THE EFFECT OF EXECUTIVE CHARACTERISTICS, CEO OVERCONFIDENCE, CAPITAL INTENSITY ON TAX AVOIDANCE

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Abstract: This study examines the effect of executive characteristics, CEO overconfidence, capital intensity on tax avoidance. The independent variables of this study are executive characteristics, CEO overconfidence, capital intensity; the dependent variable is tax avoidance. Earnings measure executive characteristics before interest expense, taxes, depreciation, amortization divided by a total asset. CEO overconfidence is measured by combining these proxies: overinvestment (also known as an excess investment), the ratio of liabilities to equity, and dividend yield. If two of the three combinations of proxies are met, then the related company is given a value of one (1) and a value of zero (0) otherwise. The capital intensity is measured by a total fixed asset divided by a total asset. Tax avoidance is measured by cash effective tax rates (CETR). The population in this study is 310 primary consumption sector companies listed on the Indonesian Stock Exchange from 2016 to 2020. The sample was selected by purposive sampling method and finally obtained 175 primary consumption sector companies that fulfill the criteria. Data were analyzed using multiple regression analysis models. The result shows that executive characteristics and capital intensity positively influence tax avoidance. CEO overconfidence is negatively influencing tax avoidance.

Keywords: Executive Characteristics, CEO Overconfidence, Capital Intensity, Tax Avoidance

1. Introduction

The tax borne by the company is an element of cost that reduces the company's profit because the higher the tax paid by a company means, the smaller the profit the company will get, so there is a tendency to minimize tax payments (Fitriany, 2016:1152). Tax avoidance is one of the strategies companies undertake in their tax policies to legally reduce the company's tax obligations based on applicable tax regulations (Widiiswa and Baskoro, 2020:62). Tax avoidance makes optimal use of loopholes in taxation provisions to reduce the amount of tax that should be paid without violating applicable regulations. Besley and Persson (2014:109) show that tax avoidance is critical in low tax revenues in developing countries. The research results conducted by Astuti and Aryani (2016:385) show that tax avoidance in manufacturing companies has increased from 2001 to 2014. Cobham et al. (2020:12) reported the total global tax losses in 2020 reached $427 billion, of which $245 billion was due to tax abuse by multinational companies, and the rest was due to tax evasion by individuals or individuals.
The practice of tax avoidance, of course, involves the intervention of company executives where the executive is the highest decision-maker in a company. Executives are involved in several decision-making processes, including exchanging information, studying data, providing ideas, evaluating, providing direction, and following up on company goals. Low (2009:470) shows that one of the characters possessed by executives is a risk-taker. The higher the corporate risk, it can be indicated that the executive has a more risk-taker character, and vice versa (Budiman and Setiyono, 2012:5). Executives who dare to take risks will tend to avoid tax (Prawati and Hutagalung, 2020:2). The role of an executive character in corporate tax avoidance is evidenced by studies conducted by Ardillah and Prasetyo (2021:181), Prastiwi and Ratnasari (2019:132), Prawati and Hutagalung (2020:6), and Surachman (2017:1676). This shows that the higher the level of corporate risk, the higher the risk-taker character possessed by the executive, the higher the level of tax avoidance. Fitria (2018:449), Gartika and Wijaya (2018:77) show that executive nature does not affect tax avoidance.

The confidence of a Chief Executive Officer (CEO) can also affect the company’s tax evasion. According to Hirshleifer et al. (2012:1458), CEOs with too high self-confidence from now on referred to as overconfidence, tend to think that they are better than they are in terms of characteristics such as ability, judgment, or prospects or optimism for a successful outcome. Chyz et al. (2019:1) show that CEO overconfidence is related to corporate tax avoidance. Tax avoidance depends on a combination of investment in tax avoidance strategies, financial reporting to tax authorities, and forecasting responses from tax authorities. CEO overconfidence can be related to tax avoidance directly or indirectly. The effect of CEO overconfidence is evidenced by research conducted by Sutrisno and Pirzada (2020:61) and Sumunar et al. (2019:103), which provides empirical evidence that CEO overconfidence has a positive and significant effect on tax avoidance.

Other factors that influence corporate tax avoidance besides the executive character and CEO overconfidence are the interpersonal connections of commissioners, directors, and large shareholders. The business world is closely related to the state administration because the government’s policies also influence a company’s success. Large companies tend to require parties involved in state administration in their companies in the hope that the laws and regulations are made in such a way as to facilitate their business activities. Butje and Tjondro (2014:7), Munawaroh and Ramdany (2019:118), Utari and Supadmi (2017:2225) provide empirical evidence that political connections influence tax avoidance. Dharma and Ardiana (2016:608) and Annisa (2017:695) show that political connections do not affect tax avoidance.

Capital Intensity is how much the company invests in fixed assets and inventories (Muzakki and Darsono, 2015:4). The higher the level of investment in the company's fixed assets, the higher the depreciation expense will be. This will result in the company's profits will decrease so that the obligation to pay corporate taxes will also decrease. Thus, management will take advantage of the depreciation of fixed assets which can reduce the tax burden that the company must pay. The company's performance will increase, and what the manager wants will be achieved. Therefore, companies with high-intensity fixed assets are more likely to tax avoidance. Richardson and Lanis (2007:702), Jessica and Toly (2014:11), and Putri and Lautania (2016:114) found that the intensity of fixed assets can affect Effective Tax Rates (ETR). Based on the phenomena and inconsistencies in the results of previous studies that have been mentioned above, the formulation of the problem from this study is as follows:

a) Does the character of the executive affect tax avoidance?
b) Does CEO overconfidence affect tax avoidance?
c) Does capital intensity affect tax avoidance?
2. Literature Review

Executive Character
Company executives will face various choices and must make the best decisions in their business activities for its sustainability. As the highest decision-makers, executives are required to consider options to increase the value of the company and the prosperity of the company owners or shareholders. Decisions made by executives are inseparable from the characteristics they have. Individuals have different features—environment, education, and experience shape a person's character. Likewise, company executives have their character in carrying out their duties. Executives who are risk takers will be more willing to take risks in business because they understand that the higher the risk taken, the higher the profits (Butje and Tjondro, 2014: 3).

The executive is involved in tax avoidance practices carried out by the company either directly or indirectly. The method of tax avoidance by the company is not an accident but is one of the policies taken by the company itself. The more daring executive characters generally desire to earn as much as possible, but higher incomes increase tax payments. This is not selected by the company and causes executives to try to minimize tax costs by taking tax avoidance actions (Prawati and Hutagalung, 2020: 6). Boone et al. (2013:27) show that tax evasion is risky behavior for corporate managers and individual taxpayers because there may be high costs to be paid in the form of interest costs, legal penalties, and loss of reputation if tax evasion becomes public. Research conducted by Surachman (2017:1676) and Ardillah and Prasetyo (2021:181) succeeded in showing that executives who have a risk-taker character have a positive and significant influence on tax avoidance.

CEO Overconfidence
The chief executive officer (CEO) is the highest leader in a company who can carry out its management and is fully responsible for it. One of the tasks of the CEO is to make decisions. The decisions taken by the CEO are influenced by various factors, one of which is the personality of the CEO himself. According to Kang and Cho (2020:2), the CEO plays a vital role in determining its value by presenting its long-term vision and strategy and setting investment plans and workforce supply and demand to achieve them.

Peterson et al. (2003:802) show that the CEO's personality affects the dynamics of top management (top management) and that top management is related to organizational performance. Managerial overconfidence can lead to excess/underinvestment, and hence, this has an apparent effect on company policy because decision making is a task assigned to managers (Kouaib and Jarbou, 2016:4).

Hirshleifer et al. (2012:1458) define overconfidence as the tendency of individuals to think that they are better in terms of characteristics such as ability, judgment, or prospects for successful results (optimism). Hsieh et al. (2018:243), CEO overconfidence refers to a high commitment to achieving specific targets and exaggerates their abilities, competencies, and knowledge to gain professional recognition and reputation. CEO overconfidence is a sense of overconfidence or excessive belief that a CEO has in his ability and potential to succeed in an opportunity. Overconfidence is an exaggerated perception and confidence in one's ability, judgment, and success.

Skała (2008:38), Libby and Rennekamp (2010:11) show that overconfident individuals have two key aspects: over-optimism and miscalibration. Hribar and Yang (2016: 4), the first aspect, namely over-optimism, refers to individuals who are unrealistically optimistic about uncertain outcomes. Over-optimism is similar to overestimating the average, in which an overconfident individual believes that an uncertain outcome will be better than what the firm expectation would predict. The second aspect, namely miscalibration, is associated with
individuals who underestimate uncertainty when predicting uncertain events. According to Hirshleifer et al. (2012:1458), overconfident individuals tend to overestimate the expected net profit from rocky ventures, either because of a general tendency to expect good results or because they overestimate their luck in bringing about success. Overconfident CEOs tend to overestimate their abilities and the likelihood of achieving excellent and rewarding performance. The optimistic bias of overconfident CEOs will affect their decision-making regarding corporate reporting (Hirshleifer et al., 2012:243).

CEOs who are overconfident tend to be bolder in making decisions. CEOs willing to take risks will make decisions with a high level of risk for a return on investment that matches their expectations. Research by Malmendier and Tate (2005:2696), Zhang and Yang (2018:13) provides empirical evidence that CEO overconfidence affects the company's investment activities. CEO overconfidence may play an essential role in setting corporate policies and strategic decisions (Hsieh et al., 2016:3).

Olsen and Steckelberg (2015:2), Chyz et al. (2019:26), Sumunar et al. (2019:102), Sutrisno and Pirzada (2020:62) in their research show that CEO overconfidence influences corporate tax avoidance practices. Hsieh et al. (2018:243) revealed that tax avoidance activities could help overconfident CEOs to lighten corporate tax burdens and provide more financial resources for their investment projects.

**Capital Intensity**

Capital intensity is a form of financial decision in investing assets. In the state of fixed assets. The choice of capital in fixed assets will cause depreciation expense. Depreciation expenses for fixed assets will drive costs that result in reduced income earned by the company. This condition can trigger companies to carry out tax management. Companies can practice tax avoidance by increasing capital by adding fixed assets. Carolina et al. (2014:410) found that the higher the capital intensity, the higher the tax avoidance. On the other hand, the lower the capital intensity, the lower the tax avoidance.

Capital Intensity shows how much the company invests its company assets in fixed assets and inventories. In this study, the capital intensity is projected with the intensity of fixed assets. Fixed asset intensity is the ratio between net fixed assets to total assets to calculate capital intensity. The capital intensity ratio is used to show the company's level of efficiency in using its fixed assets to generate company profits (Artinasari, 2018:4).

**Tax Avoidance**

Tax is a mandatory contribution for the community collected by the government as part of state revenue and used to finance state expenditures for the prosperity of the people. Taxpayers will not receive direct benefits from taxes because taxes function is to maintain economic stability, finance infrastructure development, support education, improve the quality of human resources and maximize health facilities. Tax revenues depend on the awareness of taxpayers because Indonesia adheres to the principle of a self-assessment system in collecting taxes. Taxpayers, in general, do not consider tax as an essential thing, so they try to reduce the amount of tax payment as small as possible or even not at all. Taxpayers will take various ways to minimize the taxes that must be paid, one of which is tax management.

Tax management is an effort that can be done to streamline tax payments. Tax management implements management functions in tax management, namely planning, organizing, implementing, and controlling taxation aspects that benefit taxpayers in minimizing the amount of tax payable. Tax planning is the initial stage of the management process. Tax planning is the most basic first step to reducing tax payments. Tax planning is a business that includes tax planning so that the taxes paid by the company are genuinely efficient (Pohan,
2013:13). The initial stage in this tax planning is to determine the right strategy in managing and engineering transactions to save tax costs. Strategies to streamline taxes can be done legally and illegally. Tax strategies generally carried out legally are tax avoidance, tax saving, and tax payment delays.

Tax avoidance is a tax avoidance effort that is carried out legally and safely for taxpayers because it does not conflict with tax provisions, where the methods and techniques used tend to take advantage of the weaknesses (grey areas) contained in the tax laws and regulations themselves, to reduce the amount of taxes owed (Pohan, 2013: 23). There are still many gaps in tax provisions that taxpayers can utilize to minimize the amount of tax. Tax avoidance is an effort made by taxpayers to reduce the amount of tax paid by taking advantage of loopholes in the law without violating its provisions. Tax avoidance is not a violation of the tax law because the taxpayer's efforts to reduce, avoid, minimize or alleviate the tax burden are carried out in a way that is allowed by the tax law (Kurniasih and Sari, 2013:61).

The Fiscal Affairs Committee of the Organization for Economic Cooperation and Development (OECD) stated that tax avoidance has three characteristics, namely: (1) There is an artificial element in which various arrangements appear to exist in it but are not, and this is done because of the absence of tax factors. (2) Such schemes often take advantage of loopholes in the law or applicable legal provisions for various purposes, which the legislators do not intend. (3) Confidentiality is also a form of this scheme where consultants generally show tools or methods to avoid tax on the condition that the taxpayer keeps it as secret as possible (Suandy, 2008:7).

Research Model

![Diagram](attachment:research_model_diagram.png)

3. Method

Population and Sample

The population in this study are manufacturing companies in the primary consumption sector listed on the Indonesia Stock Exchange (IDX) for the 2016-2020 period. The primary consumer goods sector includes companies that produce or distribute products and services generally sold to consumers for anti-cyclical goods or primary or essential goods. The demand for these goods and services is not affected by economic growth (www.idx.co.id). The sample selection in this population uses a purposive sampling method with the following criteria: (1) Primary consumption sector manufacturing companies listed on the Indonesia
Stock Exchange during 2016-2020. (2) The company does not suffer losses before and after-tax.

<table>
<thead>
<tr>
<th>Sampling Criteria</th>
<th>Number</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total number of manufacturing companies in the primary consumption</td>
<td>62</td>
</tr>
<tr>
<td>Companies reporting a net loss</td>
<td>(27)</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>35</td>
</tr>
</tbody>
</table>

### Variables and Measurements

**a) Executive character**

Executive character is the personality or personality of the executive as a company leader in carrying out his duties to lead the company's business activities. Low (2009:470) assesses the executive’s character from the level of courage in taking risks, one of which is the character of the risk-taker. Executives who have a risk-taker character tend to be brave in making decisions even though these decisions have high risks in the hope of obtaining various benefits. An executive character can be measured by company risk (Butje and Tjondro, 2014:3). The higher the company’s risk (corporate risk) indicates that the character of the executive risk-taker is getting stronger. The company's risk formula is:

\[
\text{Risk} = \frac{\text{EBITDA}}{\text{Total Asset}}
\]

Where:

- **Risk**: Company risk ratio
- **EBITDA**: Earnings before interest expense, taxes, depreciation, and amortization
- **Total Asset**: Total current assets and fixed assets

**b) CEO overconfidence**

The CEO's overconfidence (chief executive officer) is defined as the CEO's excessive perception of his abilities, judgments, and chances of success in leading a company. CEOs who have high self-confidence tend to think that they can consider options and make decisions that benefit them. CEO overconfidence is measured using a combination of proxies used in the research of Kouaib and Jarboui (2016:8), namely excess investment, acquisitions made by the company, the ratio of liabilities to equity, risky debt, and dividend yield. The combination of these proxies consists of overinvestment (also known as an excess investment), the ratio of liabilities to equity, and dividend yield. If two of the three combinations of proxies are met, then the related company is given a value of one (1) and a value of zero (0) otherwise. These measurements are:

1) **Overinvestment**

Overinvestment describes the level of excess investment made by the CEO for the company, which has exceeded the company's financial capacity. The CEO’s investment level is formulated by reducing the residual regression on total asset growth and sales growth with the industry median value this year. The value of one (1) is given if the company’s residual value is proven to be greater than the median residual value of the industry in question, and zero (0) otherwise.

\[
\Delta \text{Asset}_{it} / \text{Asset}_{it-1} = \square_0 + \square_1 \Delta \text{Sales}_{it}/\text{Sales}_{it-1} + \varepsilon
\]
Where:
\[ \Delta \text{Asset}_{it} \] : Difference in total assets of a company i year t and t-1
\[ \text{Asset}_{i,t-1} \] : Total assets of a company i year t-1
\[ \beta_0 \] : Constant
\[ \beta_1 \Delta \text{Sales}_{it}/\text{Sales}_{i,t-1} \] : Beta value of the difference in total sales of a company i years t and t-1 divided by total assets of a company i year t-1

2) Debt to equity ratio
Debt to equity ratio compares total debt and total company equity. A high DER ratio indicates poor company performance because it uses long-term debt to fund its business activities. CEOs who are too confident will choose a higher debt level than a more rational debt level (Rihab and Jedidia, 2016:237). The value of one (1) is given if the debt to equity ratio (DER) is higher than the industry median for that year, zero (0) if it is lower than the industry median for that year.

\[ \text{DER} = \frac{\text{Total debt}}{\text{Total Equity}} \]

3) Dividend yield
Dividend yield reflects dividend payments made by the company. CEOs who are too confident tend to lower their dividend payments because they are always driven by their subjective awareness of the possibility of getting investment opportunities in the future (Abiprayu and Wiratama, 2016:66). Overconfident CEOs often withhold and do not distribute dividends to manage these earnings to obtain greater profits. The value of one (1) is given if the company does not distribute dividends and zero (0) if the company distributes dividends.

c) Capital Intensity
Capital Intensity has a relationship with the company's investment in fixed assets. The higher the company's fixed assets, the higher the depreciation expense of the fixed assets. In other words, the higher the rate of depreciation of fixed assets each year, the lower the amount of tax that must be paid.

\[ \text{CI} = \frac{\text{Total Net Fixed Asset}}{\text{Total Asset}} \]

d) Tax Avoidance
Tax avoidance is an effort made by taxpayers to reduce the amount of tax paid by taking advantage of loopholes in the law without violating its provisions. The measurement of the tax avoidance variable in this study uses Cash Effective Tax Rates (CETR). Dyreng et al. (2018:18) suggest that CETR is an appropriate measure of evasion because cash taxes are paid to reflect tax evasion on previously filed tax returns. The lower the CETR value, the higher the level of tax avoidance by the company.

\[ \text{CETR} = \frac{\text{Payment of Taxes}}{\text{Earning before tax}} \]
4. Result and Discussion

Table 2. Determination Test

<table>
<thead>
<tr>
<th>R</th>
<th>R Square</th>
<th>Adj R Square</th>
<th>Std Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.759</td>
<td>0.671</td>
<td>0.457</td>
<td>0.27367</td>
</tr>
</tbody>
</table>

Sources: processed

Table 2. ANOVA and t-test

| ANOVA | | | |
|-------|------|---------------------|
| F | 2.710 | Sig. | 0.043 |

<table>
<thead>
<tr>
<th>t-test</th>
<th>Unstandardized Coefficients</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>0.207</td>
<td>0.005</td>
</tr>
<tr>
<td>CE</td>
<td>-0.013</td>
<td>0.068</td>
</tr>
<tr>
<td>COV</td>
<td>0.005</td>
<td>0.007</td>
</tr>
<tr>
<td>CI</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Sources: processed

The Effect of executive character on tax avoidance

The regression analysis shows that the value of beta = 0.005 and sig. = 0.000 or less than the criteria for a significance value of 0.05, that the executive character positively affects tax avoidance. The results of this study are in line with Ardillah and Prasetyo (2021:181) and Surachman (2017:1676) that the higher the level of company risk, the higher the risk-taker character possessed by the executive, the higher the level of risk-taker. Corporate tax avoidance. These results mean that the executive character has a positive effect on tax avoidance because shareholders still have a more substantial influence in the company compared to executives in making decisions in the company, including in carrying out tax avoidance policies, so executives must continue to comply with the interests of shareholders even though they have different characters.

The effect of CEO overconfidence on tax avoidance

The regression analysis showed that beta = -0.013 and sig. = 0.007 or less than the 0.05 significance value, which means CEO overconfidence hurts tax avoidance. Based on the regression results, CEO overconfidence negatively affects the taxes paid by the company. Higher the confidence of a CEO (overconfidence), the lower the tax paid, thus indicating the practice of tax avoidance. The same applies to other variables that have a negative coefficient value. At the same time, the variable with a positive coefficient value indicates that the greater the value of the variable, the greater the tax paid by the company (Hidhayana and Suhandianto, 2021:58). This research is supported by Hsieh et al. (2018:243), Chyz et al. (2019:26), and Kubick & Lockhart (2017:25) which shows that CEO overconfidence can influence corporate tax policy. Which state so. An overconfident CEO will act according to his ability and experience to lead a company. The overconfident CEO understands the opportunities and threats and makes decisions on these conditions based on his perspective. Characteristics, experience, and other human factors can drive CEOs to make significant corporate decisions in their way. Excessive investment decisions are a form of optimism that the CEO has. Top managers believe that every decision made is the best decision to provide good feedback for the company, including investment decisions. This unrealistic optimism...
attitude is one of the "better than average" effects, where individuals tend to judge their abilities above average (Hribar and Yang, 2016:4).

**The Effect of capital intensity on tax avoidance**
The regression analysis showed that beta = 0.068 and sig. = 0.030 or less than the criteria for a significance value of 0.05 means that capital intensity positively affects tax avoidance. Capital intensity is a decision made by the manager of a company to increase profits for the company through capital investment in the form of fixed assets. Almost all existing fixed assets are depreciated, and the costs arising from the depreciation can reduce the amount of tax that the company must pay. In the manufacturing industry, fixed assets significantly affect production capacity. Thus, the larger the company's fixed assets, the greater its production capacity. This will result in increased sales due to more production. Increased sales mean increased income which will have implications for improving the tax burden that must be paid by the company (Muzakki and Darsono, 2012:7). Hanum and Zulaikha (2013:8) state that depreciation costs can be deducted from income in calculating taxes. Therefore, the greater the number of fixed assets owned by a company, the greater the depreciation cost, so that the amount of taxable income and CETR will be smaller. The smaller the CETR indicates that the level of tax avoidance by the company is getting bigger.

5. **Conclusions**

1) Executive character positively affects tax avoidance—the greater the value of corporate risk, the greater the CETR value. The small risk of the company indicates the tendency of an executive character. A high level of risk suggests that company leaders are more risk-takers who are more willing to take risks.

2) CEO overconfidence hurts tax avoidance. The stronger the confidence the CEO has, the smaller the CETR value. Overconfident CEOs engage in international mergers and acquisitions, especially in countries or regions with lower tax rates. Companies can reduce tax liability and serve as a tool for overconfident CEOs to fulfill investment ambitions and avoid paying more taxes on corporate profits.

3) Capital intensity has a positive effect on tax avoidance. Capital Intensity affects tax avoidance because fixed assets owned by the company can be depreciated. Asset depreciation can be charged as a profit deduction to reduce the tax burden paid.

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