Jurnal Ekonomi Modernisasi

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Jurnal Ekonomi Modernisasi

Will Problems Arise When Banks are Exempted from Thin Capitalization Regulation?

Arfah Habib Saragih*

Department of Fiscal Administration Science, Faculty of Administrative Science,
Universitas Indonesia, Indonesia

Abstract

This research was intended to provide empirical evidences that the exemption of banks from Minister of Finance Decree Number 169/PMK.010/2015 did not raise any significant problem on banks tax avoidance which was measured by effective tax rates. Quantitative method was used in this study by conducting regression-fixed effects method on unbalanced panel data. This study found that thin capitalization in banks did not impact effective tax rates significantly. Present research also found that the banks size and profitability were other determinants of the level of tax avoidance in the banks sample. Bank size and profitability had a significant and negative effect on effective tax rate.

Keywords: thin capitalization, debt-to-equity ratio, tax avoidance, effective tax rate

Abstrak

Penelitian ini bertujuan untuk memberikan bukti empiris bahwasanya pengecualian bank dari Peraturan Menteri Keuangan Nomor 169/PMK.010/2015 tidak menimbulkan masalah signifikan pada penghindaran pajak bank yang diukur dengan tarif pajak efektif. Metode yang digunakan dalam penelitian ini adalah metode kuantitatif dengan regresi data panel metode -*fixed effect*. Studi ini menemukan bahwa *thin capitalization* pada bank tidak berdampak signifikan pada tarif pajak efektif bank sampel. Hasil studi juga menemukan bahwa ukuran dan profitabilitas bank adalah faktor penentu tingkat penghindaran pajak pada bank. Ukuran dan profitabilitas bank memiliki dampak negatif signifikan terhadap tarif pajak efektif.

Kata kunci: *thin capitalization,* rasio utang terhadap modal, penghindaran pajak, tarif pajak efektif

Alamat korespondensi*:
Ilmu Administrasi Fiskal, Fakultas Ilmu Administrasi, Universitas Indonesia
Jl. Prof. Dr. Selo Soemardjan, Depok, Indonesia
e-mail: arfah.habib11@ui.ac.id

Introduction

The Government has been extremely reliant to state revenue sourced from the taxation sector to date. Numerous efforts have been made to increase revenue from other sectors. One of the efforts is enacting a Decree on the stipulation of debt-to-equity ratio for income tax calculation purposes. This Decree has, in fact, existed since 1984, but its implementation has been suspended. The Minister of Finance Decree Number 1002/KMK.04/1984 set the maximum debt-to-equity ratio at three to one (3:1). On September 9, 2015, the Minister of Finance Decree Number 169/PMK.010/2015 (MFD-169) was officially stipulated promulgated by the Government and set the maximum debt-to-equity (DER) at four to one (4:1). The MFD-169 has been effective since tax year 2016 with exemption granted to some tax payers, such as bank tax payers, financing institution tax payers, insurance and reinsurance tax payers, oil and gas mining, general mining and other mining tax payers as well as tax payers conducting businesses in the infrastructure sector, due to the nature of their businesses that are characterized with financing predominantly sourced from debt rather than equity. However, although banks were allowed flexibility to operate at DER exceeding four to one, the level of tax avoidance they practiced should be watched out for and evaluated by regulators for them to reduce incentives for banks to prevent them from practicing tax avoidance in the future.

Having contrasting objective with that of the Government, firms typically cut down expenses to minimum, including those for paying tax. This has led to an agency conflict. Jensen & Meckling (1976) as well as Zimmerman (1978) discussed this matter in the agency theory. This theory describes that in fulfilling a contract, some parties agree to perform their respective roles as appropriate. A principal is the authorizer, while an agent is the party receiving the authority. The interest conflict highlighted in present research is the conflict between corporate management and tax authorities as representatives of the Government. This conflict occurs because corporate management attempts to avoid payment through thin capitalization (high DER) (Taylor and Richardson, 2013; Lietz, 2014), while the Government intends to optimize tax revenue from firms by supressing thin capitalization through the enactment of the Minister of Finance Decree Number 169/PMK.010/2015 (MFD-169).

Myers (2001) developed a trade-off theory in capital structure. This theory explained that the company will exercise debt up to some level of debt, when tax shield arises from debt is equal to financial distress cost (such as bankruptcy cost, organization cost, and agency cost). This theory implies that the company cannot use 100% of its financing by issuing debts. The MFD-169 officially promulgated by the Government also related to public policy theory. Public policy was created to solve arising problem in government institutions (Mustopadidjaya, 2002). This policy then need to be evaluated whether effective to be applied. Based on Dunn (1994), the process of public policy analysis covered some activities, namely planning the agenda, formulating, adopting, implementing, and evaluating the policy. The author used these theories as grand theory to construct the study and explain the phenomenon on thin capitalization and tax avoidance behaviour on banks samples. OECD (2012) defined thin capitalization as a form of capital structure predominantly from debt financing rather than equity financing. Financing in the form of debt is most often than not favoured by firms due to tax incentives in the form of tax shield on interest expense (Sherif & Erkol, 2017). Large amount of interest-bearing debt leads to greater amount of interest deductible in the taxable income calculation. Consequently, the

amount of tax payable by the firms to the state is reduced, and the state's tax revenue subsequently declines.

Thin capitalization is one way to avoid tax (Taylor & Richardson, 2013; Lietz, 2014). Corporations apply thin capitalization that is characterized with the tendency of higher debt-to-equity ratio to lead to a higher level of tax avoidance. Hanlon & Heitzman (2010) as well as Lietz (2014) defined tax avoidance as an action taken by a firm to reduce tax payable explicitly Richardson in a long term (Dyreng *et al.*, 2008). To measure the level of tax avoidance, effective tax rate (ETR) is frequently used as a variable. The lower the ETR, the higher the level of tax avoidance. ETR has an advantage, in that it is capable of capturing various tax incentives and changes in corporate tax rates (Richardson & Lanis, 2007; McGuire et al., 2014). To suppress thin capitalization, the Government officially enacted the Minister of Finance Decree Number 169/ PMK.010/2015 (MFD-169) starting from tax year 2016. Interestingly, banking and financing industries as well as some other industries are excluded from the Decree as they have been subject to other Decrees. Moreover, the nature of banking business is different from that of other businesses, in that debt is dominant over equity. With the exclusion of banks from MFD-169, banks remain operating at high DER. Firms with high DER (high degree of leverage) tend to have high levels of tax avoidance as they enjoy incentives such as tax shield over interest (Knauer & Sommer, 2012).

Previous studies in Indonesia concluded that there is no significant effect of leverage on tax avoidance. Kurniasih and Sari (2013) used CETR (cash effective tax rate) as dependent variable and profitability, leverage, composition of independent commissioner, the present of audit committee, size, and fiscal loss as independent variables. They found that leverage did not have any impact on tax avoidance represented by CETR. Ngadiman

& Puspitasari (2014) confirmed the same result as Kurniasih and Sari (2013). Ngadiman and Puspitasari (2014) employed CETR (cash effective tax rate) as dependent variable and size, leverage, and intensity as independent variables. Moreover, Harjito *et al.* (2017) also found that leverage had no significant effect on tax avoidance because the firms could not maximize the benefit from maximization of using debts. Harjito *et al.* (2017) used a regression model with ETR as dependent variable and size, leverage, capital intensity, and corporate social responsibility as independent variables. The difference between this research from the previous studies was the author tested a new Decree released by the government (the Minister of Finance Decree Number 169/ PMK.010/2015 (MFD-169) starting from tax year 2016), by using banks sample listed on Indonesia Stock Exchange, and use ETR as dependent variable, while leverage, banks size, profitability, and stock price to book value as independent variables. It is a kind of event study because the author tested the effectiveness of a new rule employed by the government where the banks are exempted from the Decree. The significance and contribution of present research include to add a reference and enrich literature pertaining to debt-to-equity ratio and tax avoidance by banks listed on the Indonesia Stock Exchange. Additionally, present research also provides empirical evidences for an event study for the effectiveness of Decrees issued by the Government. Findings are expected to help figure out whether the Government has issued an effective Decree because despite the fact that banks are allowed flexibility to operate at DER exceeding four to one, it does not necessarily mean an increase in their level of tax avoidance. It was also found out that tax avoidance practiced by banks is also influenced by factors other than DER that regulators

must be wary of, monitor and evaluate to reduce incentives that allow banks to commit tax avoidance in the future.

Although banks are excluded from MFD-169, regulators must stay alert and periodically carry out supervision and monitoring due to the fact that banks enjoy the same incentives as those for non-financing corporations in terms of capital structure for tax avoidance purposes (Ghosh & Chatterjee, 2018). Given the background above mentioned, we were genuinely interested in providing empirical evidences for the question of whether that is the case with banking industries. We were also interested in finding out whether the Decree did not significantly result in a greater possibility of tax avoidance by banks. Thus, the research question of this study was whether the exemption of banks from the Decree that sets a maximum DER at 4:1 will significantly increase tax avoidance activity by banks. The objective of this research was to provide an answer for the research question whether the exemption of banks from the Decree that sets a maximum DER at 4:1 will significantly increase tax avoidance activity by banks.

The research question of this study was whether the exemption of banks from the Decree that sets a maximum DER at 4:1 will significantly increase tax avoidance activity by banks. This research investigated whether the tax avoidance activity by banks significantly increases if banks are allowed to operate at DER greater than 4:1. Debt financing is most often than not favoured by firms due to tax incentives in the form of tax shield on interest expense (Sherif & Erkol, 2017). Large amount of interest-bearing debt leads to a greater amount of interest deductible in the taxable income calculation. Although the nature of business conducted by banks is different from that conducted by non-financing companies, banks enjoy the same incentives as those for non-financing corporations in terms of

capital structure for tax avoidance purposes (Ghosh & Chatterjee, 2018). The higher the leverage, the higher tax avoidance (indicated by lower ETR). Hence, the main hypothesis to be tested is as follows:

H1: There is a significant effect of thin capitalization practices on effective tax rates of banks listed, before and after the MFD-169 implemented

Methods

In general terms, this section elaborates the research methods employed and the hypotheses developed to answer the research problem. The population engaged in this research consisted of all firms in Indonesia, while the sample consisted of banks listed on the Indonesia Stock Exchange since 2009 until 2016. The sample was taken using the purposive sampling method with the following criteria: the banks had fiscal year ending on December 31; the banks had no debt or negative equity; the banks had ETR value of less than 100%; and the banks had complete data for 2009–2016. Thus, the sample of present research consisted of 203 observations. The data used were secondary data obtained from various sources, such as Financial Statement and Annual Report (www.idx.co.id).

Present research used the panel data regression model with unbalanced data operationalized using fixed effects method and processed with the assistance of software STATA. This method was used because the researcher needs to prove the effect of debt-to-equity ratio on effective tax rate as a proxy of tax avoidance of 203 observations from 2009-2016. This regression model was also generated by including control variables banks size, banks profitability, stock price to banks book value, and dummy variable. The model used is as follows:

$$ETR_{it} = \alpha_0 + \alpha_1 DER_{it} + \alpha_2 SIZE_{it} + \alpha_3 ROA_{it} + \alpha_4 PBVS_{it} + \alpha_5 DMFD_{it} + \varepsilon_{it}$$

Description:

ETR : Effective Tax Rates (proxy of level of tax avoidance, calculated by dividing total tax expense by pre-tax income)

DER : Debt-to-Equity Ratio (proxy of leverage, capital structure, calculated by dividing total debt by total equity)

SIZE : Banks Size (calculated using natural logarithm of total asset)

ROA : Return on Asset (proxy of banks profitability, calculated by dividing net income by total assets)

PBVS : Price to Book Value per Share (proxy of banks value, calculated by dividing stock price per share by stock book value per share)

DMFD : Dummy Minister of Finance Decree Number 169 (1 = after, 0 = before)

i : i-th bank

t : t-th year

α_0 : constant

$\alpha_1 - \alpha_5$: coefficient of each independent variable

ε_{it} : error

Before regressing the model, the author developed some steps namely: descriptive statistics test and normality test. After the data had fulfilled the normality test, the model then be tested by using regression method including these steps: chow test, Lagrange multiplier test, Hausman test, multicollinearity test, heteroscedasticity test, autocorrelation test, robustness test, F-test, model fit test, and t-test). Descriptive statistics test was needed to detect the data from outlier. If the data had some outliers which was be indicated from the skewness value, it was indicated that the data is not fulfil the normality requirements.

Results

Based on preliminary test on descriptive statistics, the author found that there was outlier on ETR and ROA data because the skewness of the data was out of the range -2 up to +2, the skewness of ETR and ROA were 3.1993 and 9.6945 respectively (see Table 1). To treat this problem, the author used winsorizing method by replacing high outlier data with the average value plus three times standard deviation and low outlier data with the average value minus three times of standard deviation thus the data would fulfil the normality requirement.

Table 1. Outlier Data

	ETR	DER	SIZE	ROA	PBVS
Skewness	3.1933	0.2701	-0.1160	9.6945	1.7796
Obs.	203	203	203	203	203

Source: Processed by Researcher with STATA

After treating outlier data by using winsorizing method, the descriptive statistics showed there was no outlier on the data. The newest skewness of ETR and ROA were 1.8461 and 1.3491 respectively (see Table 2). Thus, because all of the data had the skewness value on the range -2 up to +2, it was concluded that the dat had fulfil normality test. This newest data then will be used as main sources to be processed further.

Table 2. Treatment Result of Outlier Data

	ETR	DER	SIZE	ROA	PBVS
Skewness	1.8461	0.2701	-0.1160	1.3491	1.7796
Obs.	203	203	203	203	203

Source: Processed by Researcher with STATA

Table 3 reports the descriptive statistics for all variables used in this study. Dependent variable ETR denotes the proportion of tax to earnings before tax. ETR indicates the actual tax payable by banks to the Government. Table 3 presents an average ETR value of 25.76%,

which shows that the banks serving as sample in present research had an effective tax rate of 25.76% on average. These figures fit with the corporate tax rate applicable in Indonesia, namely 25%.

Meanwhile, independent variable DER denotes the proportion of debt-to-equity of banks. The average DER value was 7.9717, which means that the debt was nearly eight times the equity. This high average DER value is in agreement with the nature of business conducted by banks, in that as financing institutions, banks operate with debt composition dominating over equity. The bank size shows 31.4278 on average, which means that the banks sample have total assets in large amount. The higher

total assets of banks indicate the higher flexibility of banks in doing its business to generate more profit. Table 3 also provides information that the banks sample is in profit condition on average 1.53%. It indicates that the banks can achieve some profit in doing its business rather than loss. The stock price to book value shows average 1.8482. Thus, the overall data describes that the banks sample used in this study have an effective tax rate more than 25% indicating that the banks do not execute tax avoidance in aggressive way, the banks sample also have high ratio of debt-to-equity, high number of total assets, positive profit and stock price to book value.

Table 3. Variable Descriptive Statistics

	ETR	DER	SIZE	ROA	PBVS	DMFD
Mean	0.2576	7.9717	31.4278	0.0153	1.8482	0.1133
Minimum	0.0462	0.3700	27.4437	0.0001	0.2306	0.0000
Maximum	0.6024	15.6202	34.5768	0.0695	8.9501	1.0000
Std. Dev.	0.0720	2.6088	1.6751	0.0093	1.2726	0.3177
Obs.	203	203	203	203	203	203

Source: Processed by Researcher with STATA

Present research used panel data regression processed with software STATA. According to the results of estimation methods selection test, the method selected was the fixed effect method, which has been robust (free from multicollinearity, heteroscedasticity and autocorrelation problems). All of these steps will be explained further in this section. Regression with unbalanced panel data on 203 observations from 2009-2016 can be executed with three options namely pooled least square (PLS), fixed effects (FE), or random effects (RE). To decide which model is the best, the author runs some test namely chow test, Lagrange multiplier test, Hausman test. The result of chow test shows that probability of F (Prob > F = 0.0000) indicating the fixed effects method is preferable than pooled least square see Table 4).

Table 4. Chow Test Result

	F-test that all u_i	Prob > F
Value	0	0.000

Source: Processed by Researcher with STATA

The next step is executing Lagrange multiplier to decide which method is the best, pooled least square or random effects.

Table 5. Lagrange Multiplier Result

	chibar2	Prob > chibar2
Value	39.25	0.000

Source: Processed by Researcher with STATA

The result can be seen on Table 5 The result of Lagrange multiplier shows that probability of chibar2 (Prob > chibar2 = 0.0000) indicating the random effects

method is preferable than pooled least square.

The last step in choosing the best method Hausman test, to decide fixed or random effects will be applied on the analysis. The result of Hausman test shows that probability of chi2 (Prob > chi2 = 0.0000) indicating the fixed effects method is preferable than random effects method (see Table 6). Thus, for further analysis, the fixed effects method is used as the best model to regress the model in answering research problem.

Table 6. Hausman Test Result

	chibar2	Prob > chibar2
Value	59.94	0.000

Source: Processed by Researcher with STATA

In order to get unbiased result, this regression method needs to be checked whether multicollinearity, heteroscedasticity test, and autocorrelation arise. Multicollinearity occurs when there is a linear correlation among independent variables. The main characteristics can be detected on its correlation value which exceeds 0.8 that indicates high correlation. The effect of this condition is biased estimator in term of significance. From the correlation test result, it shows that the data has no multicollinearity problem because none of the value exceeding 0.8000 (see Table 7).

Meanwhile, this data has heteroskedasticity and autocorrelation problem (see Table 8 and 9, respectively). Heteroscedasticity incurs when the variant of the variables is not constant and changes evenly. It usually can be found on cross section data because the observation done on different individual item at the same time.

Table 7. Multicollinearity Test Result

	ETR	DER	SIZE	ROA	PBVS
ETR	1.0000				
DER	-0.0647	1.0000			
SIZE	-0.3532	0.0248	1.0000		
ROA	-0.3440	-0.2887	0.4398	1.0000	
PBVS	-0.0453	-0.0970	0.2002	0.5892	1.0000

Source: Processed by Researcher with STATA

The effect of this problem is wider level of significance interval, thus causes a bias result. Table 8 shows that the probability of chi2 is 0.0000, this value is less than 0.05 (5%) indicating that heteroscedasticity arises. It can be solved by using robust test later.

Table 8. Heteroscedasticity Test Result

	chi2	Prob > chi2
Value	12092.55	0.0000

Source: Processed by Researcher with STATA

Autocorrelation occurs when residual value of observations related each other. It appears easily on time series data because based on its nature, the present data is affected by past data. If it happens, the regression results will be biased.

Table 9. Autocorrelation Test Result

	F (1, 25)	Prob > chi2
Value	33.176	0.0000

Source: Processed by Researcher with STATA

Table 9 below also indicates that autocorrelation problem arises because the value of probability of chi2 is 0.0000 which less than 5% level. To solve heteroscedasticity and autocorrelation problem, the robustness test has been conducted and the final result can be found on Table 10.

Table 10. Final Results of Regression of the Effect of Debt-to-Equity Ratio on Tax
Avoidance Measured with Effective Tax Rates

Model:
$$ETR_{it} = \alpha_0 + \alpha_1 DER_{it} + \alpha_2 SIZE_{it} + \alpha_3 ROA_{it} + \alpha_4 PBVS_{it} + \alpha_5 DMFD_{it} + \varepsilon_{it}$$

Variable	Coef.	Prob.
C	1.8770	0.000*
DER	-0.0003	0.913
SIZE	-0.0499	0.002*
ROA	-3.7847	0.001*
PBVS	0.0033	0.358
DMFD	0.0239	0.061
N = 203; Ajd R² = 22.04%; F-stat = 8.24; Prob. = 0.0001*		
*significant at 5% level		

Source: Processed by Researcher with STATA

Discussion

Statistical F-test was carried out to figure out whether all independent variables simultaneously had a significant effect on dependent variables or not. According to Table 10, the statistical F value was 8.24, and the statistical F probability was 0.0001. These results show that at a confidence level of 95% (α = 5%), independent variables (DER, SIZE, ROA, PBVS, DMFD) simultaneously had a significant effect on dependent variable level of tax avoidance (ETR). It could be concluded that in the banks samples, the level of tax avoidance was affected by debt-to-equity, bank size, profitability, stock prices, and dummy variable simultaneously for 22.04%. Adjusted R² test was carried out to figure out the extent to which independent variables were able to describe dependent variable in the equation model examined.

Statistical t-test was carried out to figure out the significance and the extent of the effect of independent variables on dependent variable by assuming that other independent variables were unchanged, held constant, ceteris paribus. At a significance level of 95% (α = 5%), variable debt-to-equity ratio and stock price to book value did not have any effect on dependent variable level of tax avoidance indicated by probability of DER (0.913 > 0.05), PBVS (0.358 > 0.05), and DMFD (0.061 > 0.05).

However, bank size and profitability had a negative and significant effect on effective tax rate (tax avoidance), the probability of SIZE and ROA were 0.002 < 0.05 and 0.001 < 0.05 respectively.

Adjusted R² test was carried out to figure out the extent to which independent variables were able to describe dependent variable in the equation model examined. According to the table 10, the adjusted R-squared value was 22.04%. This shows that 22.04% variation of the level of tax avoidance can be described by changes in debt-to-equity ratio, bank size, profitability, stock price to book value, and dummy variable of MFD-169. The remaining 77.96% was influenced by factors out of the model.

Back to the hypothesis tested, based on Table 10, because the probability of DER and DMFD is higher than 0.05, it means that H alternative (after MFD-169 implemented, banks sample will have lower ETR) is rejected. There is no significant effect of implementation MFD-169 on banks effective tax rate (tax avoidance), before and after the MFD-169 implemented. Although banks were allowed flexibility to operate at DER exceeding four to one (4:1), the banks sample could not execute tax avoidance aggressively although they have higher DER as MFD-169 stated. This result was also supported by the previous researches

conducted by Kurniasih and Sari (2013), Ngadiman & Puspitasari (2014), and Harjito *et al.* (2017) that found DER did not have any impact on tax avoidance because the firms could not maximize the benefit from maximization of using debts.

This result was contrast with the agency theory explained by Jensen & Meckling (1976) because the conflict of interest between company and the government did not arise significantly since the tax paid by the companies is above 25% on average. Meanwhile, this result confirmed the grand theory developed by Myers (2001) called trade-off theory in capital structure. This theory explained that the company will exercise debt up to some level of debt, when tax shield arises from debt is equal to financial distress cost (such as bankruptcy cost, organization cost, and agency cost). This theory implies that the company cannot use 100% of its financing by issuing debts. In this case, although the banks sample had higher debt-to-equity ratio relative to other kinds of company or industry, they could not take more advantages of tax shield from debts issued. Form the regression results, it was approved that dummy variable DMFD was insignificant. It implies that the MFD-169 released by the government is effectively implemented as a part of public policy process. Thus, problems (related to banks tax avoidance and debt-to-equity ratio) will not arise when banks are exempted from the Minister of Finance Decree Number 169/PMK.010/2015.

This research provided empirical evidences that thin capitalization did not necessarily translate to high level of tax avoidance practiced by banks sample. Thin capitalization characterized by high DER value was found to have no effect on the level of tax avoidance in banks sample, although the DER value exceeded the 4:1 ratio set by the MFD-169. This provided the provision under the MFD-169 enacted by the Government with a support to exclude bank from the implementation of 4:1 DER

limit. Banking and financing industries as well as some other industries are exempted from the Decree as they have been subjected to other Decrees. Moreover, the nature of banking business is different from that of other businesses, in that debt is dominant over equity. Nevertheless, regulators must stay alert and periodically carry out supervision, monitoring and evaluation regarding this issue as banks enjoy the same incentives as those for non-financing corporations in terms of capital structure for tax avoidance purposes (Ghosh & Chatterjee, 2018).

Present research also found that bank size and profitability were other determinants of the level of tax avoidance which was measured by effective tax rates in the banks sample. Bank size and profitability had a significant and negative effect on ETR. This finding also confirmed result found by Ngadiman & Puspitasari (2014); Harjito *et al.* (2017) that profitability and bank size had significant impact on tendency of conducting tax avoidance. The larger the banks and the better the profitability of the banks, the smaller the ETR will be, which means that the possibility of tax avoidance by the banks was greater. This should be watched out for and evaluated by regulators to reduce the incentives for banks to practice tax avoidance in the future. This finding may also serve as feedback for the Government to review the tax rate policy and corporate tax Decrees in Indonesia and to monitor tax avoidance activity of corporations in Indonesia. Thus, the state tax revenue can be optimized with the application of appropriate tax rates and reduction of tax avoidance practiced by corporations.

Conclusion

Common practice of thin capitalization by companies for the purpose of avoiding tax has driven the Government through the Minister of Finance to issue the Minister of Finance

Regulation Number 169/PMK.010/2015 on the Stipulation of Debt-to-Equity Ratio for Income Tax Calculation Purposes and set the maximum debt-to-equity ratio at four to one. This regulation exempts some tax payers engaged in the financial sector, including banks, due to the nature of business they conduct, which is dominated by debt component rather than equity. This research was intended to provide empirical evidences that this regulation did not raise any significant problem in the form of bank tax avoidance and that the stipulation was considered legitimate. By engaging sample banks listed on the Indonesia Stock Exchange from 2009 to 2016 in 203 observations, the data from which were processed by employing unbalanced panel data regression analysis technique using fixed effects method with the assistance of software STATA, it was proven that thin capitalization characterized with high debt-to-equity ratio in banks did not impact significantly on the level of tax avoidance (represented by effective tax rates), as well as before and after the MFD-169 implemented. This result confirmed the grand theory developed by Myers (2001) called trade-off theory in capital structure. This theory explained that the company will exercise debt up to some level of debt, when tax shield arises from debt is equal to financial distress cost (such as bankruptcy cost, organization cost, and agency cost). This theory implies that the banks cannot use 100% of its financing by issuing debts. In this case, although the banks sample had higher debt-to-equity ratio relative to other kinds of company or industry, they could not take more advantages of tax shield from debts issued. It implies that the MFD-169 released by the government is effectively implemented as a part of public policy process. Thus, problems (related to banks tax avoidance and debt-to-equity ratio) will not arise when banks are exempted from the Minister of Finance Decree Number 169/PMK.010/2015. According to this finding, the Government was deemed to have issued an effective regulation and have regulated banks strictly through other regulations on the grounds that although banks were allowed flexibility to operate at DER exceeding four to one, the level of tax avoidance they practiced did not necessarily increase. It was also found out that the size and profitability of the sample banks had a significant, negative effect on effective tax rates of such banks. The higher banks size and profitability, the higher possibility to execute aggressive tax avoidance planning. Implication of this findings is it should be watched out for and evaluated by regulators for them to reduce incentives for banks to prevent them from practicing tax avoidance in the future.

Some limitations in this study arise, namely, the banks sample used are taken from the Indonesian Stock Exchange in 2009-2016 periods only. Next study can investigate wider level of banks sample include all banks in Indonesia in order to get higher generalization and wider level of period range. Besides, to proxy the level of tax avoidance, the author used the effective tax rate only as dependent variable. Next research can employ other variables such as cash effective tax rate or book-tax difference. Future research also can develop more comprehensive model measurement to capture the phenomenon precisely.

References

Dunn, W. N. (1994). *Public Policy Analysis: An Introduction.* Second edition, New Jersey: Prentice Hall Inc.

Dyreng, S. D., Hanlon, M., & Maydew, E. L. (2008). Long Run Corporate Tax Avoidance. *The Accounting Review*, 83 (1), 61–82

Ghosh, S., & Chatterjee, G. (2018). Capital structure, ownership and crisis: how different are banks? *Journal of Financial Regulation and Compliance*, 26(2), 300–330.

Hanlon, M., & Heitzman, S. (2010). A review of tax research. *Journal of Accounting and Economics*, *50*(2–3), 127–178. https://doi.org/10.1016/j.jacceco.2010.09.002

Harjito, Y., Sari, C. N., & Yulianto. (2017). Tax Aggressiveness Seen From Company Characteristics and Corporate Social Responsibility. *Journal of Auditing, Finance, and Forensic Accounting*, 5(2), 77-91.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm : Managerial Behavior, Agency Costs and Ownership Structure Theory of the Firm : Managerial Behavior, Agency Costs and Ownership Structure. *Journal of Financial Economics,* 3(4). https://doi.org/10.1016/0304-405X(76)90026-X

Knauer, T., & Sommer, F. (2012). Interest barrier rules as a response to highly leveraged transactions: Evidence from the 2008 German business tax reform. *Review of Accounting and Finance*, *11*(2), 206–232.

Kurniasih, T., & Sari, R. M. M. (2013). Pengaruh Return On Assets, Leverage, Corporate Governance, Ukuran Perusahaan dan Kompensasi Rugi Fiskal Pada Tax Avoidance. *Buletin Studi Ekonomi,* 18(1), 58-66.

Lietz, G. (2014). *Determinants and Consequences of Corporate Tax Avoidance*. University of Munster: Institute of Accounting and Taxation.

McGuire, S. T., Wang, D., & Wilson, R. J. (2014). Dual class ownership and tax avoidance. *Accounting Review*, *89*(4), 1487–1516.

Mustopadidjaya, A. R. (2002). *Manajemen Proses Kebijakan Publik, Formulasi, Implementasi dan Evaluasi Kinerja*, Jakarta: LAN.

Myers, S. C. (1984). The Capital Structure Puzzle. *The Journal of Finance*, *39*(3), 575.

Ngadiman, & Puspitasari, C. (2014). Pengaruh Leverage, Kepemilikan Institusional, Dan Ukuran Perusahaan Terhadap Penghindaran Pajak (Tax Avoidance) Pada Perusahaan Sektor Manufaktur Yang Terdaftar Di Bursa Efek Indonesia 2010-2012. *Jurnal Akuntansi, XVIII*(03), 408–421.

OECD. (2012). *Thin Capitalisation Legislation: A Background Paper of Country Tax Administrations.*

Republik Indonesia. (2015). Peraturan Menteri Keuangan Nomor 169/PMK.010/2015 tentang Penentuan Besarnya Perbandingan antara Utang dan Modal Perusahaan untuk Keperluan Perhitungan Pajak Penghasilan.

Richardson, G., & Lanis, R. (2007). Determinants of the variability in corporate effective tax rates and tax reform: Evidence from Australia. *Journal of Accounting and Public Policy*, *26*(6), 689–704. https://doi.org/10.1016/j.jaccpubpol.2007.10.003

Sherif, M., & Erkol, C. T. (2017). Sukuk and conventional bonds: shareholder wealth perspective. *Journal of Islamic Accounting and Business Research*, *8*(4), 347–374.

Taylor, G., & Richardson, G. (2013). The determinants of thinly capitalized tax avoidance structures: Evidence from Australian firms. *Journal of International Accounting, Auditing and Taxation*, *22*(1), 12–25. https://doi.org/10.1016/j.intaccaudtax.2013.02.005

Zimmerman, J. L. (1983). Taxes and firm size. *Journal of Accounting and Economics*, *5*(C), 119–149. https://doi.org/10.1016/0165-4101(83)90008-3