

THE EFFECT OF CAPITAL INTENSITY, SALES GROWTH, AND LEVERAGE ON TAX AVOIDANCE

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ABSTRACT

This study aims to present empirical evidence regarding the effect of capital intensity, sales growth, and leverage on tax avoidance in consumer and industrial goods sector companies listed on the Indonesia Stock Exchange during the 2017-2022 period. The independent variables in this study include capital intensity, sales growth, and leverage, while the dependent variable is tax avoidance. The purposive sampling technique was used to select the sample, resulting in 32 companies that met the criteria during the six-year observation period. The data used is secondary, and data analysis is performed using multiple linear regression analysis. The results showed that capital intensity has no significant effect on tax avoidance. However, sales growth and leverage proved to have a significant effect on tax avoidance.

Keywords: *Capital Intensity; Sales Growth; Leverage; Tax Avoidance.*

1. Introduction

Taxes are the main source of state revenue used to fulfill the needs of the state in order to improve the welfare of the people. Through tax funds, the government can run various programs designed to increase economic growth, including the development of infrastructure, public assets, and other public facilities, with the main goal of creating the greatest prosperity of the people. According to Law Number 28 of 2007 concerning General Provisions and Tax Procedures article 1 paragraph (1), tax is a taxpayer's contribution to the state that is owed by an individual or entity that is coercive based on the Law, without receiving direct compensation and used for state needs for the greatest prosperity of the people. Taxes play an important role in the Indonesian economy. This is because taxes are the country's main source of income.

Tax avoidance or resistance to taxes are obstacles that occur in tax collection, resulting in reduced state treasury revenues. The aim of tax avoidance is to reduce or minimize the amount of tax that must be paid.

Tax avoidance by taxpayers, especially by business entities, is indeed possible and in some cases does not conflict with the prevailing laws and regulations. This is because tax avoidance is often considered as the utilization of loopholes that exist in tax regulations. The practice of tax avoidance is often related to tax planning, where both use legal methods to reduce or even eliminate tax liabilities. Tax planning is the ability possessed by taxpayers to organize their financial activities in such a way as to minimize the amount of tax to be paid.

Capital Intensity is a form of financial decision determined by company management to increase the company's profitability in the form of fixed assets (noncurrent assets/NCA). According to Dharma and Noviari (2017), ownership of fixed assets can contribute to the reduction of tax payments paid by the company, through the depreciation costs associated with these assets. Companies that make large investments in depreciable Non-Current Assets (NCA) have the opportunity to minimize their tax liabilities. This can be done by utilizing higher

investment tax credits and accelerating capital allowances, which in turn allows the company to report a lower Effective Tax Rate (ETR) (Kasim & Saad, 2019).

Sales growth also affects tax avoidance. This reflects the success of past investments and can be used as a predictor of future growth. Brigham and Houston (as cited in Hidayat, 2018) state that companies with stable sales tend to be safer in obtaining more loans and bear higher fixed costs than companies with unstable sales. Leverage is one of the many financial ratios used to determine the relationship between a company's debt and its equity. The leverage ratio describes the proportion between the debt owned by the company and the ability of equity and assets to cover the debt. The use of debt by a company to finance its operations results in loan interest costs, which can be deducted when calculating taxable income.

Agency theory was first introduced by Jensen and Meckling in 1976. They explained that an agency relationship is a contract in which one or more principals use the services of agents and delegate authority and decision making to them. Jensen and Meckling (1976) also argued that government interests are not always in line with management, often causing conflicts within the company.

Signaling theory can help reduce information asymmetry between companies (agents), owners (principals), and outside parties by producing high-quality financial reports and integrity. To ensure the reliability of financial information, it is important for the company (agent) to obtain validation from an independent third party who can provide an objective opinion on the financial statements (Siregar & Nurmala, 2018). This allows investors to use the information as a guide in assessing the company's future prospects based on management actions.

The findings of Hendrianto et al. (2022) and Sari and Indrawan (2022) show that capital intensity has an influence on tax avoidance. High capital intensity results in large depreciation costs. In accordance with tax regulations, depreciation expense is recognized as a factor that can reduce corporate profits, which means it can also reduce corporate tax liabilities. H1: Capital intensity has an effect on tax avoidance.

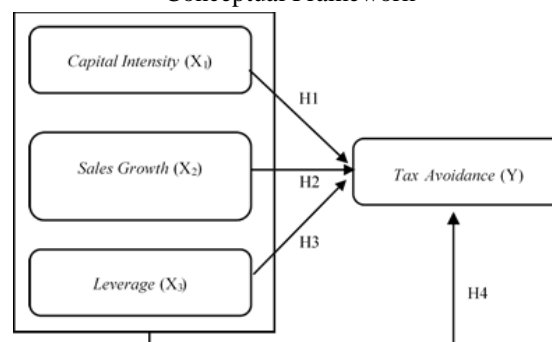
The findings of Oktamawati (2017) and Hidayat (2018) show the effect of sales growth on tax avoidance, a result reinforced by Ziliwu and Ajimat (2021) who also found that sales growth affects tax avoidance. Sales growth can increase the profit earned by the company. However, an increase in sales growth from year to year tends to increase sales operating costs and tax expenses, encouraging companies to increase tax avoidance efforts to maximize profits without being burdened by an increase in income tax burden. H2: Sales growth has an effect on tax avoidance.

Studies conducted by Oktamawati (2017) and Ainniyya et al. (2021) found that leverage has an influence on tax avoidance. These results are in line with the findings of Panjaitan et al. (2022), which state that leverage affects tax avoidance. This is because debt that incurs interest expense can reduce taxable income, in contrast to dividends from retained earnings that cannot reduce profits. Interest expense that can reduce taxable income is interest expense from loans obtained from third parties or creditors who do not have a business relationship with the company. H3: Leverage has an effect on tax avoidance

Research conducted by Hendrianto et al. (2022), Ainniyya et al. (2021), and Sari and Indrawan (2022) shows that capital intensity has an influence on tax avoidance. This means that large investments in fixed assets by companies generate significant depreciation costs, which in turn can reduce the tax burden. H4: Capital intensity, sales growth, and leverage have an influence on tax avoidance.

Based on the expansion of the hypothesis above, the following research model can be used.

Figure 1
Conceptual Framework



2. METHOD

The type of research used in this study is quantitative research, which falls into the category of quantitative research methods. According to Sugiyono (2019), quantitative research aims to identify causal relationships between variables through statistical testing or calculations, which results in evidence of whether the hypothesis is rejected or accepted.

Descriptive statistical analysis, as explained by Sugiyono (2019), is a statistical technique for analyzing data by describing or illustrating the data collected as it is, without aiming to make conclusions that apply generally through generalization. The purpose of descriptive statistical analysis is to describe the data of the dependent variable, which includes the components of cash flow, accounting profit, and dividend policy, using analytical techniques to explain the data in general or general, by calculating the minimum value, maximum value, average, and standard deviation.

The classical assumption test includes normality test, multicollinearity test, heteroscedasticity test, and autocorrelation test. The normality test is carried out to ensure that the variables in the panel regression model have a normal or near normal distribution, because the ideal regression model must have a normal data distribution. To perform the normality test, the EViews program is used. The criterion for determining data normality is to compare the Jarque-Bera (JB) value with the critical value of the Chi Square distribution. Conclusions about the normality of the data are drawn based on the following criteria:

- If the probability value is > 0.05 , then the distribution is normal.
- If the probability value is < 0.05 , then the distribution is not normal.

The multicollinearity test is conducted to determine whether there is a correlation between the independent variables in the regression model. According to Ghazali (2018), a good regression model should not have a correlation between independent variables, meaning that the independent variables must be orthogonal (not correlated with each other). To detect the presence of multicollinearity in the regression model, testing is done with the following criteria:

- If the Variance Inflation Factors (VIF) value is > 10 , then the data has multicollinearity.
- If the Variance Inflation Factors (VIF) value is < 10 , then there is no multicollinearity in the data.

The heteroscedasticity test is conducted to determine whether there is an inequality of residual variance between observations in the regression model. When the residual variance is consistent between observations, the condition is known as homoscedasticity. Conversely, this variance inequality indicates the presence of heteroscedasticity. To draw conclusions from the heteroscedasticity test using the Glejser test, the following guidelines are used:

- If the probability value is < 0.05 , then H_0 is rejected, which means there is a heteroscedasticity problem.
- If the probability value is > 0.05 , H_0 is accepted, which means there is no heteroscedasticity problem.

The autocorrelation test is intended to evaluate whether there is a correlation between observation errors in a period and errors in the previous period ($t-1$) in the regression model. In this study, the Durbin-Watson test was used to detect autocorrelation. A Durbin-Watson statistical value of less than 1 or more than 3 indicates the presence of autocorrelation.

3. RESULTS AND DISCUSSION

Hypothesis testing in this study includes normality test, heteroscedasticity test, and multicollinearity test, all of which show the results meet the criteria, with details can be seen in the attachment. Multiple regression analysis was used for hypothesis testing, processed using the EViews version 9 application.

Table 1

CEM Panel Data Regression Analysis Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	0.244897	0.033645	7.278776	0.0000
X1_CI	-0.017475	0.073580	-0.237499	0.8125
X2_SG	0.075594	0.083476	0.905575	0.3663
X3_LV	0.022669	0.013666	1.658798	0.0988

Based on the table above, a regression equation can be formulated to determine the effect of Capital Intensity, Sales Growth, and Leverage on Tax Avoidance as follows:

$$Y = 0.244897 + -0.017475(X1) + 0.75594(X2) + 0.022669(X3)$$

The Capital Intensity Variable (X1) has a t-statistic value of -1.6790 with a Prob value of 0.0948 > 0.05, so it can be concluded that the Capital Intensity Variable (X1) has no significant effect on the Tax Avoidance Variable (Y). The Sales Growth Variable (X2) has a t-statistic value of -1.5047 with a Prob value of 0.1341 > 0.05, so it can be concluded that the Sales Growth Variable (X2) has no significant effect on the Tax Avoidance Variable (Y). The Leverage Variable (X3) has a t-statistic value of 2.9398 with a Prob value of 0.0037 < 0.05, which indicates that the Leverage Variable (X3) has a significant effect on the Tax Avoidance Variable (Y).

Table 2

CEM Hypothesis Test Results		
R-squared	0.062473	Mean dependent var
Adjusted R-squared	0.047512	S.D. depende
S.E. of regression	0.404883	
F-statistic Prob(Fstatistic)		

Based on table 2, the Adjusted R-squared value is 0.047512, indicating that the independent variables (Capital Intensity, Sales Growth, and Leverage) together provide an explanation of 4% to the dependent variable (Tax Avoidance). The remaining 96% is explained by other variables outside the model, such as Effective Tax Rate and Debt to Equity Ratio. The Prob. (F-statistic) value in table 4.14 is 0.0068 < 0.05, indicating that the Capital Intensity (X1), Sales Growth (X2), and Leverage (X3) variables simultaneously have a significant effect on the Tax Avoidance (Y) variable.

The effect of Capital Intensity, Sales Growth, and Leverage on Tax Avoidance was analyzed using EViews 9. The analysis results show that the Prob. (F-statistic) value is 0.0068, which is smaller than the significance threshold of 0.05. This indicates that Capital Intensity, Sales Growth, and Leverage simultaneously have a significant influence on Tax Avoidance in companies in the Consumer Goods Industry sector.

The effect of Capital Intensity on Tax Avoidance, based on the analysis of Capital Intensity, obtained a t-statistic value of -1.6790 and a Prob. value of 0.0948 (>0.05), which indicates that Capital Intensity has no significant effect on Tax Avoidance, so the first hypothesis (H1) is rejected. In the context of Agency Theory, the company is considered as an agent and the government as the principal who sets the law. This means that the company must follow any new regulations made by the principal, including rules related to tax payments. According to Signal Theory, this theory helps companies (agents), owners (principals), and external parties reduce information asymmetry by providing quality financial reports and integrity. This study gets support from the results of research by Dharma and Noviri (2017) which found that Capital Intensity has a positive effect on Tax Avoidance, indicating that the higher the intensity of fixed assets, the higher the practice of tax avoidance. The same thing is also found in the research of Sari and Indrawan (2022), which states that Capital Intensity has a positive effect on Tax Avoidance.

The effect of Sales Growth on Tax Avoidance, from testing Sales Growth obtained a t-statistic value of -1.5047 and a Prob. value of 0.1341 (>0.05), which indicates that Sales Growth has no significant effect on Tax Avoidance, so the second hypothesis (H2) is rejected. Agency Theory is also used to evaluate the results of decisions that have been taken with the aim of facilitating the allocation of results between principals and agents based on employment contracts, known as the performance evaluation function. This research gets support from the results of Dewinta and Setiawan (2016), which found that Sales Growth has a positive effect on Tax Avoidance. This means that the longer a company operates, its tax avoidance activities tend to increase. The reason is that companies that have been operating longer have more expertise and experience in managing finances, especially in terms of taxation. However, the findings of Hendrianto et al. (2022) show that Sales Growth has a positive influence on Tax Avoidance. This means that the greater the sales growth, the tax avoidance tends to decrease.

The effect of Leverage on Tax Avoidance, from the Leverage analysis, it is found that the t-statistic value is 2.9398 and the Prob. value is 0.0037 (<0.05), which indicates that Leverage has a significant effect on Tax Avoidance, so the third hypothesis (H3) is accepted. Agency Theory outlines that the higher the leverage of a

company, the more effective the transfer of wealth from creditors to shareholders. Companies with a greater proportion of debt in their capital structure tend to have higher agency costs. However, this study found differences with the results of Hidayat (2018), which states that Leverage has no significant effect on Tax Avoidance, indicating that the company's debt taking is not directly related to tax avoidance policies. The same thing was also revealed by Putri and Bella (2017), who found that Leverage has no effect on Tax Avoidance.

4. CONCLUSION

The results show that the independent variables, namely Capital Intensity, Sales Growth, and Leverage, explain 4% of the variation in the dependent variable Tax Avoidance. Meanwhile, the other 96% of the variation is explained by factors outside this model, including Effective Tax Rate, Capital Intensity, Sales Growth, and Debt to Equity Ratio.

This study has several limitations that may affect the results, including: (1) The use of secondary data which potentially contains numerical entry errors. (2) Limited time, energy, and researcher capabilities. (3) The research sample is limited to consumer goods and industrial sector companies. (4) The variables determined are limited to only three independent variables: Capital Intensity, Sales Growth, and Leverage.

Based on this analysis, the following are suggestions for future research: The addition of independent variables such as Liquidity, Earnings Management, or Good Corporate Governance (GCG) Mechanisms is expected to increase understanding. In addition, expanding the research sample to various types of industries and extending the research period is expected to make the research results more generalizable.

REFERENCES

- Ainniyya, S. M., Sumiati, A., & Susanti, S. (2021). Pengaruh Karakter Eksekutif, Pertumbuhan Penjualan, Dan Ukuran Perusahaan Terhadap Tax Avoidance. *Owner: Riset & Jurnal Akuntansi Doi* 10.47065/Ekuitas.V3i2.1106, 525-535.
- Dewinta, I. A., & Setiawan, P. E. (2016). Pengaruh Ukuran Perusahaan, Umur Perusahaan, Profitabilitas, Leverage, Dan Pertumbuhan Penjualan Terhadap Tax Avoidance. *Issn: 2302-8556 E-Jurnal Akuntansi Universitas Udayana Vol.14.3.*, 1608-1613.
- Dharma, N. B., & Noviari, N. (2017). Pengaruh Corporate Social Responsibility dan Capital Intensity Terhadap Tax Avoidance. *Issn: 2302-8556 E-Jurnal Akuntansi Universitas Udayana Vol.18.1.*, 538-556.
- Ghozali, I. (2018). Aplikasi Analisis Multivariate Dengan Program IBM SPSS 25. Hendrianto, A. J., Suropto, Effriyanti, & Hidayati, W. N. (2022). Pengaruh Sales Growth, Capital Intensity, Kompensasi Eksekutif, Dan Kepemilikan Manajerial Terhadap Penghindaran Pajak. *Owner: Riset & Jurnal Akuntansi E –Issn : 2548-9224 | P–Issn : 2548- 7507 Volume 6Nomor3Doi: <https://doi.org/10.33395/owner.v6i3.1054>, 2548-7507.*
- Hidayat, W. W. (2018). Pengaruh Profitabilitas, Leverage Dan Pertumbuhan Penjualan Terhadap Penghindaran Pajak: Studi Kasus Perusahaan Manufaktur Di Indonesia. *Jurnal Riset Manajemen Dan Bisnis (JRMB) Fakultas Ekonomi Uniat Vol.3, No.1 P-Issn 2527– 7502 E-Issn 2581-2165.*
- Jensen, M., & Meckling, W. (2000). Managerial Behavior, Agency Costs And Ownership Structure.
- Kasim, F. M., & Saad, N. (2019). Determinants Of Corporate Tax Avoidance Strategies Among Multinational Corporations In Malaysia. *International Journal Of Research In Business Studies And Management, Volume 6.*,
- Oktamawati, M. (2017). Pengaruh Karakter Eksekutif, Komite Audit, Ukuran Perusahaan, Leverage, Pertumbuhan Penjualan, Dan Profitabilitas Terhadap Tax Avoidance. *Jurnal Akuntansi Bisnis, Vol. 15, No. 1 Issn 1412-775x, 2541-5204.*
- Panjaitan, A. T., Assalam, A. G., & Wardoyo, D. U. (2022). Pengaruh Capital Intensity, Leverage Dan Komite Audit Terhadap Tax Avoidance (Studi Pada Perusahaan Sektor Barang Konsumsi Yang Terdaftar Di Bursa Efek Indonesia Periode Tahun 2017-2021). *Jurnal Ilmiah Mea (Manajemen, Ekonomi, Dan Akuntansi) Vol. 6 No. 3, 494-512.*
- Putri, V. R., & Bella, I. P. (2017). *Jurnal Manajemen Dayasaing* 19.1. Pengaruh Leverage, Profitability, Ukuran Perusahaan Dan Proporsi Kepemilikan Institusional Terhadap Tax Avoidance, 1-11.

- Sari, M. R., & Indrawan, I. A. (2022). Pengaruh Kepemilikan Instutional, Capital Intensity Dan Inventory Intensity Terhadap Tax Avoidance. Owner: Riset & Jurnal Akuntansi Issn 2548- 750 10.33395/Owner.V6i4.1092, 4037-4049.
- Siregar, H., & Nurmala, P. (2018). Pengaruh Ukuran Perusahaan Dan Penerimaan Opini Going Concern Terhadap Harga Saham.
- Sugiyono. (2019). Metode Penelitian Kuantitatif, Kualitatif Dan R&D.
- Ziliwu, L., & Ajimat. (2021). Pengaruh Umur Perusahaan Dan Sales Growth Terhadap Tax Avoidance. Jurnal Disrupsi Bisnis Vol 4, No 5 Issn 2621-797x, 426.