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*Original Article*

# The Effect of Sales Growth, Capital Intensity on Income Tax Expense with Managerial Abilities as a Moderating Variable

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***Abstract:*** *The goal of this study was to ascertain the moderating role that managerial competence played in the relationship between sales growth, capital intensity, and income tax expense. Manufacturing businesses listed on the Indonesia Stock Exchange between 2017 and 2020 made up the study's sample. Just 83 manufacturing businesses listed on the Indonesia Stock Exchange matched the selection criteria, therefore 332 data were available for reference. Sampling was done using a purposive sampling strategy. Sample. Eviews version 10 was the data analysis method employed in this investigation. The results of this study were sales growth and capital intensity did not affect income tax expense, the relationship between sales growth and capital intensity on income tax expense could not be affected by managerial ability due to managerial ability is not a major factor in increasing the income tax burden on companies. Based on this research, it would be nice to issue a tax policy for sales growth and company capital. When sales increase, the income tax burden will definitely increase as well.*

***Keywords:*** Sales growth, *capital intensity, managerial abilities, income tax expenses.*

## I. INTRODUCTION

Taxes play a significant part in the functioning of the state and are one of the major sources of governmental revenue. Tax funds are obtained from the public and are used for the public interest and public welfare in accordance with their designation. In this case, the state is the party that carries out the supervisory and legislative functions in the field of taxation. The role of taxes in Indonesia is very dominant and reached more than 75% annually. Indonesia tax revenue in 2017 amounted to Rp. 1,343,529,800 (in billions) while in 2018 it grew by Rp. 1,518,789.80 (in billions) then in 2019 grew by Rp. 1,546,141.90 (in billions) and in 2020 there will be a decrease to Rp. 1,404,507.50 (in billions). When viewed from the non-tax revenue sector from 2017 it was Rp. 311,216.30 (in billions) and in 2018 grew by Rp. 409,320.20 (in billions) whereas in 2019 there was a decrease of Rp. 408,994.30 (in billions) while in 2020 there was a sharp decline to Rp. 294,141 (in billions). The information above indicates that taxes continue to be the largest single source of governmental income. This further explains that the Indonesian government (particularly the Directorate General of Taxes) needs to step up actions to optimize its tax revenues for the sake of accelerating national development. The table above also provides information that the source of state revenue from tax revenues, especially income tax, which is part of the state revenue component, continues to increase. So in this study, the factors that influence income tax expense will be examined.

There are several factors that affect income tax expenses, including sales growth and capital intensity. In addition to these two factors, another factor that also affects income tax expense is managerial ability (Z. J. King et al., 2019) This is the same as the research conducted by (Z. King et al., 2020). Companies that have competent management with good managerial skills will be able to make policies and manage resources effectively and efficiently (Idowu & Oyeshola, 2016) This study is identical to that carried out by (Robinson et al., 2017). Effective management will influence the company's income tax payment burden (Murdoch et al., 2015).

Selling is the science and art of using personal influence to persuade others to want to purchase the goods or services being offered. Hence, a sale is the act of buying something (goods or services) from one party and giving it to another in exchange for payment. Sales growth can be proxied by changes in the company's total sales. So that sales growth has an important role for companies in predicting how much profit will be obtained (Khomsiyah et al., 2021). This study is identical to that carried out by (Robinson et al., 2016). Credit sales, according to Darush Yazdanfar and Peter Öhman (2004), are an agreement between two parties to postpone payment and permit buyers to buy items on credit (instead of paying cash on delivery), paying the supplier later. A credit sale is viewed by the seller as an investment in the current assets in the balance sheet's accounts receivable account. The availability of credit sales also has an impact on sales growth due to the simplicity of the available payment options.

The bigger a company's sales volume, according to Dewinta & Setiawan (2016), means that the company's sales growth is accelerating. Sales growth is a metric that can demonstrate how a firm's sales level changes over time in order to enable the company to further expand its operational capacity, which is shown in the prior period's investment performance and can be used to forecast future growth (Zhang et al., 2022). Financially, the growth rate can be determined and is based on the company's financial capability which is directly related to the income tax expense (Purwanti & Sugiyarti, 2017). Research conducted by Hasan, R., Mitra, D., & Sundaram, A. (2013) states that manufacturing companies in India use a higher capital intensity than predicted by the supporting factors, namely the quality of business-related institutions and take more into account the magnitude of the intensity actual capital used. According to Mulyani et al., (2020) capital intensity can be described as the amount of capital needed to earn income for a company. In addition, capital intensity is also a capital ratio that gives an idea of how much capital is needed by a company to generate income, namely the capital intensity ratio. According to Prawati & Hutagalung (2020), businesses choose to invest in fixed assets as a way to lower their tax obligations. Depreciation expenditures derived from fixed assets can be used as a deduction from taxable income to lessen the tax burden placed on the business.

Managerial ability plays an important role in the quality of financial reportingin banks, and that capable bank managers are less likely to opportunistically manage earnings (García-Meca & García-S?anchez, 2018). In the process of making financial decisions, capital is an important resource and basically, capital can be divided into equity capital or non-equity capital (Arasteh et al., 2013). Sales growth reflects the success of investments in the past. Sales growth can predict the amount of profit in the future (Nurlis et al., 2022), (Muti'ah et al., 2021).

In this way, the corporation will be able to meet its goals of increasing revenue and lowering tax obligations. The corporation incurs a higher depreciation expense the more fixed assets it owns. A higher depreciation expense will result in a lower taxable income amount (Hidayat & Fitria, 2018). The ratio of capital intensity, which is calculated by dividing the total fixed assets of the company by the total assets owned by the company, is used to estimate capital intensity.

According to research by Nurfauzi (2018), a firm's managerial ability has an impact on corporate tax avoidance related to the tax burden of the company. This demonstrates how managerial skill affects tax evasion in the organisation. In contrast, sales growth has little impact on tax evasion, according to study by Prawati and Hutagalung (2020). Capital intensity and executive character, on the other hand, have a considerable impact. According to research by Claudia and Mulyani (2020), capital intensity can attenuate the relationship between business strategy and tax evasion, while business strategy can positively influence tax avoidance.

The goal of this study was to ascertain how managerial skill affected the impact of sales growth and capital intensity on income tax expense. Data from financial reports are used in this study as a testing tool.

## II. MATERIALS AND METHODS

Panel data and a quantitative approach are used in this study. From 2017 to 2020, the population is made up of manufactured businesses registered on the Indonesian Stock Exchange. The sample selection use purposive sampling based on the following criteria: (1) companies publishes audited financial statements as of December 31 from 2017—2020; (2) companies that IPO in 2017—2020; (3) companies did not have complete information as needed in this research; (4) companies have losses before tax or after tax during 2017—2020. For data panel regression, the classic assumption tests used are normality, autocorrelation, heteroscedasticity and multicollinearity tests. The software used in data analysis is Eviews 10 version. The regression equation of this main model are as follows:

$$Y = \alpha + \beta 1X1 + \beta 2X2 + e \ldots\ldots \text{(i)}$$

$$Y = \alpha + \beta 1X1 + \beta 2X2 + \beta 3X3 + \beta 4X1{*}X3 + \beta 5X2{*}X3 + e \ldots\ldots \text{(ii)}$$

Description:

Y : income tax expense
X1 : sales growth
X2 : capital intensity
X3 : managerial abilities
α : constanta
β : coefficient
e : error term

## III. RESULTS AND DISCUSSION

The standard assumption test, which consists of a normality test, a heteroscedasticity test, a multicollinearity test, and an autocorrelation test, is the first step in statistical testing. It verifies that all independent and dependent variables pass this test. The following are the outcomes of testing all hypotheses, which successfully tested the traditional assumptions.

Multiple linear regression analysis was used to determine the effect of the independent variables on the dependent variable, namely between the independent variables in this study on income tax expense (Y). An equation form is employed to make it simpler to read the outcomes and understand the regression. The model or equation contains coefficients and constants for regression that were determined by the outcomes of data processing with the Eviews 10 application and then modified to the regression equation. The test for multiple linear regression yielded the following findings.

The income tax expense is the dependant variable in this study, and the testing process is conducted on the independent variable on the dependant variable. According to the study's findings, the following partial significance, t value, and regression coefficient were found:

**Table 2. Regression Test Result (Without Moderating Variables)**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 15.73557 | 0.329452 | 47.76281 | 0.0000 |
| X1 | -0.000692 | 0.001939 | -0.357061 | 0.7214 |
| X2 | 2.05E-06 | 9.77E-07 | 2.099601 | 0.0371 |
| R-squared | 0.023728 | | Mean dependent var | 15.79539 |
| Adjusted R-squared | 0.013397 | | S.D. dependent var | 4.328892 |
| S.E. of regression | 4.299797 | | Akaike info criterion | 5.770515 |
| Sum squared resid | 3494.281 | | Schwarz criterion | 5.821413 |
| Log likelihood | -550.9694 | | Hannan-Quinn criter. | 5.791129 |
| F-statistic | 2.296762 | | Durbin-Watson stat | 0.909671 |
| Prob(F-statistic) | 0.103385 | | | |

*Source: Primary data processed by Eviews 10 (2022)*

**Table 3. Regression Test Result (With Moderating Variables)**

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 4.385654 | 0.415792 | 10.54770 | 0.0000 |
| X1 | -0.047953 | 0.039620 | -1.210343 | 0.2282 |
| X2 | 6.82E-05 | 0.000165 | 0.413512 | 0.6799 |
| X3 | 0.549381 | 0.375376 | 1.463549 | 0.1456 |
| X1_X3 | -2.537194 | 1.193126 | -2.126511 | 0.0352 |
| X2_X3 | 0.017304 | 0.136948 | 0.126353 | 0.8996 |
| Effects Specification | | | | |
| Cross-section fixed (dummy variables) | | | | |
| R-squared Mean | 0.602924 | | dependent var | 3.933524 |
| Adjusted R-squared | 0.454377 | | S.D. dependent var | 0.569619 |
| S.E. of regression | 0.420757 | | Akaike info criterion | 1.335538 |
| Sum squared resid | 24.60804 | | Schwarz criterion | 2.234743 |
| Log likelihood | -75.21168 | | Hannan-Quinn criter. | 1.699723 |
| F-statistic | 4.058820 | | Durbin-Watson stat | 2.022585 |
| Prob(F-statistic) | 0.000000 | | | |

*Source: Primary data processed by Eviews 10 (2022)*

### *A) The Effect of Sales Growth on Income Tax Expense*

Based on the results of data processing shows that the significance of 0.2282>0.050, thus H1 is rejected. The high level of company sales growth does not affect the amount of income tax payable. This happens because along with increasing sales growth, it shows that good management performance so that company profits increase and company has adequate funds and is able to pay the income tax expense payable in accordance with actual conditions. According to studies by Sawitri (2022) and Susilowati (2020), increasing sales have little impact on tax evasion, which is inversely related to income tax expense. According to agency theory, management must explain to business owners that increased sales growth shows that management is capable of making the best use of the company's resources and ensuring long-term business continuity. As a result, the company must abide by tax laws by paying income tax expenses.

### *B) The Effect of Capital Intensity on Income Tax Expense*

Based on the results of data processing shows that the significance value is 0.6799>0.050, thus H2 is rejected. This shows that the variable capital intensity has no effect on income tax expense. The findings of this study are consistent with those of studies by Yanti, et al. (2021) and Christina, et al. (2022) that found no evidence of a significant relationship between capital intensity and income tax burden.

According to agency theory, management establishes objectives for creating long-term business operations and has sufficient knowledge of the fixed assets the organisation has. Depreciation costs for companies that invest in fixed assets can be written off against corporate earnings to lower income tax payments, however from the perspective of Indonesian tax laws, the fixed assets of the company have different economic lifetimes. Companies are required to apply the depreciation method based on tax regulations to calculate the depreciation expense of their dixed assets so that companies cannot use the high depreciation expense to reduce the income tax expense paid. Based in this, management policy for investment in fixed assets is prioritized so that production capacity increases and the expansion of the marketing area so that it will increase company profits according to the wishes of the company owner.

### *C) The Effect of Sales Growth on Income Tax Expense with Managerial Abiities as Moderating*

Management skill affects company tax aggression in terms of the amount of income tax burden paid, in accordance with Bill B. Francis, Xian Sun, Chia-Hsiang Weng, and Qiang Wu (2022). While making tax-aggressive decisions, managers must consider the advantages and disadvantages. In addition, managers with higher managerial skill than those with weaker managing ability see tax aggressiveness differently. Based on the results of data processing shows that the significance value is 0.0352<0.050, thus the hypothesis is accpted. This shows that the sales growth variable has effect on income tax expense with managerial abilities as moderating. Based on the agency theory states that business pwners give authority t managers to manage the company. Managers will develop sales strategies and policies that are not only based on increasing sales volume from year to year but also increasing cash received from these sales. This suggests that as sales increase, more cash will be available for the company to pay for operations and tax liabilities, such as income tax expense.

### *D) The Effect of Capital Intensity on Income Tax Expense with Managerial Abilities as Moderating*

Based on the results of data processing shows that the significance value is 0.8996 >0.05, thus this hypothesis is rejected. This shows that the variable capital intensity has not significant effect on income tax expense. Haijing Liu and Hyun-Ah Lee (2019) state that companies take advantage of loopholes in tax regulations for tax evasion, including by carrying out corporate social responsibility (CSR) activities. Bill B. Francis, Xian Sun, Chia-Hsiang Weng, Qiang Wu (2022) states that managerial ability is proven to increase company value but tax aggressiveness in terms of income tax expense is not a strategy to increase company value because high managerial ability can increase company value through its operational activities. The findings of this analysis are consistent with those of Ardiana's (2016) study, which found no relationship between capital intensity and income tax burden. This is because management's actions to increase company total fixed assets are solely not to increase the depreciation expense of fixed assets and reduce the payment of income tax expenses but are carried out with the aim of running the company's operations through increasing capacity and the amount of production maximally and efficiently. Based on agency theory, the business owner (principal) gives trust to management (agent) to safeguard company assets and manage company resources with the aim of increasing profits and business operational effectiveness.

Mohammadreza Hoseini and Mehdi Safari Gerayli, Hasan Valiyan (2019), based on agency theory states that business owners focus more on the wealth and interests of the company they own by taking action to supervise business operational activities so as to avoid tax evasion. Competent managers will take into account the fact that the extent of fixed asset ownership has no bearing on the company's potential to reduce income tax payments. This will also boost business owners' confidence in management's performance since they will know that they are making the best use of the resources available to them while still adhering to Indonesian tax laws.

## IV. CONCLUSION

Sales growth has no discernible impact on income tax burden, according to the findings of the research and conversations that have been conducted. Income tax expense is not significantly impacted by capital intensity. However, capital intensity has no discernible impact on income tax expense with managerial qualities as a moderating factor. Sales growth has a large impact on income tax expense.

The researcher makes a number of recommendations based on the debate and findings that are anticipated to assist investors, firm management, and future researchers in boosting understanding and interest in income tax expenses. The researcher's recommendations are based on the following study findings: (a) For investor that investors remain in investing and consider that company sales growth and capital intensity focused on the company's goals for business development not for reduce income tax espense, (b) For company management to still have maintaining financial condition of the company and continue to improve internal control, (c) For further research, it is expected to be able to add samples which are not only manufactured companies and add other independent variable like company size, net profit margin ratio or temporary tax defferences.

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