

RESULTS

Descriptive Statistics

In this study, descriptive statistics are used to describe the frequency of each research variable as well as its mean, minimum, maximum, and standard deviation values. Researchers can see the minimum value, the maximum value, the average value (mean), and the company's standard deviation of each variable used in the study based on data taken from the financial statements of consumer goods

IConEnt

The 4th International Conference on Entrepreneurship

industries listed on the Indonesia Stock Exchange and used as research samples for period of 2018 to 2021, as shown in Table 1 as follows:

Table 1. Descriptive Statistic

	N	Minimum	Maximum	Mean	Std. Deviation
Firm_Size	128	25.96	32.83	29.1138	1.49854
Capital_Intensity	128	.05	.77	.3469	.15567
Inventory_Intensity	128	.02	.56	.1982	.12228
DER	128	.13	3.83	.7415	.62840
ETR	128	.03	2.38	.2716	.21273
Valid N (listwise)	128				

Source: Processed by writer using SPSS (2022)

Based on table 1, it is known that there are 128 observational data used for observation on consumer goods companies listed on the Indonesia Stock Exchange during the period 2018 to 2021.

Classical Assumption Tests

The normality test results in this study can be seen in the following table:

Table 2. Normality Test

	Unstandardized Residual
N	112
Normal Parameters A ^b	
Mean	.0000000
Std. Deviation	.05551485
Most Extreme Differences	
Absolute	.069
Positive	.069
Negative	-.065
Test Statistic	.069
Asymp. Sig. (2-tailed)	.200 ^{c,d}

Source: Processed by writer using SPSS (2022)

The table shows that the asymptotic significance (2-tailed) value is greater than 0.05 so that the data is ensured that the data is normally distributed. Therefore, it can be concluded that all the normality tests conducted in this research fulfills the normality assumption.

Multicollinearity Test

The results of the multicollinearity test can be seen in the following table:

Table 3. Multicollinearity Test

Model	Unstandardized Coefficients	Standardized Coefficients	Collinearity Statistics		
	Std. Error	Beta	Tolerance	IF	
1 (Constant)	.400	.114			
Firm_size	-.006	.004	-.145	.923	1.084
Capital_intensity	-.050	.040	-.123	.770	1.298
Inventory_intensity	.046	.057	.075	.853	1.173
DER	.053	.010	.463	.890	1.124

Source: Processed by writer using SPSS (2022)

IConEnt

The 4th International Conference on Entrepreneurship

Based on table 3, the Variance Inflation Factor (VIF) for each independent variable does not have a value under 10. Firm size (X1) is equal to 1.084, Capital Intensity ratio (X2) is equals to 1.298, Inventory Intensity ratio (X3) is equals to 1.173, and Debt-to-Equity ratio is equals to 1.124. The tolerance value for each variable does not have a tolerance value of 0.10, as shown in the table below. Firm size (X1) is equal to 0.923, Capital Intensity ratio (X3) is equal to 0.853, and DER ratio is equal to 0.890.

Heteroscedasticity Test

Heteroscedasticity Test results by observing the Spearman Test

Table 4. Heteroscedasticity Test

		Correlations					
		Firm_size	Capital_intensity	Inventory_intensity	DER	Unstandardized Residual	
Spearman's rho	Firm_size	Correlation Coefficient	1.000	-.103	-.121	.231*	-.009
		Sig. (2-tailed)	.	.279	.205	.014	.926
		N	112	112	112	112	112
	Capital_intensity	Correlation Coefficient	-.103	1.000	-.401**	.337**	-.016
		Sig. (2-tailed)	.279	.	.000	.000	.865
		N	112	112	112	112	112
	Inventory_intensity	Correlation Coefficient	-.121	-.401**	1.000	-.040	.084
		Sig. (2-tailed)	.205	.000	.	.676	.381
		N	112	112	112	112	112
	DER	Correlation Coefficient	.231*	.337**	-.040	1.000	-.184
		Sig. (2-tailed)	.014	.000	.676	.	.052
		N	112	112	112	112	112
	Unstandardized Residual	Correlation Coefficient	-.009	-.016	.084	-.184	1.000
		Sig. (2-tailed)	.926	.865	.381	.052	.
		N	112	112	112	112	112

Source: Processed by writer using SPSS (2022)

Based on table 4, a residual variable is said not to have heteroscedasticity if the significant value is above 0.05. The result for firm size (0.926), capital intensity ratio (0.865), inventory intensity ratio (0.381), and leverage (0.052) means the residual variable has no heteroscedasticity or is usually referred to as homoscedasticity.

Autocorrelation Test

The results of the autocorrelation test can be seen in the following table:

Table 5. Autocorrelation Test

Runs Test	
	Unstandardized Residual
Test Values	-.00581
Cases < Test Value	56
Cases >= Test Value	56
Total Cases	112
Number of Runs	47
Z	-1.898
Asymp. Sig. (2-tailed)	.058

Source: Processed by writer using SPSS (2022)

IConEnt

The 4th International Conference on Entrepreneurship

A regression model is said to be free of autocorrelation if the value of significance is above 0.05. Based on table 5, significance is 0.058 which is above 0.05. In conclusion, the regression model has passed the autocorrelation test.

Multiple Linear Regression Analysis

Table 6. Multiple Linear Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error	Beta		
1 (Constant)	.400	.114		3.515	.001
Firm_size	-.006	.004	-.145	-1.617	.109
Capital_intensity	-.050	.040	-.123	-1.250	.214
Inventory_intensity	.046	.057	.075	.805	.422
DER	.053	.010	.463	5.053	.000

Source: Processed by writer using SPSS (2022)

Based on table 6, the multiple linear regression model is representing as the table above:

$$Y = 0.400 - 0.006X_1 - 0.050X_2 + 0.046X_3 + 0.053X_4 + e$$

Hypothesis Test

First Hypothesis Testing (H₁)

Based on the test result in the table above, the variable firm size on ETR indicates a t-count value of -1.617 and a significance level of 0.109. The t-count is higher than the t-table value, namely $-1.617 > -1.98238$. The significance value of firm size is also higher than 0.05, namely $0.109 > 0.05$. Therefore, the conclusion can be drawn if H₀ is accepted and H₁ is rejected. It means that firm size negatively and insignificant affects the effective tax rate in consumer goods companies Listed on Indonesia Stock Exchange.

Second Hypothesis Testing (H₂)

From the results above, the variable capital intensity on the effective tax rate indicates the t-count value of -1.250 and a significance level of 0.214. The t-count is lower than the t-table value, namely $-1.250 < -1.98238$. The significance value of capital intensity is also higher than 0.05, namely $0.214 > 0.05$. Therefore, it can be concluded that H₀ is accepted and H₂ is rejected means that capital intensity has a negative and insignificant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange.

Third Hypothesis Testing (H₃)

From the results above, the variable inventory intensity on ETR indicates a t-count value of 0.805 and a significance level of 0.422. The t-count is lower than the t-table value, namely $0.805 < 1.98238$. The significance value of inventory intensity is also higher than 0.05, namely $0.422 > 0.05$. Therefore, the conclusion can be drawn if H₀ is accepted and H₃ is rejected. It means that inventory intensity has a negative and insignificant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange.

IConEnt

The 4th International Conference on Entrepreneurship

Four Hypothesis Testing (H₄)

From the results above, the variable leverage on the effective tax rate indicates a t-count value of 5.053 and a significance level of 0.000. The t-count is higher than the t-table value, namely $5.053 < 1.98238$. The significance value of leverage is also lower than 0.05, namely $0.000 < 0.05$. Therefore, the conclusion can be drawn if H₀ is rejected and H₄ is accepted. It means that leverage positively and significantly affects the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange.

Simultaneous Hypothesis Testing

Table 7. Simultaneous Hypothesis Testing

ANOVA ^a						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	.086	4	.022	6.741	.000 ^b
	Residual	.342	107	.003		
	Total	.428	111			

Source: Processed by writer using SPSS (2022)

As a result, a conclusion can be drawn if H₀ is rejected and H₅ is accepted. It means all independent variables significantly affect the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange.

Coefficient of Determination Test (R²)

Table 8. Coefficient of Determination Test

Model Summary					
Model	R	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson	
1	.449 ^a	.201	.05654	1.746	

Source: Processed by writer using SPSS (2022)

Based on the table above, the value of adjusted R square is 0.171, which equals 17.1%, which means only 17% of the dependent variable of the ETR is explained by the independent variable, which is firm size, capital intensity, inventory intensity, and leverage. The rest of 82.9% is explained by other variables not discussed in this research paper.

DISCUSSION

The impact of firm size towards effective tax rate.

According to the T-test results, the company size, the first independent variable of this study, has a negligible impact on the effective tax rate in consumer goods companies listed on the Indonesia Stock Exchange. In other words, $-1.617 > -1.98238$, the minus t_{count} value is greater than the minus t_{table} value. The significance value is $0.109 > 0.05$, which is likewise greater than 0.05. The significance value indicates that there is no significant impact of firm size, however the negative t_{count} result demonstrates a negative correlation between firm size and effective tax rate.

The first hypothesis (H₁) claimed that firm size partially has a significant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange is rejected, and H₀ is accepted. This means no matter how much the amount increases or decreases in firm size; it will not

IConEnt

The 4th International Conference on Entrepreneurship

affect the effective tax rate. Meanwhile, the negative relationship shows that the greater the firm size, the lower the effective tax rate. With a high level of firm size, the firm's ability to reduce tax payments is also increasing because the larger the firm size, the better the firm's decision in managing resources is also getting better, so the firm's tax rate will be lower.

Based on agency theory, agents (managers) who are given the authority to manage the company will try their best to utilize the firm's assets so that the firm's performance remains high. Agents will try to improve their performance and earn high profits. To maintain the profits obtained, the agents will carry out tax planning so that the real taxes paid do not burden the profits that will be used again for the company's operations in the future.

The results of this research align with the research which stated that firm size has no significant effect on the effective tax rate (Husni & Wahyudi, 2022). However, this study is not in line with other research which stated that firm size has a significant influence on the effective tax rate (Batmomolin, 2018) (Gazali & Damayanti, 2020).

The impact of capital intensity ratio towards effective tax rate.

The T-test results indicate that the second independent variable of this research, namely capital intensity, partially has no significant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange. The minus t_{count} value is higher than the minus t_{table} value, namely $-1.250 > -1.98238$. The significance value is also higher than 0.05, namely $0.214 > 0.05$. The significance value means that capital intensity has no significant effect, while the negative result of t_{count} shows a negative relationship between capital intensity and effective tax rate.

The second hypothesis (H_2) claimed that capital intensity partially affects the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange is rejected, H_0 is accepted. This means no matter how much the amount increases or decreases in capital intensity; it will not affect the effective tax rate. Meanwhile, the negative relationship shows that the greater the capital intensity, the lower the effective tax rate. With a high level of capital intensity, the firm's tax payments will decrease because there is a depreciation expense arising from the size of the firm's assets that can be used as a tax deduction. As a result, the firm's tax rate will be lower.

Based on agency theory, agents (managers) are required to manage the company by utilizing their fixed assets to be able to generate profits. The increase in fixed assets will give the company sufficient capital to finance its operations so that it can create high profits. Earning a high profit for the company will increase the tax burden that must be paid to encourage managers to make tax savings through the effective tax rate. However, the difficulty of knowing how much the actual depreciation costs on fixed assets whose economic benefits have been exhausted has made the company only include a portion of the depreciation expense that it should have. This makes it an obstacle to making tax saving through the effective tax rate by the firm's management.

The results of this research align with the research stating that capital intensity has no significant effect on the effective tax rate (Gazali & Damayanti, 2020) (Syamsudin & Suryarini, 2020). However, this study is not aligned with other research which stated that capital intensity has a significant influence on the effective tax rate (Rahmawati, 2021).

The impact of inventory intensity ratio towards effective tax rate.

The t-test results indicate that the third independent variable of this research, namely inventory intensity, partially has no significant effect on the ETR in consumer goods companies listed on Indonesia Stock Exchange. The t_{count} value is lower than the t_{table} value, namely $0.805 < 1.98238$. The

IConEnt

The 4th International Conference on Entrepreneurship

significance value is also higher than 0.05, namely $0.422 > 0.05$. The significance value means that inventory intensity has no significant effect, while the positive result of t_{count} shows a positive relationship between inventory intensity and effective tax rate.

On this basis, the third hypothesis (H_3) claimed that inventory intensity partially has a significant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange is rejected, and H_0 is accepted. This means that no matter how much the amount increases or decreases in inventory intensity, it will not affect the effective tax rate. Meanwhile, the positive relationship shows that the higher the inventory intensity, the higher the effective tax rate. This is because the large inventory will incur additional costs associated with inventory. According to GAAP No. 14 Year 2014, the costs incurred to be removed will lead to reduced profits for the firm. In addition, the policy of the firm's management seeks to emphasize the value of tax rates using policies following existing regulations.

Based on the agency theory, the agency (manager) will try to minimize additional expenses due to a large inventory so as not to reduce profit. On the other hand, managers will maximize additional costs which must be borne to reduce the tax burden. Managers charge additional inventory costs to reduce the company's taxable income.

The results of this research align with the research which stated that inventory intensity has no significant effect on the effective tax rate (Batmomolin, 2018). However, this study is not in line with other research, which stated that inventory intensity significantly influences the effective tax rate (Rahmawati, 2021).

The impact of leverage towards effective tax rate.

The T-test results indicate that the four independent variables of this research, namely leverage, partially have a significant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange. The t_{count} value is higher than the t_{table} value, namely $5.053 > 1.98238$. The significance value is also < 0.05 , namely $0.000 < 0.05$. The significance value means that leverage has a significant effect, while the positive result of t_{count} shows a positive relationship between leverage and the effective tax rate.

The fourth hypothesis (H_4) claimed that leverage partially has a significant effect on the effective tax rate in consumer goods companies listed on Indonesia Stock Exchange is accepted, H_0 is rejected. This means the higher the leverage, the higher the effective tax rate.

Based on agency theory it is explained that the higher the company's Leverage, the better the transfer of prosperity from creditors to company shareholders. Companies that have a larger proportion of debt in their capital structure will have higher agency costs. Therefore, the company with high leverage has higher liabilities to meet the information needs of long-term creditors.

The results of this research align with the research which stated that leverage has a significant effect toward the effective tax rate (Gazali & Damayanti, 2020). However, this study is not aligned with research which stated that leverage has no significant influence on the effective tax rate (Batmomolin, 2018) (Husni & Wahyudi, 2022).

The impact of firm size, capital intensity ratio, inventory intensity ratio, and leverage towards effective tax rate.

The result of the F-test demonstrates that all of the independent variables in this research, such as firm size, capital intensity, inventory intensity, and leverage, simultaneously have a significant effect on the ETR. It is proven that the $f_{\text{count}} > f_{\text{table}}$ value, namely $6.741 > 2.46$. The significance value of the

IConEnt

The 4th International Conference on Entrepreneurship

F-test < 0.05 , namely $0.000 < 0.05$. Therefore, it can be concluded that H_0 is rejected, and H_5 states that firm size, capital intensity, inventory intensity, and leverage simultaneously significantly affect the ETR in consumer goods companies listed on Indonesia Stock Exchange, is accepted.

Additionally, the outcome of the adjusted R^2 shows a value of 0.171 which means the variability in the multiple linear regression model is 17.1%. In other words, the dependent variable of this research, namely the effective tax rate, is affected by the firm size, capital intensity, inventory intensity, and leverage for 17.1%. In contrast, the remaining 82.9% are affected by other predictive factors not examined in this research.

CONCLUSION

The goal of this study is to clarify the relationship between firm size, capital intensity, inventory intensity, and leverage with respect to the ETR for consumer goods companies listed on the IDX for the years 2018 through 2021. Purposive sampling is used in this research, which is conducted quantitatively. As a result, 112 samples have been taken following the outliers, and 49 businesses make up the population. Because agency theory establishes the relationship between the shareholder and taxpayer, the author has chosen this theory as her guide. The government is the principal in this study, while the consumer goods businesses are the agency.

Based on the result, the research shows that firm size, capital intensity has a negative insignificant impact toward the effective tax rate on Consumer Goods companies listed on Indonesia Stock Exchange for 2018-2021. However, inventory intensity ratio has an insignificant positive impact toward effective tax rate on Consumer Goods companies listed on Indonesia Stock Exchange for 2018-2021. Furthermore, leverage has a significant positive impact toward effective tax rate on Consumer Goods companies listed on Indonesia Stock Exchange for 2018-2021. On the other hand, firm size, capital intensity ratio, inventory intensity ratio, and leverage have significant simultaneous impact toward effective tax rate on Consumer Goods companies listed on Indonesia Stock Exchange for 2018-2021.

REFERENCES

- Batmomolin, S. (2018). Analisis leverage, firm size, intensitas aset tetap dan intensitas persediaan terhadap tarif pajak efektif (Pada Perusahaan Kimia Yang Terdaftar Di Bursa Efek Indonesia Tahun 2012-2017). *Jurnal Ilmiah*, 36-42.
- Darsani, P. A., & Sukartha, I. M. (2021). The Effect of Institutional Ownership, Profitability, Leverage and Capital Intensity Ratio on Tax Avoidance. *American Journal of Humanities and Social Sciences Research (AJHSSR)*, 13-22.
- Desshyfa, R. T., & Purwanto, E. (2024). Assessing Financial Performance in Consumer Goods Manufacturing: The Role of Debt to Assets Ratio, Current Ratio, and Inventory Turnover. *Widyakala Journal*, 9-17.
- Gazali, M., & Damayanti, T. (2020). Effective Tax Rate pada Perusahaan Sub Konstruksi Bangunan di Bursa Efek Indonesia. *Prosiding Seminar Nasional Pakar ke 3 Tahun 2020 Buku 2: Sosial dan Humaniora*(ISSN 2615 - 2584), 2.77.1-2.77.6.
- Ghozali, I. (2017). *Model Persamaan Struktural Konsep dan Aplikasi dengan Program Amos 24*, ed.7. Semarang: Badan Penerbit Universitas Diponegoro Semarang.
- Husni, A. N., & Wahyudi, J. (2022). Faktor-faktor yang Mempengaruhi Effective Tax Rate. *Kompak :Jurnal Ilmiah Komputerisasi Akuntansi*, 255–268.
- Kasmir. (2019). *Analisis Laporan Keuangan Edisi Revisi*. Jakarta: Rajawali Pers.

IConEnt

The 4th International Conference on Entrepreneurship

- Rahmawati, V. (2021). Tax Facility Moderates Effect on Inventory and Capital Intensity on Effective Tax Rate. *Jurnal Ilmu dan Riset Akuntansi*(e-ISSN 2460-0585), 1 - 19.
- Sjahril, R. F., Yasa, I. N., & Dewi, G. A. (2020, Agustus 31). nalisis Faktor-Faktor Yang Mempengaruhi Tarif Pajak Efektif Pada Wajib Pajak Badan. *JIMAT (Jurnal Ilmiah Mahasiswa Akuntansi) Universitas Pendidikan Ganesha*, 56-65.
- Sugiyono. (2018). *Metode Penelitian Kuantitatif, Kualitatif dan R&D*. Bandung: Alfabeta.
- Syamsudin, M., & Suryarini, T. (2020). Analisis Pengaruh Intensitas Modal, Intensitas Persediaan, Komisaris Independen dan Kepemilikan Manajerial Terhadap ETR. *Jurnal Penelitian Ekonomi dan Bisnis*, 5(ISSN : 2460 – 4291), 52-65.
- Widati, S., Asiah, N., Kamela, H., & Hidayat, T. A. (2024). Effective Tax Rates: Firm Size, Leverage and Return on Assets. *International Journal of Asian Business and Management (IJABM)*, 131-148.