Company Characteristics, Corporate Governance and Aggressive Tax Avoidance Practice: A Study of Indonesian Companies

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ABSTRACT
Tax avoidance is a common practice employed by companies to reduce the tax burden. This research aimed to investigate whether company characteristics and corporate governance play a significant role in company’s tax avoidance. This research selected 70 companies in Indonesia as a sample. The company characteristics were proxied by (1) profitability, (2) leverage, (3) age and (4) size. Corporate governance was proxied by (1) the size of the board of commissioners, (2) the proportion of independent commissioners, (3) audit firms and (4) the audit committee. Data were obtained from the companies’ financial statements for the years 2011–2015. Multiple linear regression was used for the analysis. This research showed that several company characteristics proxies, namely age, profit and size, significantly affected tax avoidance practices. Several corporate governance proxies, namely age, profit and size, significantly affected tax avoidance.

Keywords: Tax avoidance; corporate governance; company characteristics.

1 INTRODUCTION
Tax compliance is a prerequisite for increasing tax revenue (Puspita et al., 2016). Indonesia is still struggling to increase its level of tax compliance. Based on a report compiled by the Directorate General of Tax, Ministry of Finance, in 2016, the tax compliance ratio in Indonesia was 60%, far below the target of 75% and also lower than that in other South-East Asian countries. Based on a report from the Statistics Bureau of Indonesia, Indonesia’s tax ratio was only 11% in 2015, while other neighbouring countries had higher ratios, for example 24% in Singapore and 18% in Malaysia. Moreover, Indonesian tax receipts did not achieve their targets in a five-year period (2010–2015) and tax revenue in 2015 was only 85% of the target. The low amount of tax revenue might have been caused by several factors. One of these factors is tax avoidance practices conducted by Indonesia’s taxpayers, especially corporate tax payers. Tax avoidance is used as a legal means of reducing the income tax payable by companies. Companies use several methods to conduct tax avoidance, but the most common method is accounting methods (Jones, 2012; Zain, 2005). Companies also employ estimation to increase their expenses and allowances to reduce their income. The level of tax avoidance varies across companies. Previous research has shown that some companies have a greater tendency to engage in tax avoidance practices.
avoidance than others. This might be related to economies of scale and complexity issues; for example, if the company has more business unit, the tax charged might be greater (Chen et al., 2010; Mills et al., 1988; Rego, 2003).

Researchers have used different proxies to represent company characteristics. Minnick and Noga (2010) used size, book-to-market ratio, profitability, leverage, discretionary earnings and the ratio of advertising expenses and capital expenditure as proxies for firm characteristics. Taylor and Richardson (2013) used firm size, leverage, capital intensity, inventory intensity, R&D intensity, return on assets and industry sector and year effects. Besides company-specific factors, several studies have also shown that corporate governance can mitigate tax avoidance practices. Desai and Dharmapala (2006) argue that tax avoidance schemes can be overcome by a good governance system. Previous researchers have used many proxies to represent corporate governance. Minnick and Noga (2010) used board composition, entrenchment, board compensation and executive compensation. Wahab and Holland (2012) used ownership structure, board structure and compensation structure. However, the results of previous research show some inconsistencies.

This research aimed to examine company characteristics and corporate governance as variables that affect aggressive tax avoidance practices. It employed several proxies used by previous research to provide a more comprehensive picture of the measurement of company characteristics and corporate governance. This study covered a five-year period (2011–2015), thus presenting a recent account of tax avoidance practices in Indonesia. This research provides new insights into tax avoidance practice and a clearer view of such behaviour in Indonesia. The next section of the paper presents a review of the relevant literature review, followed by the research methodology, the results, further analysis and finally conclusions and suggestions for future research.

2 LITERATURE REVIEW
This section discusses relevant literature regarding tax avoidance, company characteristics and corporate governance. It provides clear links between the variables studied, as well as the theoretical foundations of this research.

2.1 Tax avoidance and firm motivation
Jones (2012) describes tax avoidance as a legitimate means of reducing taxes. From a company perspective, Jones (2012) also argues that the objective of business decisions is to maximize the value of the firm. If a transaction results in an increase in tax for any period, the increase (tax cost) is a cash outflow, whereas if a transaction
results in a decrease in tax for any period, the decrease (tax savings) is a cash inflow. The tax costs must be lower than tax savings, so the company can increase its value. Hanlon and Heitzman (2010) consider that tax avoidance is defined very broadly, usual in relation to lack of compliance or aggressiveness. Darussalam et al. (2007) define aggressive tax avoidance as an ‘unacceptable method of reducing income taxes from the point of view of tax authority, although it is legal to conduct it’. They also describe several methods of avoiding tax aggressively, for example through thin capitalization, transfer pricing, or treaty shopping.

The theories related to corporate tax avoidance have been discussed in a considerable number of previous studies. Hanlon and Heitzman (2010) use agency theory to explain tax avoidance behaviour. They state that in the corporate context, there is a separation between ownership and control. If managers consider that tax avoidance is a beneficial activity, the owners ought to structure appropriate incentives to ensure that managers make tax-efficient decisions. Desai and Dharmapala (2006) also state that the interaction between corporate governance and tax planning will lead to differing views of firm value. Investors will view aggressive tax avoidance as reducing firm value, especially for a company with a lack of good corporate governance. However, in a company with strong corporate governance, tax avoidance will have no significant effect on firm value.

This research used the effective tax rate (ETR) as a measure for tax avoidance. According to Hanlon and Heitzman (2010), the ETR is computed by dividing an estimate of tax liability by a before-tax profit or cash flow measure; however, variations in ETR exist in previous research. This research used generally accepted accounting principles (GAAP)-based ETR. Minnick and Noga (2010) argue that ETR is a good measure of long-term tax avoidance and as this research used data for a five-year period, it was deemed suitable.

2.2 Firm characteristics

As noted by Hanlon and Heitzman (2010), research regarding tax avoidance to date has examined the relationship between firm-level characteristics and tax avoidance using a number of proxies. In this research, we used four variables to proxy company characteristics: (1) profitability, (2) size, (3) leverage and (4) age of the company.

2.2.1 Profitability

Minnick and Noga (2010) argue that a key reason why companies engage in tax management is to improve financial performance. Looking at the bonus plan hypothesis, firms will higher levels of profit tend to increase their profits and at the
same time minimize costs, i.e. income tax (Godfrey et al., 2013), to improve their performance. However, looking at political cost theory, profitable firms will try to maintain their reputation to enhance investor confidence and will minimize the use of aggressive methods of earnings management (Scott, 2006). Wahab and Holland’s (2012) research shows that profitability influences tax avoidance. However, Adhikari et al. (2006) and Taylor and Richardson (2013) show inconsistencies in terms of the results of the influence of tax avoidance. Based on these inconsistent results, the following hypothesis is proposed, but no sign is predicted:

H1: Profitability significantly influences tax avoidance.

2.2.2 Size
Dyreng et al. (2008) suggest that firm size play a role in tax management and find that smaller firms have higher tax rates. Rego (2003) argues that larger firms can achieve economies of scale via tax planning and have the incentives and resources readily available to them to reduce the amount of corporate taxes payable. However, there are inconsistencies in the results of prior research. Minnick and Noga’s (2010) study showed that firm size positively influences tax if the measure of tax avoidance used is GAAP ETR, but there is no significant influence if the measure used is cash ETR. Taylor and Richardson (2013) also showed no significant influence between size and tax avoidance. Size can be measured through several proxies, but the natural logarithm of total assets is widely used and thus was employed in this study. Based on the above and the inconsistent results of prior research, the following hypothesis is constructed, with no predicted sign:

H2: Size significantly influenced tax avoidance

2.2.3 Leverage
High levels of debt can also influence the tax avoidance behaviour of a company. Minnick and Noga (2010) argue that companies with higher leverage use the interest costs of liabilities to reduce the amount of income tax payable. Badertscher et al. (2013) state that firms with greater leverage have less need to engage in tax planning due to the tax benefits of debt financing. However, while some research has shown that leverage does not significantly influence tax avoidance (e.g. Minnick and Noga, 2010; Taylor and Richardson, 2013), Badertscher et al. (2013) found that leverage positively affects tax avoidance measured by GAAP ETR. As a firm’s capital structure (debt or equity) can be a reason for tax avoidance, leverage is measured using the debt-to-equity ratio (Hanlon and Heitzman, 2010; Minnick and Noga, 2010).
Based on the above and the lack of consistency in the results of existing research, the following hypothesis is proposed, again predicting no sign:

**H₃:** Leverage significantly influences tax avoidance.

### 2.2.4 Age of company

Political cost theory can be used to explain the association between the age of company and tax avoidance. Scott (2003) argue that the older the company, the broader its business and the higher its reputational risk. Firm will tend to mitigate risk and choose actions that do not trigger higher risk. Previous research in the field of tax avoidance practices, to the best of my knowledge, has not included age as one of the company characteristics. This research aims to address the influence of this variable. Due to the lack of this measure in previous research, the following hypothesis is constructed with no prediction of sign:

**H₄:** The age of the company significantly influences tax avoidance.

### 2.3 Corporate governance

Desai and Dharmapala’s (2006) research is among the studies that have tried to elaborate the relationship between corporate governance and tax avoidance. They argue that corporate governance affects tax avoidance and this will influence firm value. Hanlon and Heitzman (2010) also state that tax avoidance involves managers’ behaviour; based on agency theory, managers will try to achieve maximum utility by engineering the financial performance of the firm. Increased monitoring and incentives in governance will reduce ‘bad practice’ and therefore reduce tax avoidance. This research employed several proxies in this regard, namely: (1) the size of the board of commissioners, (2) the proportion of independent commissioners, (3) external audit and (4) the audit committee.

#### 2.3.1 Size of the board of commissioners

Indonesia has adopted a two-tier board system. In this system, the monitoring and executive functions are separate. The monitoring function is conducted by the board of commissioners, which serves as an internal monitoring mechanism to protect the interests of stockholders (Jensen, 1993; Minnick and Noga, 2010). The board can comprise internal and external commissioners. Several previous studies have shown that larger boards with more internal commissioners tend to have higher agency problems as the commissioners have greater power to act only in the interests of majority shareholders (Godfrey et al., 2013; Scott, 2003). In contrast, Wahab and Holland (2012) found no evidence that the size of the board influences tax avoidance.
Minnick and Noga (2010) found a significant, but weak influence of the size of the board on tax avoidance. Therefore, the following hypothesis is proposed:

**H5:** The size of the board of commissioners significantly influences tax avoidance.

### 2.3.2 Proportion of independent commissioners

The Indonesian board system uses the term ‘independent commissioner’ as synonymous with external director. The presence of internal commissioners provides opportunities for increased aggressive tax behaviour and failure to control the company (Jensen, 1993). External commissioners provide a more robust monitoring mechanism as they are independent and do not have direct financial interests in the company. Several previous studies have shown that a higher percentage of external directors reduces the level of tax avoidance (Armstrong et al., 2015; Minnick and Noga, 2010; Taylor and Richardson, 2013). However, previous research has also failed to find any influence of the proportion of independent commissioners on tax avoidance (Wahab and Holland, 2012). Based on the above and the inconsistent results, the following hypothesis is proposed, again with no sign:

**H6:** The proportion of independent commissioners significantly influences tax avoidance.

### 2.3.3 External audit

External audit firms may influence the tax avoidance practices of a company. McGuire et al. (2013) argue that external audit firms might have tax expertise and advise the company on how to reduce income tax legally. As it is difficult to find data on the tax expertise of auditing firms in Indonesia, this research employed the Big 4 audit firms (Ernst & Young, Deloitte, PwC and KPMG) to distinguish those with such expertise. Previous research has found that the Big 4 audit firms have greater capabilities and competent resources in tax expertise compared to non-Big 4 audit firms. However, research aiming to examine the influence of audit firms on tax avoidance is still rare. McGuire et al. (2013) showed that the use of Big 4 audit firms increases the tax avoidance level of firms. Due to the lack of previous research the following hypothesis is constructed with no prediction of the sign:

**H7:** The use of a Big 4 audit firm significantly influences tax avoidance.

### 2.3.4 Audit committee

In Indonesia, the audit committee is a special committee under the board of commissioners. The role of the audit committee is to give advice to the board of
commissioners concerning financial and audit matters and also to provide a general monitoring mechanism on behalf of the board of commissioners. Audit committee members usually have accounting or financial expertise. The audit committee might play a role in tax avoidance, although to the best of my knowledge of prior research concerning this role. However, based on the political cost hypothesis, the role of the audit committee may reduce tax avoidance practices. Thus, the following hypothesis is proposed:

**H**₈: The audit committee significantly influences tax avoidance.

### 3 RESEARCH METHODOLOGY

This research uses a descriptive, explanatory approach, employing quantitative methodology. The population in this research consists of all the companies listed on the Indonesian Stock Exchange, a total of 533 companies. From this population, a sample was selected using the purposive sampling method, including companies listed for five consecutive years (2011–2015) and excluding financial and mining companies, those with an ETR value \( \leq 1 \) and that did not suffer a net loss in the period 2011–2015. The final sample comprised 27 companies. Data were collected using the financial statements of the companies for the years ending in 2011–2015, i.e. the observation period.

To address the hypotheses, the following model was estimated:

\[
TA = \alpha_0 + \alpha_1 PROFIT + \alpha_2 SIZE + \alpha_3 LEV + \alpha_4 AGE + \alpha_5 SIZE_{BRD} + \alpha_6 IND_{BRD} + \alpha_7 AUD + \alpha_8 AUD_{COM} + \varepsilon \tag{1}
\]

where the notations are as follows:

- **TA**: Tax avoidance, measured by GAAP ETR (income tax expense/pre-tax income)
- **PROFIT**: Profitability, measured by return on assets
- **SIZE**: Size, measured by the natural logarithm of total assets
- **LEV**: Leverage, measured by the debt-to-equity ratio
- **AGE**: Age of the company
- **SIZE_{BRD}**: Size of the board of commissioners, measured by the number of members
- **IND_{BRD}**: Proportion of independent commissioners, measured by the number of independent commissioners divided by the total number of commissioners
- **AUD**: Audit firm, taking the value 1 for Big 4 audit firms and 0 otherwise.
- **AUD_{COM}**: Audit committee, measured by the number of audit committee members.
The data analysis was conducted using multiple regression. The classic assumption tests for normality, multicollinearity, heteroscedasticity and autocorrelation were undertaken to ensure the model fit before engaging in the regression process. All the analyses were done in the E-Views 8.0 software.

4 RESULTS

This section presents the research results based on the empirical data. First, the descriptive statistics are provided and then the results of the multiple linear regression are presented and discussed.

4.1 Descriptive statistics

Table 1 presents the descriptive statistics. From the table, we can see that the mean level of tax avoidance, measured by GAAP ETR is 23.20%, relatively lower than the income tax rate of Indonesia (25%). For the corporate governance-related variables, the average number of members on boards of commissioners is 4.87 per company and the proportion of independent commissioners is 38.7%. On average, there are 3.11 members of audit committees per company. In terms of the company characteristics, the average ROA is 10.10%, the mean age of companies in the sample is 33 years, the average size (total assets) is just below 29.30 and the average leverage ratio is 83.3%.

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>SIZE_BRD</td>
<td>4.8741</td>
<td>1.65912</td>
<td>3.00</td>
<td>9.00</td>
</tr>
<tr>
<td>IND_BRD</td>
<td>.3870</td>
<td>.11543</td>
<td>.00</td>
<td>.80</td>
</tr>
<tr>
<td>AUD_COM</td>
<td>3.1185</td>
<td>.32442</td>
<td>3.00</td>
<td>4.00</td>
</tr>
<tr>
<td>LEV</td>
<td>.8330</td>
<td>.45076</td>
<td>.02</td>
<td>1.97</td>
</tr>
<tr>
<td>PROFIT</td>
<td>.1010</td>
<td>.07700</td>
<td>.01</td>
<td>.42</td>
</tr>
<tr>
<td>AGE</td>
<td>33.3407</td>
<td>10.11144</td>
<td>7.00</td>
<td>53.00</td>
</tr>
<tr>
<td>SIZE</td>
<td>29.2985</td>
<td>1.02342</td>
<td>27.36</td>
<td>31.35</td>
</tr>
<tr>
<td>TA</td>
<td>.2320</td>
<td>.06564</td>
<td>.02</td>
<td>.37</td>
</tr>
</tbody>
</table>

Note: AUDIT cannot be interpreted as it is a dummy variable. From 135 observations, 69 observations (51.1%) are audited by Big 4 audit firms, while 66 observations (48.9%) are audited by non-Big 4 audit firms.

4.2 Multiple regression analysis

Before conducting multiple linear regressions, the classic assumption tests were conducted. These indicated problems of heteroscedasticity and autocorrelation and thus a robust regression model was adopted using heteroscedasticity autocorrelation correction (HAC). HAC employs the Newey–West method. Multiple linear
regressions were undertaken with the HAC-Newey–West estimator in the Eviews 8.0 statistical software. The results are presented in Table 2.

**Table 2 Multiple regression results**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-statistic</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>-0.334</td>
<td>0.194606</td>
<td>-1.720</td>
<td>0.0879*</td>
</tr>
<tr>
<td>AGE</td>
<td>0.002</td>
<td>0.000862</td>
<td>3.187</td>
<td>0.0018***</td>
</tr>
<tr>
<td>AUD_COM</td>
<td>0.036</td>
<td>0.020499</td>
<td>1.793</td>
<td>0.0753*</td>
</tr>
<tr>
<td>AUD</td>
<td>0.054</td>
<td>0.013772</td>
<td>3.975</td>
<td>0.0001***</td>
</tr>
<tr>
<td>LEV</td>
<td>0.013</td>
<td>0.014396</td>
<td>0.926</td>
<td>0.3561</td>
</tr>
<tr>
<td>IND_BRD</td>
<td>-0.013</td>
<td>0.046873</td>
<td>-0.285</td>
<td>0.7758</td>
</tr>
<tr>
<td>PROFIT</td>
<td>-0.280</td>
<td>0.078404</td>
<td>-3.565</td>
<td>0.0005***</td>
</tr>
<tr>
<td>SIZE</td>
<td>0.013</td>
<td>0.006335</td>
<td>2.162</td>
<td>0.0325**</td>
</tr>
<tr>
<td>SIZE_BRD</td>
<td>-0.009</td>
<td>0.003940</td>
<td>-2.417</td>
<td>0.0171**</td>
</tr>
</tbody>
</table>

R-squared: 0.429762  
Adjusted R-squared: 0.393556  
F-statistic: 11.87004  
Probability (F-statistic): 0.000000 **

Notes:  *** Significant at α = 1%, ** significant at α = 5%, * significant at α = 10%.

From Table 2 above, the overall model fit can be considered good, with the F-statistic showing significance at .0000. The adjusted determination coefficient is 39.36%. Examining the variables, AGE, AUD and PROFIT are significant at α = 0.01. The variables SIZE and SIZE_BRD are significant at α = 0.05. AUD_COM is significant at α = 0.1. LEV and IND_BRD are not significant, even at α = 0.1. The variable IND_BRD is not significant, even at α = 0.1. Therefore, we can conclude that H1, H2, H4, H5, H7, H8 are accepted, while H3 and H6 are rejected.

**5 DISCUSSION**

This research provides several interesting results. Of the variables related to company characteristics, profitability, size and the age of company are shown to influence tax avoidance behaviour. Profitability presents a negative sign, which means the higher the profitability, the lower the effective tax rate, in line with the finding of Wahab and Holland (2012). This research also confirms the bonus plan hypothesis, namely that management will seek ways of maximizing financial performance by reducing
expenses, including tax expenses. Size presents a positive sign, which means the larger the size of company, the higher the effective tax rate, similar to the finding of Minnick and Noga (2010). This result is quite interesting as it seems to support political cost theory, according to which big companies will try to prevent negative reputational effects by not engaging in aggressive action. This research shows that companies aim to achieve two purposes simultaneously: maximizing financial performance while trying to avoid a negative reputation. The age of the company also shows a positive sign, which means that the older the company, the higher the effective tax rate, supporting political cost theory. Leverage does not significantly influence tax avoidance, in line with Minnick and Noga (2010) and Taylor and Richardson (2013). This research shows that managers might view debt as a burden for company performance (Gitman, 2006; Godfrey et al., 2013) and therefore the managers will choose to remove the burden rather than use it as a tax avoidance tool.

The corporate governance variables also show several interesting results. Of the four variables analysed, the size of the board of commissioners, the audit firm and audit committee influence tax avoidance. In terms of the size of the board, the sign is negative, meaning that the higher the number of commissioners, the lower the effective tax rate. This result is similar to that of Wahab and Holland (2012). This research also confirms Godfrey et al.’s (2013) view that boards of commissioners engage in tunnelling activities, increasing the wealth of majority shareholders. The variable for audit firm shows a positive sign, which means that companies using Big 4 audit firms tend to have a higher effective tax rate. This is in contrast to McGuire et al.’s (2013) research, possibly reflecting the context of Indonesia where Big 4 audit firms tend to be more conservative in performing audits and advise client to follow tax rules strictly, rather than engaging in tax avoidance. The audit committee variable also shows a positive sign, indicating that a greater number of audit committee members in a company leads to higher effective tax rate. This result shows that the audit committee plays a significant role in preventing aggressive tax behaviour. However, the proportion of independent commissioners is not significant, in line with Wahab and Holland’s (2012) research. Minnick and Noga (2010) stated that one of the possible reasons for this may be the ineffectiveness of the board structure. From Table 1 it is apparent that in Indonesia the proportion of independent commissioners is still below 40%, so boards are still dominated by internal commissioners, making it difficult for independent commissioners to conduct proper monitoring.

6 CONCLUSION
This research shows that in general there is a relationship between company characteristics and corporate governance in relation to tax avoidance practice. However, as we have seen in the discussion, several variables showed insignificant results. The overall result is, however, in accordance with theory, the literature and previous studies. Thus, this research provides insights into aggressive tax avoidance practices in Indonesia. Future research might add several more proxies to gain a better representation of company characteristics and corporate governance-related variables.

REFERENCES


