# The Role of Leverage as a Mediator of The Influence of Executive Character, Capital Intensity, and Sales Growth on Tax Avoidance

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**Abstract.** The purpose of this research is to examine the role of leverage as a moderator of the influence of executive character, capital intensity, and sales growth on tax avoidance in companies listed on the Indonesia Stock Exchange in the Basic And Chemical Industries sub-sector from 2018 to 2021. Purposive sampling was used to gather 22 companies that met the sampling requirements from 95 manufacturing companies listed on the Indonesia Stock Exchange in the basic and chemical industry sub-sectors. In this work, panel data regression analysis and the Sobel test were utilized to collect data.The findings revealed that (1) leverage is unable to mediate the influence of executive personality on tax avoidance, (2) leverage is unable to mediate the influence of capital intensity on tax avoidance, and (3) leverage is unable to mediate the influence of sales growth on tax avoidance.

**Keywords:** Leverage, Executive Character, Capital Intensity, Sales Growth, Tax Avoidance.

## 1. Introduction

In Indonesia, taxes are the largest state revenue. To ensure that the pace of expansion and the implementation of national development operate smoothly for the benefit of the nation, participation from every taxpayer is required. Sources of tax revenue in the last five years the proportion of realized tax revenues above 75% [1] . This shows that tax revenue has a higher number than other sources of income. Therefore, the large proportion of tax revenue must be in line with the government's realization in making optimal tax collections considering that the source of tax revenue is the main focus of state revenue.

Currently, many companies in Indonesia are experiencing a financial crisis, especially companies in the industrial and chemical sectors. The company will be obligated to repay debt in the future as a result of the policy of using the company's debt to pay operating expenses. When the debts are due and the company does not have the money to pay them, the creditor may seize the company's assets in order to make up the difference between the amount owed and the value of the confiscated assets. This is the factor that leverages the risk for the company if the calculation is not mature.

Tax avoidance is indeed one of the solutions that companies in Indonesia take to improve efficiency, but this action will degrade the company's image because the company will be considered negligent in fulfilling its obligations to the state[2]. Therefore, the tendency for tax

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evasion to occur must be reduced so that the image and reputation of the company can be maintained.

Executive leaders in a corporation might be either risk-takers or risk-averse in the course of their tasks. One of the executive personalities who dares to take risks is a risk-taker. A risk-averse executive is one who is reluctant to take chances. Even though the risks taken are pretty large, executive characters that take chances will do anything to maximize their profits, making them more bold risk-takers overall.[3].

*Capital Intensity* is often associated with the amount of company capital in the form of fixed assets and inventories owned by the company. A company's tax burden may be impacted by how many fixed assets it owns. The depreciation expense increases with the amount of intensity of fixed assets. Tax payments will be impacted by depreciation costs associated with fixed asset ownership. This is so that the depreciation expense can be deducted from taxes. [4]. Companies that have large investments in fixed assets will pay lower taxes because companies benefit from depreciation attached to fixed assets which can reduce a company's tax burden.

The next factor influencing the practice of tax avoidance is Sales Growth. Sales Growth demonstrates how sales levels change from year to year. Increased growth gives the organization the ability to expand its operational capacity. On the other hand, if the company's growth declines, it will face obstacles in increasing its operating capacity. According to research, higher sales transactions will increase the amount of profit earned by the company, this can also result in increased taxable income so that the tax debt that must be paid becomes greater[5].

## 2. Literature Review

### 2.1. Agency Theory

Agency theory assumes that differences in interests between the principal and the agent can cause conflicts and problems where company managers tend to fulfill their personal goals. The owner of the company wants the manager to manage the company to maximize its prosperity without any problems that will arise, but the manager does not always act purely like that. Managers also have another interest, namely getting a good performance appraisal from the principal if the prosperity is met. The provision of compensation when managers have good performance results is the main motivation in fulfilling the prosperity of the principal. This can be related to tax avoidance behavior, namely in achieving the manager's desire to maximize profits by making decisions to carry out tax avoidance strategies [6].

### 2.2. Signaling Theory

Signal theory discusses how businesses convey or present information to third parties or other information consumers about their operations and financial statements. The existence of information asymmetry between the company and its external stakeholders motivates the significance of communicating company information to them[7]. Companies must make all internal information, including financial and non-financial information, available to the public in order to eliminate information asymmetry with third parties. [8].

### 2.3. Tax Avoidance

The term "tax avoidance," or simply "tax avoidance," refers to a strategy used to lower one's tax liability by exploiting loopholes in a nation's tax laws. Conceptually speaking, the tax avoidance technique is legitimate because it does not contravene tax laws.

By complying by the law, tax avoidance aims to lessen the burden of paying taxes. Because it does not violate tax laws, tax avoidance is an effective method and tactic that is used legally and safely for taxpayers.[9].

### 2.4. Executive Characteristics

"A leader may have a risk taker or risk averse character which is reflected in the size of the company's risk. The higher the risk of a company, the more executives tend to be risk-takers. Conversely, the lower the risk of a company, the executives tend to be risk averse" [10].Based on this explanation, the following hypothesis is proposed;

$H_1$ : Excecutive Characteristics has positive influence on Leverage
$H_5$ : Excecutive Characteristics has positive influence on Tax Avoidance

### 2.5. Capital Intensity

The capital intensity of a corporation is the proportion of fixed assets to total fixed assets possessed by the company. With an increase in the company's fixed assets, productivity will rise, and earnings will rise as well. [11].Based on this explanation, the following hypothesis is proposed;

$H_2$ : Capital Intensity has positive influence on Leverage
$H_6$ : Capital Intensity has positive influence on Tax Avoidance

### 2.6. Sales Growth

*Sales Growth* is growth or increase in sales within a predetermined period. This is a parameter to measure how far and how well the sales/sales team is performing, and also an indicator for the company in determining what business strategy to implement [12].Based on this explanation, the following hypothesis is proposed;

$H_3$ : Sales Growth has positive influence on Leverage
$H_7$ : Sales Growth has positive influence on Tax Avoidance

### 2.7. Leverage

The utilization of assets and sources of cash by the company in which the company must incur fixed costs or fixed expenses is referred to as the leverage ratio.[13].Based on this explanation, the following hypothesis is proposed;

$H_4$ : Leverage has positive influence on Tax Avoidance

## 3. Research Method

### 3.1. Research Approach

The research approach used in this study is quantitative research because the meaning of each variable and the relationship between variables is based on a quantitative measurement scale. This research is a causality design based on the features of the problem researched by the author, which is a type of research with the characteristics of the problem in the form of a causal link between two or more variables. The purpose of this study is to examine the impact of the independent factors, namely Executive Character, Capital Intensity, and Sales Growth, on the dependent variable, namely Tax Avoidance (ETR), using Leverage as a mediator. For

data processing, researchers used Microsoft Excel and Eviews 9.0 programs to perform significant tests of panel data regression analysis.

### 3.2. Measurement of Variable

The dependent variable is one that is influenced or results from the presence of an independent variable. Tax Avoidance is the dependent variable employed. Tax avoidance is one type of effort made by a party, in this example the taxpayer, to lower the amount of tax payable by exploiting tax loopholes [14]. The Cash Effective Tax Rate (CETR) is used to calculate this variable since it can reflect the amount of income tax paid by the corporation during that time.

The corporation must use corporate risk to determine the executive's character. Corporate risk indicates earnings variances or standard deviations, whether the deviation is less than intended or more than expected; the more the earnings deviation, the greater the risk of the current company. According to Paligorova (2010), the standard deviation of EBITDA (Earning Before Income Tax, Depreciation, and Amortization) divided by the total assets of the company is used to determine the company's risk.

The capital intensity or capital intensity is the proportion of fixed asset ownership compared to all assets owned by the company. The measurement of capital intensity is calculated using the ratio of fixed assets to the number of assets owned [15].

Sales growth is an indicator used to measure sales performance to increase revenue over a predetermined period.

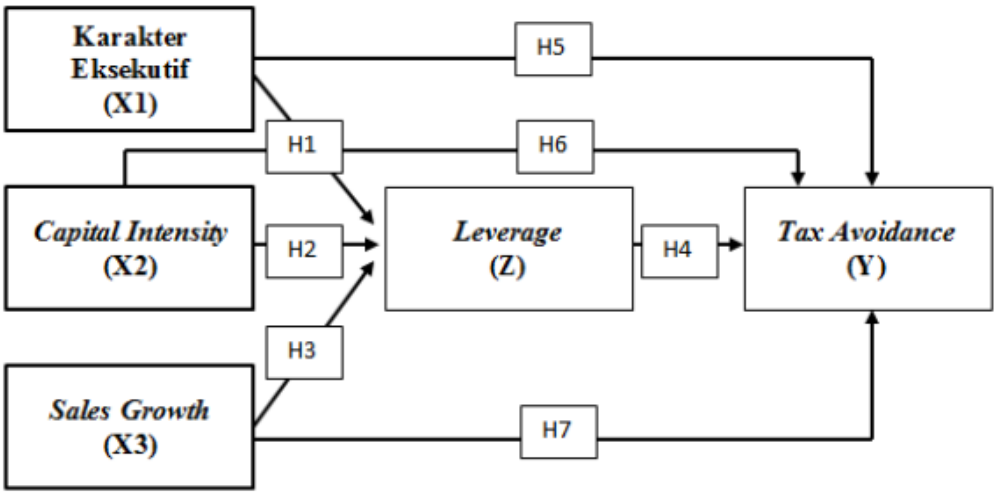


**Figure 1** Research Model

## 4. Results and Discussion

The Random Effect Model is the Panel Data regression model utilized in the hypothesis and panel data regression equation (REM). If the Random Effect Model (REM) is better appropriate for the panel data regression equation, there is no need to evaluate the classical assumption because the Random Effect Model (REM) uses the General Least Square (GLS) method in its estimate technique.

It reveals that the F-statistic value is 4.688220, whereas the F-Table value is 2.713227 with a threshold of 5%, df1 (k-1) = 3 and df2 (nk) = 84. Thus, the F-statistic 4.688220 > F-Table 2.713227 and the probability value (F-statistic) of 0.0044670.05 indicate that the independent variables in this study, namely Executive Character, Capital Intensity, and Sales Growth, have a significant effect on the intervening variable, namely Leverage, in basic and chemical industrial sector companies from 2018 to 2021.

**Table 1** t test

Dependent Variable: Y
Method: Panel Least Squares
Date: 08/30/22 Time: 22:50
Sample: 2018 2021
Periods included: 4
Cross-sections included: 22
Total panel (balanced) observations: 88

| Variable | Coefficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| C | 0.239974 | 0.061214 | 3.920234 | 0.0002 |
| X1 | 0.195355 | 0.137529 | 1.420461 | 0.1592 |
| X2 | -0.182765 | 0.080879 | -2.259743 | 0.0265 |
| X3 | -0.248233 | 0.084232 | -2.947016 | 0.0042 |
| Z | 0.200156 | 0.083481 | 2.397632 | 0.0187 |

Is known that t- statistic Character Executive -2.727873 > t- Table 1.98861 and the value of Prob. 0.0078 < 0.05. This thing proves that the more height moderate risk _ borne company precisely will become a signal for executives who have risk taker character to get weigh return decision in taking policy debt. Policy debt alone has a burden still a must paid every period fall down the tempo. Fixed load precisely will increase the risk that must be borne by the company in the future. According to (Brigham & Houston, 2011) the increased use of debt can increase the potential risk of bankruptcy. This is a concern over the risks that will be faced by the company if the company fails to pay when the company's performance is in bad condition and then the company ends up in bankruptcy.

It is known that the t-statistic of *Capital Intensity* -0.952230 < t-Table 1.98861 and the value of Prob. 0.3437 > 0.05. These results indicate that the higher the use of *capital intensity policies* in the company, the higher the use of *leverage policies* in the company. According to *the pecking order theory* (Myers, 1984) which states that companies prefer internal funding to external funding, however, the second option is when using debt options, companies prefer low-risk debt to high-risk debt.

It is known that the t-statistic of Sales Growth is 2.173102 > t-Table 1.98861 and the value of Prob. 0.0326 < 0.05. These results indicate that a higher company's sales growth rate will affect an increase in leverage. This is because the sales growth value of the manufacturing company in the research period fluctuated so it became a signal of the good condition of the company. Based on data from the results of sales growth measurements during the 2018-2021 research year on 22 basic and chemical industry companies that were sampled in this study, it shows that every year the sample companies experience increased sales growth, sometimes it can increase rapidly, and sometimes it decreases drastically.

It is known that the t-statistic Leverage is 2.397632 > t-Table 1.98896 and the value of Prob. 0.187 < 0.05. These results indicate that the higher leverage has an effect on CETR which is a proxy for tax avoidance. This explains that the greater leverage will be followed by an increase in interest expense which can then reduce the taxes that must be paid. Then the company will consider the use of debt and company risk to reduce the number of tax burdens that will later be paid.

It is known that the t-statistic of Executive Character 1.420461 < t-Table 1.98896 and the value of Prob. 0.1592 > 0.05. These results prove that the executive character does not affect the tax avoidance carried out by the company. Low (2006) states that executives with a risk-averse character tend to dislike risk so in making decisions they always choose the lower risk. This character usually has an older age, has held a position for a long time, and is dependent on the company so he prioritizes security over profits which has a high risk for the company.

It is known that the t-statistic of Capital Intensity is -2.259743 > t-Table 1.98896 and the value of Prob. 0.0265 < 0.05. These results indicate that capital intensity has a positive effect on the cash-effective tax rate and when the cash-effective tax rate increases, it means that tax avoidance decreases. It can be concluded that capital intensity has a negative effect on tax avoidance. Large fixed assets will have large depreciation costs as well. However, the results of the study show that the amount of investment in the company's fixed assets that will increase the depreciation expense does not show a large impact in terms of tax avoidance. depreciation expense is not a way for food and beverage companies to do tax avoidance.

It is known that the t-statistic of Sales Growth is -2.947016 > t-Table 1.98896 and the value of Prob. 0.0042 < 0.05. These results indicate that Sales growth has a negative effect on Tax Avoidance. Where an increase in sales growth (sales growth) will be a concern of tax officials who assume that the higher sales growth (sales growth), the greater the amount of tax payable that should be paid by the company.

The t-statistic on the Sobel test has a value of -0.23884 and the t-table result is 1.98896. The t-statistic value is smaller than the t-table, this indicates that the leverage variable failed to mediate the effect of the Executive Character variable on Tax Avoidance. So that either the direct or indirect influence of the Executive Character variable has no effect on tax avoidance.

The t-statistic on the Sobel test has a value of -0.23252 and the t-table result is 1.98896. The t-statistic value is smaller than the t-table, this indicates that the leverage variable failed to mediate the effect of the Capital Intensity variable on Tax Avoidance. So that either the direct or indirect influence of the capital intensity variable has no effect on tax avoidance.

The t-statistic on the Sobel test has a value of 0.238316 and the t-table result is 1.98896. this indicates that the leverage variable fails to mediate the influence of the Sales Growth variable on Tax Avoidance. So that either the direct or indirect influence of the Sales Growth variable has no effect on tax avoidance.

## 5. Conclusion

This study aims to investigate the role of *Leverage* as a Mediator of the Effect of Executive Character, *Capital Intensity, and Sales Growth on Tax Avoidance in Basic and Chemical* Industry Companies Listed on the Indonesia Stock Exchange for the 2018-2021 Period. Based on the data analysis that has been done in CHAPTER IV, the researchers draw the following conclusions:

5.1. The results of the Executive Character Hypothesis Test have a negative effect on Leverage in basic and chemical industrial companies listed on the IDX in 2018-2021.

This is evidenced by the value of a = 5%, the probability value of 0.0078 is smaller than the significance level of 0.05, and t statistic (-2.727873) > t table (1.98861).

5.2. The results of the Capital Intensity Hypothesis Test have no effect on Leverage in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of a = 5%, the probability value of 0.3437 is greater than the significance level of 0.05, and t statistic (-0.952230) < t table (1.98861).

5.3. Sales Growth Test results have a positive effect on Leverage in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of a = 5%, the probability value of 0.0326 is smaller than the significance level of 0.05, and t statistic (2.173102) > t table (1.98861).

5.4. The results of the Leverage Hypothesis Test have a positive effect on Tax Avoidance in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of a = 5%, the probability value of 0.0187 is greater than the significance level of 0.05, and t statistic (2.397632) < t table (1.98896).

5.5. The results of the Executive Character Hypothesis Test have no effect on Tax Avoidance in basic and chemical industrial companies listed on the BEI in 2018-2021. This is evidenced by the value of a = 5%, the probability value of 0.1592 is greater than the significance level of 0, 05, and t statistic (1.420461) < t table (1.98896).

5.6. The results of the Capital Intensity Hypothesis Test have a negative effect on Tax Avoidance in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of a = 5%, the probability value of 0.0265 is smaller than the significance level of 0.05, and t statistic (-2.259743) > t table (1.98896).

5.7. The results of the Sales Growth Hypothesis Test have a positive effect on Tax Avoidance in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of a = 5%, the probability value of 0.0042 is smaller than the significance level of 0.05, and t statistic (-2.947016) > t table (1.98896).

5.8. The results of the Leverage Hypothesis Test are not able to mediate the effect of Executive Character on Tax Avoidance in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of t statistic (-0.23884) < t table (1.98896).

5.9. The results of the Leverage Hypothesis Test are not able to mediate the effect of Capital Intensity on Tax Avoidance in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of t statistic (-0.23252) < t table (1.98896).

5.10. The results of the Leverage Hypothesis Test are not able to mediate the effect of Sales Growth on Tax Avoidance in basic and chemical industrial companies listed on the IDX in 2018-2021. This is evidenced by the value of t statistic (0.238316) < t table (1.98896).

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