

Do the Executive Characters and Leverage can affect Tax Avoidance?: Evidence from Indonesia Mining and Coal Listed Companies

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Abstract: This study aims to determine whether the executive characters and leverage can affect tax avoidance in Indonesia Mining and Coal Listed Companies. The factors tested in this study were the executive character and leverage with the proxies corporate risk and debt to equity, respectively, as independent variables. Meanwhile, tax avoidance is proxied by cash effective tax rate as the dependent variable. The research data are taken from 112 financial statements of 28 Indonesian Mining and Coal Companies that listed on the Indonesia Stock Exchange in the period 2016 - 2019. The data are analyzed by using panel data regression analysis. The research results show that that executive characteristic has significant positive effect on tax avoidance. In contrast, the leverage has not effect on tax avoidance.

Keywords: Executive Character, Leverage, and Tax Avoidance

1. Introduction

Generally, the terms of tax avoidance is related to a scheme that aims to minimize the tax payment by utilizing the loopholes of taxation provisions in a nation. Conceptually, tax avoidance scheme is actually legal or legitimate because it does not violate taxation provisions. Most companies take advantages from unclear and ambiguity of tax regulations in order to obtain a favorable tax outcome (Dyreng, Hanlon, & Maydew, 2010). Hence, tax avoidance occupies cryptic area between tax compliance and tax evasion. However, this tax avoidance practices can lead to reduced tax revenue received by the country.

In Indonesia, tax avoidance practices are a very serious problem for the nation revenues. The Indonesian Forum for Budget Transparency indicates that the amount losses from tax avoidance practices approximately are IDR 110 Trillion by conducted of the domestic and foreign companies, especially from companies in the mineral and coal sector (Himawan, 2017).

Currently, Indonesia is the fifth largest of coal producer in the world with a production of 485 million tons of coal or 7.2% of total world production. In addition, Indonesia is the second largest exporter in the world after Australia. Approximately, 80% of the national coal production is destined for export. However, despite the fantastic economic value generated by the coal mining industry, it turns out that the tax contribution is very minimal. For instance in 2016, data from the Ministry of Finance of the Republic of Indonesia showed that the tax ratio contribution for the mineral and coal mining sector was only 3.9%, while the national tax ratio was 10.4%. The low tax ratio cannot be separated from the tax avoidance problem by the coal mining players. It was supported by research from Maftuchan (2019; Aydin et al., 2019) there were 4,532 out of 8,003 the coal mining taxpayers have not submit their tax paid report in year of 2015. This has resulted in minimal national tax revenue from the mining and coal sector.

Moreover, Moody's Investor Service stated that the leverage matrix of mining companies in Indonesia will suffer the most compared to other companies in the Asia Pacific, due to volatility in commodity price until year of 2020. It has an impact on Indonesian mining company revenues declines and weakens the ability to pay debts and debt interest. This condition is indicated by the high leverage of the company as measured by debt to equity ratio. The use of long-term debt causes the company to pay fixed expenses in the form of interest expense. In this condition, the company can take advantages to reduce its taxable income. The higher of leverage ratio will increase the possibility to conduct tax avoidance, and vice versa. Hence, this phenomenon indicates that many Indonesian tax payers in mining and coal companies still have practicing tax avoidance.

Tax avoidance actions that are taken by companies mostly are carried out by their executive policies through tax planning (Zain, 2008)(Zain, 2008 and Low, 2008). In general, the executive characteristics in decision making can be divided into two, namely risk averse and risk taker (Coles, Daniel, & Naveen, 2006; Maluleke et al., 2019). The executive as a risk taker with the point of view that the greater risk that is taken, the big benefits that will be

obtained. The benefits obtain by the risk taker characteristics in such as the abundant of wealth, high income, job promotion; and greater authority or power.

This research is motivated by the phenomena that occurred in Indonesia context and inconsistencies occurred in the previous research. In Indonesia, there have been many studies in tax avoidance practices. Various studies have linked the executive characteristics on tax avoidance practices with mixed results. Several research results show the positive effect of executive characteristics on tax avoidance (Aprilia & Majidah, 2020; Khoirunnisa, Raja Adri Satriawan, & Rofika, 2016; Oktamawati, 2019; Prawati & Hutagalung, 2020; Rahmawati, 2017; Surachman, 2017; Swingly & Sukartha, 2015). The negative effect has been shown by research Yuliani (2018). Meanwhile, other researchers showed that the executive characteristics have no effect on tax avoidance (Noviani, Diana, & Mawardi, 2018; David & Grobler, 2019)

Likewise, previous research that linked leverage to tax avoidance has shown mixed results. The positive results have been showed by several researchers (Aprilia & Majidah, 2020; Oktamawati, 2019; Yuliani, 2018). In contrast, the negative result have been found by Swingly and Sukartha (2015). Meanwhile, Rahmawati (2017) and Khoirunnisa et al. (2016) have fail to found leverage has influence on tax avoidance.

2. Research Framework and Hypothesis

The influence executive character on tax avoidance

An organization is structur of chain of command with a chief executive officer (CEO) at the top. Executives are individuals who have very important positions with the authority and power to regulate operations and direction of the company. Therefore, executives must have capable in making decisions and policies according to different characters, qualities and styles in leading the company (Coles et al., 2006; Govindarajan & Anthony, 2012).

Executive character will shows how the actions taken by leaders when faced with a risk. The decision taken will reflect whether the executive is someone who dares to take risks or not. Company risk is a reflection of the policies adopted by company leaders (Paligorova, 2010). Hence, the policy taken indicates whether they have character as a risk taker or risk averse (Coles et al., 2006; Lewellen, 2006). It can be interpreted that higher of company risk, it more reflects the character executive as risk takers. Conversely, the lower of company risk, it more reflects character executive as risk averse.

In addition, executives can influence decision making in tax avoidance by adjusting the "tone at the top" with regard to company activities (Swingly & Sukartha, 2015). Therefore, the executive who have character as risk takers, the more higher possibility to practicing tax avoidance. Conversely, executives who are not risk takers, the lower likelihood that executive will practice tax avoidance.

The aforementioned statement inline and support by the previous research that found executive character has positive effect on tax avoidance (Aprilia & Majidah, 2020; Khoirunnisa et al., 2016; Oktamawati, 2019; Prawati & Hutagalung, 2020; Rahmawati, 2017; Surachman, 2017; Swingly & Sukartha, 2015). Hence, this study has hypohthesis that stated as follow:

H₁: Executive character has positive influence on tax avoidance

The influence leverage on tax avoidance

The leverage ratio is a measurement in regard to the ability of company to pay off all short-term and long-term debt obligations. This is shown by comparing the sources of company financing through debt and equity (Rahmawati, 2017; Deshko, 2018). The use of long-term debt as a supply of corporate financing creates an commitment to compensate with fixed expenses in the form of interest expenses. It is possible for the company to take advantage of this situation to reduce its taxable income. Thus, when the leverage ratio is higher, the greater the occasion for company to conduct tax avoidance. In conversely, when company has lower leverage ratio, the lower possibility for the company to practice tax avoidance. The aforementioned statements were supported by the previous research that found leverage has positive influence on tax avoidance. Hence, the hypothesis is stated below:

H₂: Leverage has positive influence on tax avoidance

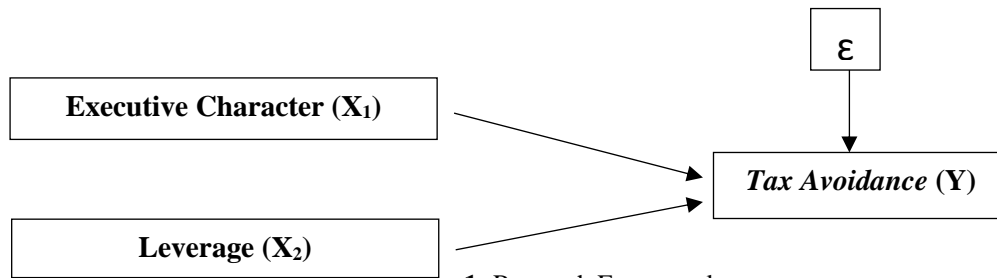


Figure 1: Research Framework

3. Research Methodology

The data consists of 188 observations from annual reports and financial statements based on a population of 47 Indonesian mining and coal companies listed in Indonesia Stock Exchange from period 2016 to 2019. The data are obtained through the official website of Indonesia Stock Exchange (www.idx.co.id) and the official websites of the respective companies.

The research sample was obtained by nonprobability sampling with purposive sampling technique with the consideration that the company has published full complete annual report and financial report for 4 consecutive years (2016-2019). The final sample consisted of 112 observations where 19 out of 47 mining and coal sector companies were excluded from observation because they did not publish complete financial reports and annual reports.

This research consists of two independent variables and one dependent variable. The independent variables are executive Characters (X_1) which is proxied by corporate risk which is a reflection of the character of executive (Paligorova, 2010; Bermejo, 2019) and leverage (X_2) which is proxied by debt to equity ratio. Meanwhile, the dependent variable is tax avoidance (Y) which is proxied by cash effective tax rates (CETR). CETR has been used to evaluate the aggressiveness of a company's tax planning (Cheng & Nasir, 2010; Dyreng et al., 2010; Chunxiang & Baccanello, 2019). The research data are the panel data which is a combination of time series and cross sectional data. Therefore, the data analysis technique employs panel data regression analysis techniques.

There are three methods that can be used to estimate panel data regression models, namely common effect, fixed effect, and random effect. In order to determine the appropriate model, this research uses the Chow Test, Hausman Test, and the Lagrange Multiplier Test (Breusch & Pagan, 1980; Hausman, 1978; Park, 2011; Aksu & Reyhanlioglu, 2019). The regression equation for this research panel data is shown below:

$$TA_{i,t} = \beta_0 + \beta_1 EC_{i,t} + \beta_2 Lev_{i,t} + \epsilon_{i,t} \dots (1)$$

where

- $TA_{i,t}$ = Tax avoidance for firm i in period t
- $CE_{i,t}$ = Executive character for firm i in period t
- $Lev_{i,t}$ = Leverage for firm i in period t
- $\epsilon_{i,t}$ = the error terms

4. Findings

Statistic Descriptive

Table 1: Statistic Descriptive

	CETR (Y)	CorRisk (X1)	DER (X2)
Mean	0.342723	0.078782	1.211562
Median	0.297302	0.051837	0.805143
Maximum	0.988154	0.394995	5.976233
Minimum	0.000410	0.006167	0.118670
Std. Dev.	0.185274	0.076558	1.089216
Skewness	1.154151	1.842062	1.875800
Kurtosis	4.708939	6.162315	7.122331
Jarque-Bera	38.49409	110.0074	144.9846
Probability	0.000000	0.000000	0.000000
Sum	38.38501	8.823586	135.6950

Sum Sq. Dev.	3.810243	0.702565	131.6894
Observations	112	112	112

Table 1 show that the corporate risk (X_1) has the mean value is 0.078782 with a standard deviation value is 0.076558. It can be concluded that the mean value is greater than the standard deviation value which indicates that the sample distribution data is good. The skewness and kurtosis values are 1.842062 and 6.162315, respectively. These indicate that the data is close to normal distributed.

Moreover, Table 1 also show that the debt to equity ratio (X_2) has the mean value is 1.211562 with the standard deviation value is 1.089216. It can be concluded that the mean value is greater than the standard deviation value which indicates that the sample distribution data is good. The skewness and kurtosis values are 1.875800 and 7.12331, respectively. These indicate that the data is close to normal distributed.

Furthermore, Table 1 also show that cash effective tax rate (Y) has the mean value is 0.342723 with the standard deviation value 0.185274. It can be indicated that that the mean value is greater than the standard deviation value which indicates that the sample distribution data is good. The skewness and kurtosis values are 1.1541 and 4.708939, respectively. These indicate that the data is close to normal distributed.

5. Analysis Regression Panel Data

This study conducted Chow-test or likelihood ratio test (F test) to determine whether common (OLS) or fixed effect model would be suitable. The result will be described below in Table 2:

Table 2: Chow Test

Redundant Fixed Effects Tests
Equation: EN_FIXED_EFFECT
Test cross-section fixed effects

Effects Test	Statistic	d.f.	Prob.
Cross-section F	2.575352	(30,79)	0.0004
Cross-section Chi-square	76.392620	30	0.0000

This study noticed that the p-value < chi-square and for both models were significant (p-value < 5%). It follows the test criteria. Hence, it was appropriate to use the fixed effect model. However, this study should follows to use the second test for the Hausman test.

This Hausman test will provide information in regard to the regression model whether the fixed effect model or random effect model is most appropriate. This study found that p-value (Prob) was 0.7019 (higher than 0.05). It means the random effect model was more appropriate than the fixed effect model. The Hausman test result will be described below in Table 3:

Table 3: Hausman Test

Correlated Random Effects - Hausman Test
Equation: Untitled
Test cross-section random effects

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	0.707996	2	0.7019

Hence, this study continues to use Lagrange Multiplier (LM) test. The LM test is shown in Table 4. The test provides result that Breusch-Pagan Cross-section value is adalah 0.0024 (less than 0.05). It means the most appropriate model is random effect model.

Table 4: Lagrange Multiplier test.

Lagrange Multiplier Tests for Random Effects
 Null hypotheses: No effects
 Alternative hypotheses: Two-sided (Breusch-Pagan) and one-sided (all others) alternatives

	Test Hypothesis		
	Cross-sectio...	Time	Both
Breusch-Pagan	9.187472 (0.0024)	0.709777 (0.3995)	9.897250 (0.0017)
Honda	3.031084 (0.0012)	-0.842483 --	1.547575 (0.0609)
King-Wu	3.031084 (0.0012)	-0.842483 --	0.120699 (0.4520)
Standardized Honda	3.333695 (0.0004)	-0.570170 --	-2.507108 --
Standardized King-Wu	3.333695 (0.0004)	-0.570170 --	-2.576507 --
Gourieriou, et al.*	--	--	9.187472 (< 0.01)

*Mixed chi-square asymptotic critical values:

1%	7.289
5%	4.321
10%	2.952

This study also conducted a multicollinearity test for independent variables. The result shows that the correlation among the independent variables is -0.140765. It does not exceed 0.90 which is no correlation among the independent variables. Furthermore, heteroscedasticity test results using the Glejser test found that significancy values of independent variables were higher than 0.05. It indicates no heteroscedasticity problems in this study.

Table 5: Coefficient Determination Weighted Statistics

R-squared	0.456766	Mean dependent var	0.21400
Adjusted R-squared	0.281166	S.D. dependent var	5
S.E. of regression	0.168434	Sum squared resid	0.17110
F-statistic	2.608501	Durbin-Watson stat	2
Prob(F-statistic)	0.048238		3.09234
			0.95970
			3

Table 5 shows the F statistic value is 2.6085, and the significance with Prob (F-statistic) is 0.048. The R² and adjusted R² values are 0.456 and 0.281. The R² value can be interpreted that the dependent variable is explained by 45.6% of the independent variables' variation, while the other 55.6% are not examined in this study.

Table 6: Panel Data Regression

Dependent Variable: Y
 Method: Panel EGLS (Cross-section random effects)
 Date: 12/21/20 Time: 17:51
 Sample: 2016 2019
 Periods included: 4
 Cross-sections included: 31
 Total panel (unbalanced) observations: 112
 Swamy and Arora estimator of component variances

Variable	Coefficie nt	Std. Error	t-Statistic	Prob
				.

					0.00
C	0.418369	0.039629	10.55717		00
	-				0.02
EC	0.704701	0.308803	-2.282042		44
	-				0.61
Lev	0.003895	0.007646	-0.509411		15
					Rho
Effects Specification			S.D.		
					0.32
Cross-section random				0.115655	21
					0.67
Idiosyncratic random				0.167787	79

Table 6 shows the panel data regression equation model as follows:

$$TA_{i,t} = 0.418369 - 0.704701 EC_{i,t} - 0.003895 Lev_{i,t} + \epsilon_{i,t}$$

Table 6 shows that the executive character coefficient has a negative value of -0.704701 with the probability value of 0.0244. It means that the executive variable variable has a significant negative effect on tax avoidance. It means the first hypothesis is accepted. Moreover, the coefficient of leverage has a negative value of -0.003895 with probability value 0.6115, which is the leverage variable has not significant negative affect on tax avoidance. Hence, the second hypothesis is rejected.

6. Discussions

The influence executive character on tax avoidance

The result indicates that corporate risk had a negative effect on the cash effective tax rate. This result explains when the value of corporate risk increases, which indicates the executive characteri as a risk taker; it will decrease in the value of the cash effective tax rate in which tax avoidance practices is happens. This result was in line with the research hypothesis that executive character has a positive effect on tax avoidance. When the characteristics of executive are becoming risk takers, the tendency of company are engaging in the tax avoidance practices is higher, and vice versa.

The result were in line and support the previous studies which stated the executive character proxied by corporate risk produces a positive influence on tax avoidance (Aprilia & Majidah, 2020; Khoirunnisa et al., 2016; Oktamawati, 2019; Prawati & Hutagalung, 2020; Rahmawati, 2017; Surachman, 2017; Swingly & Sukartha, 2015).

The influence leverage on tax avoidance

The result shows that the debt to equity ratio has not negative significant effect on the cash effective tax rate. This means that leverage has no effect on tax avoidance. This result is not in line with the discussion from previous theory which suggests that leverage has a positive effect on tax avoidance. The result of this study indicates that the high or the low leverage ratio of a company is not become a benchmark for companies to practice tax avoidance. This leverage ratio arises because the company makes loans to third parties. This loan from third parties creates an interest expense that can reduce the tax burden of a company. However, in this context, the company does not direct to make a loan as much as possible to a third party to reduce its tax burden.

This result in line with previous studies from Rahmawati (2017) and Khoirunnisa et al. (2016) which stated the leverage has not influence on tax avoidance.

7. Conclusions

This study found that the executive character has positive significant effect on tax avoidance. It can be called that executive with risk taker character plays a dominant factor in influencing a company to conduct tax avoidance practices in Indonesian mining and coal. The executives with risk taker character conducts tax avoidance practices by setting company’s policies through its tax planning with the big benefits that they want obtain.

In construct, this study failed to found the positive influence leverage on tax avoidance. It shows that leverage has not negative effect on tax avoidance. It is such conversely with the theories and the previous research findings. However, this study argue that is happened in Indonesia mining and coal companies due to the high of leverage is not become the trigger for the company to maximasing their loan to third party in order to reduce tax burden.

This study has shortcoming in regard to limitation of determinat variables. Future research should be consider many other factor that will be enriche conceptualization of factor for tax avoidance practices.

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