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Tax knowledge and tax avoidance: The case of mining companies listed on Indonesia

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Abstract

The purpose of this research is to know and analyze the influence of *tax knowledge* towards *tax avoidance*. The sample technique used is a *purposive sampling* from a method of *judgment non-probability sampling* and the analysis technique is using the *ordinary least square method*. The outcome of the research shows a significant influence of tax knowledge towards tax avoidance. A result of negative *beta coefficient unstandardized* indicates the higher tax knowledge owned by a top manager, the lower and even zero tax avoidance behavior is likely to happen. On the contrary, if the top manager has a lower tax knowledge, then the tendency towards tax avoidance behavior is high. The tax avoidance practice is chosen in order to achieve more profit for the company.

Keywords: Tax Knowledge, Tax Avoidance.

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1. Introduction

The tax avoidance practice involves a reduction of tax which are still within legal tax regulations to increase company's profitability. Generally, the practice takes advantage of weaknesses of tax regulations within a country.

The practice of tax avoidance generated a loss to a country and when it becomes aggressively adopted then it will cause a significant impact on the country's tax revenue. Tax avoidance is all kind of practices to modify a result in tax obligation's value through a regulated tax allowances or other special tax deduction scheme [1].

The practice of tax avoidance usually takes an advantage from tax regulation's weaknesses and will not violate the regulation itself. Other than increasing the company's profitability, the tax avoidance practice enables the manager to manipulate the company's ledger to distort the result for investor to see the real value of the company.

There are many phenomena of tax avoidance practice in all of the world. In Europe, European Union (EU) estimate the tax avoidance practise cost a one trillion Euro in 2012. UK also describe the practice is structurally organised, until the end of 2012, English taxation government HMRC (HM Revenue & Customs) scrutinised taxation reports of a few global companies.

Deputy Commissioner of Ministry of Finance Tax (Kemenkeu) state some evidence of the tax avoidance practice and estimated a loss of 68.7 trillion rupiah per year. Similar evidence is found by Tax Justice Network that Indonesia is estimated to suffer a loss up to US $ 4,86 billion per year.

In its report, titled *The State of Tax Justice 2020: Tax Justice in The Time Covid-19*, Tax Justice Network emphasise that the loss experienced by Indonesian government is because of tax avoidance behaviour by company operating in Indonesia. The behaviour often occurs from transactions amid parties that have a special privilege within the country or internationally, (national.kontan.co.id, 2020).

At present, it is known such practice is a little more difficult to happen because the tax regulation is getting stricter. More disciplines and regulation are implemented to close any loophole in the accounting system. However, we still need to be aware of such practice to anticipate and help the government building tax regulations avoid an aggressive tax avoidance practice.

Dyreng, et al. [2] mentioned that a suitable parameter for tax avoidance is a long-term scale (compounding calculation within 10 years). This long-term parameter is expected to offset *permanent difference* therefore truly represents a tax avoidance behaviour to Indonesian business.

Tax avoidance practice directly impact on the country's revenue. Additionally, Tax regulation No. 36/Year 2008 article 6:2 in income revenue tax, stated a company which make a loss in one financial year period can carry forward the amount to the next five financial years. The loss amount will be prorated and deduct company's profitability thus effectively reduce the tax payable amount.

Based on the background situation above, the research will identify "Does tax knowledge have a significant impact on tax avoidance?"

2. Review Literature

2.1. Agency Theory

Jensen and Meckling [3] described the agency relationship is a contract between one person (employer/principal) who employs another person (agent) to perform a number of services and provide authority in decision making.

There are several ways to govern the action of the agents in relation to tax management activities which by evaluating the result of a company's financial statements using the comparison ratio of financial ratio and aggressiveness actions that carried out by the agents. The ratio used is the comparison of company's ETR from the tax calculation and the pre-tax profit.

2.2. Tax Knowledge

Tax knowledge is needed to increase public awareness, specifically in the field of tax law, the role of taxes in national development and especially to understand how and where the government, Obongo [4] defines tax knowledge as the ability of taxpayers to know tax regulations, for the tax rates regulated by the law as well as tax benefits for their lives.

Taxpayers must have a knowledge of general taxation regulations and procedures, these are vital to develop taxpayer's compliance behavior, *because how can taxpayers comply if they do not know the tax regulations?* [5].

In this research, tax knowledge is measured using a dummy variable, which is a value of 0 when the CEO does not have an accounting education background and a value of 1 if the CEO has an accounting education background.

2.3. Tax Avoidance

Tax avoidance is an effort made to reduce the tax payable, which is still legal but could be risky for the company due to fines by the government as well as a bad reputation in the eyes of the public, Kalbuana, et al. [6]. Measurement of tax avoidance can be calculated using a proxy from the effective tax rate (ETR), the value reflects tax avoidance as well as a calculated ratio by dividing the tax payable and gross profit.

The assumption to know if a company has done a tax avoidance practice, is a low ETR value and the determinant factor show a negative *unstandardized beta coefficient* value against ETR, this can be interpreted also that the ETR ratio has a positive correlation with tax avoidance practice as well as the other way around.

3. Research Methodology

The research is *explanatory research* which study between association and causality. The analytical technique used is *ordinary least square analysis* with *software statistic for windows* SPSS version 26. The sample technique used is *purposive sampling-judgment sampling* with *non-probability sampling method*. The number of companies included in the mining sector listed on the IDX in the 2020 period is 47 companies whereas the samples used in this research were 41 companies.

3.1. Statistic Test

3.1.1. Description of Sample

The sample companies in this research are as presented below.

Table 1.
Research Sample.

No	Sample Criteria	Sample
1	Mining Sector Companies listed on the IDX for the 2020 period	47
2	The companies have relevant data with research needs	43
3	Samples with symptoms of heteroscedasticity	41

Source: IDX Data.

Based on the *purposive sampling* technique used, the number of samples used in this research were 41 companies.

3.1.2. Classical Assumptions

The results of using the classical assumptions are as presented below.

3.1.2.1. Residual Normality Test

It is shown that the dots spread around the diagonal line and their distribution follows the direction of the diagonal line. Therefore, the regression model in this study has met the normality assumption test and the data is feasible to be used in the next analysis stage.

Table 2.
Durbin-Watson.

Model Summary[b]	
Model	**Durbin-Watson (DW)**
1	2.303

Note: a. Predictors: (Constant), Tax Knowledge
b. Dependent Variable: Tax Avoidance.

3.1.2.2. Autocorrelation Test

It is shown that DW value is 2,303. Furthermore, this value will be compared with the value of the DW table with a significance of 5% in a sample of 41 companies, with the number of independent variables being 1 or K = 1, namely 1.41. Therefore, the dU value is 1.5490. The DW value of 2.303 is greater than the upper limit (dU) which is 1.5490 and less than (4-dU) which is 4 – 1.5490 = 2.451. Thus, it can be interpreted that the data in this research did not find any autocorrelation symptom. Consequently, the data in this study is suitable for use in the next stage of analysis.

3.1.2.3. Heteroscedasticity Test

It is shown that the dots spread in groups and form a certain clear pattern and the distribution did not randomly spread, either above or below the number 0 on the Y axis. Therefore, it can be concluded that the data in this study is symptomatic of heteroscedasticity. This is as a result of using the dummy tax knowledge indicator which refers back to the basic theory of managerial behavior. Thus, this data is suitable for use in the next stage of analysis.

Table 3.
Correlation coefficient.

		Tax Avoidance	**Tax Knowledge**
Pearson Correlation	Tax Avoidance	1.000	-0.331
	Tax Knowledge	-0.331	1.000
Sig. (1-tailed)	Tax Avoidance	.	0.017
	Tax Knowledge	0.017	.
N	Tax Avoidance	41	41
	Tax Knowledge	41	41

3.1.3. Ordinary Least Square Analysis

3.1.3.1. Correlation Coefficient

It is shown that the value of sig (1-tailed) is $0.017 \leq \alpha$ 0.05. It can be interpreted that the tax knowledge variable has a significant correlation with the tax avoidance variable.

Table 4.
Determinant coefficient.

Model Summary[b]		
Model	**R**	**R Square**
1	0.331[a]	0.109

Note: a. Predictors: (Constant), Tax Knowledge
b. Dependent Variable: Tax Avoidance.

3.1.3.2. Determinant Coefficient

It is shown that the R square value of 0.109 or 10.90% indicates that the tax knowledge variable can only explain the variation of its effect on tax avoidance by 10.90%, the remaining of 89.10% is explained by other variables that not included in the research and result in error value. While the R value of 0.331 or 33.10% indicates the level of correlation between the tax knowledge and tax avoidance variable is low.

Table 5.
Ordinary Least Square Analysis.

Coefficients[a]						
Model		**Unstandardized Coefficients**		**Standardized Coefficients**	**t**	**Sig.**
		B	**Std. Error**	**Beta**		
1	(Constant)	0.892	0.293		3.047	0.004
	Tax Knowledge	-0.736	0.337	-0.331	-2.187	0.035

Note: a. Dependent Variable: Tax Avoidance.

3.1.3.3. Ordinary Least Square Analysis

It is shown that the tax knowledge variable has a significance of 0.035 ≤ sig α 0.05. It can be interpreted that the tax knowledge variable has a significant influence to the tax avoidance. The unstandardized beta value of -0.736 can be interpreted as if the tax knowledge variable increases by one unit, then the tax avoidance variable will decrease by 0.736 times and this applies the other way around.

4. Result

Based on the results of the statistical test above, it can be explained that the tax knowledge variable has a significant influence on tax avoidance. This indicates that the higher the education of a CEO in a company which reflected in his understanding of accounting system, the lesser of behavior that may lead to tax avoidance practice in fulfilling the company's obligation to pay corporate income taxes and this applies vice versa.

This can be interpreted that if the individual who has a position as CEO in a company has an accounting study background, then the tendency of his or her behavior to take tax avoidance practice is small or low. On the other hand, the CEO who has no accounting study background, tends to perform tax avoidance practice.

The reason for taking tax avoid practice is because of a conflict of interest, since a CEO is responsible to please all stakeholders in a company by always presenting a positive performance or generating a positive number of profitability result. Typical misconduct that is often carried out by CEOs to achieve their goals, is to modify their financial reporting, it can be in the form of tax avoidance, earnings management, or other forms of accounting fraud.

The implication of tax avoidance is often related to the behavior of CEOs who are too confident. Hsieh, et al. [7] in their research state that the overconfident CEOs tend to influence tax avoidance by facilitating and executing their overconfident decision to tax avoidance. In particular, firms are more likely to engage in tax avoidance practice when they have an overconfident CEO.

The overconfidence CEO is a tendency of a CEO to estimate subjectively of their high capability and value [8]. Tax avoidance depends on a combination of investment in tax avoidance strategies, financial reporting to tax authorities and forecasting responses from tax authorities, [1, 9-11].

Tax avoidance consists of reduction or avoidance of tax payable and reduction of cashflows. Tax avoidance evasion costs include explicit tax costs, reverse tax positions and various other costs such as tax strategy implementation costs (promoter and attorney fees), implicit taxes, IRS audit fees and other costs, [11] and lead to earnings management behavior. , [12-14].

Executive compensation can also explain its effect on CEO behavior in tax avoidance. Agency costs (Bradshaw, Liao, Ma (2019), the company’s culture, information asymmetry [11] incentive given to CEOs are proven to increase tax avoidance behavior by companies [15, 16].

Thus, it can be interpreted that the use of a dummy variable, which is the characteristics of CEO, as an indicator used to measure the tax knowledge variable, either directly or indirectly, can reflect the tax knowledge variable very well. Furthermore, the tax knowledge variable can clearly prove its effect on tax avoidance.

5. Conclusions

Empirically study, the tax knowledge variable is proven to show its effect on the tax avoidance variable. The indicators of overconfidence CEO, executive compensation, informative asymmetry, company's culture can reflect tax knowledge variables very well.

The suggestion that can be given is for mining companies to improve the education qualifications in CEO level, which is to mandate an accounting degree as the education background for such position. This would minimise a conflict of interest and managerial behaviours to manipulate the company's financial statements, and also to have more awareness on the tax law and tax payable regulations.

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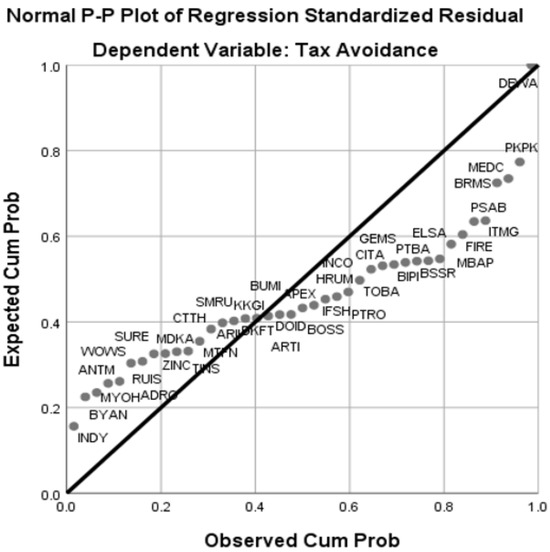
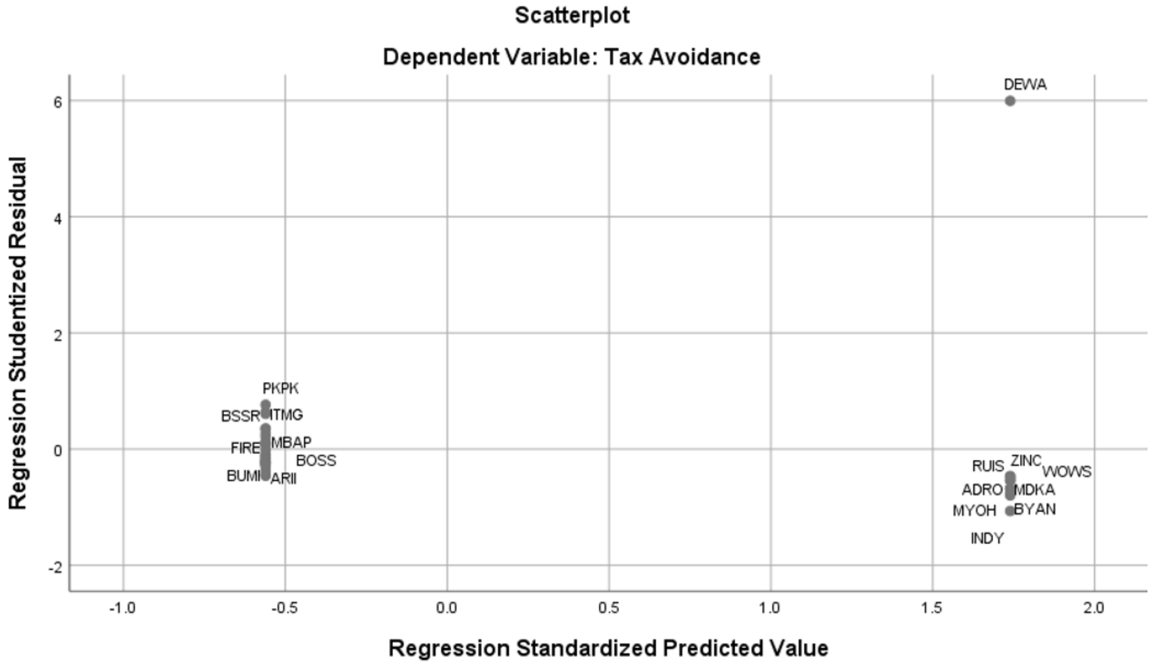
Appendix



Appendix 1.
Residual Normality.



Appendix 2.
Heteroscedasticities.