Does Corporate Governance Reduce Thin Capitalization Practice? The Case of Indonesian Manufacturing Firms

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ABSTRACT

This descriptive, quantitative research investigated whether corporate governance mechanisms affect the practice of thin capitalization in manufacturing companies listed on the Indonesian Stock Exchange. The size of the board of commissioners and percentage of independent commissioners were used as proxies for corporate governance. Profitability and the size of the company were employed as control variables. Data for 31 firms (93 observations) were collected through purposive sampling, obtained from manufacturing firms' financial statements over the years 2013–2015. Analysis was undertaken using multiple linear regressions with Newey−West heteroscedasticity autocorrelation correction (HAC). The study shows that the size of the board of commissioners negatively affects thin capitalization practices, significant at α = 10%. However, the percentage of independent commissioners does not exert a significant effect. The two control variables, profitability and size, both negatively affect thin capitalization, significant at α = 1% and 5%, respectively. The adjusted R-squared value is 40.90%.

Keywords: Board of commissioners; corporate governance; independent commissioner; thin capitalization.

1 INTRODUCTION

Tax is often viewed as a burden for the tax payer and as a result non-compliance is commonly a problem for countries. The Australian Taxation Office (ATO) stated in 2014 that 98 out of 321 (30.53%) of privately owned companies earning more than $200 million in revenue did not pay tax in 2013–14 and new data reveal that 36% of large companies paid no tax at all in the 2014−15 financial year. A United States America (US) Government Accountability Office (GAO) report showed that 24% of large profitable corporations in the US paid no income tax in 2011, 22% paid nothing in 2010 and 21% paid nothing in 2009. This is not just a problem in developed countries, but also in developing countries. In India, based on National Tax Data for 2015, 52,911 companies made a profit in 2014−15 but had zero − and in some cases less than zero − effective tax rates; thus, they clearly paid no income tax despite being profitable. The number of loss-making companies in India has also increased, from 35.19% in 2010 to 43.59% in 2014. In Indonesia, The Commissionerate General of Tax, Ministry of Finance Indonesia, reported that 2,000 companies did not pay tax in 2016, most being affiliated with multinational companies. Jaya (2016) therefore argues that decisive action is needed from taxation authorities, such as inspections and more robust tax collection, to reduce non-compliance among tax payers.

Tax avoidance is a common practice in companies. Many companies try to avoid paying higher amounts of income tax and have created several schemes to avoid tax. Many such schemes are deemed to be aggressive, rather than defensive. In

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aggressive tax avoidance, companies use tax loopholes and create phony schemes (Panayi, 2015; Schoen, 2008). As noted by Darussalam et al. (2007), one method of aggressive tax avoidance is thin capitalization. This uses liabilities as a mechanism to lower income tax payments as the cost of interest is usually deductible for tax purposes (Martins, 2012; Taylor and Richardson, 2013). Tax offices around the world have implemented anti-measures to counter the practice of thin capitalization, commonly establishing a maximum level of the debt-to-equity ratio, for example a level of 1.5:1 in Australia and 4:1 in Indonesia.

Previous research on thin capitalization has typically focused on two aspects. First, it has examined factors determining the practice of thin capitalization, such as the effect of corporate governance mechanisms, multinationality and use of tax havens (Taylor and Richardson, 2013) and the adoption of International Financial Reporting Standards (IFRS) (Taylor and Tower, 2009). Second, studies have examined the effect of thin capitalization on several outcome variables, such as the firm's financial performance (Buettner et al., 2012) and capital structure (Buettner et al., 2012; Weichenrieder and Windischbauer, 2008).

However, to the best of my knowledge, research on factors determining the practice of thin capitalization is still scarce. Therefore, this research focused on corporate governance-related variables in driving such practice. Taylor and Richardson (2013) found that corporate governance has a significant effect on the thin capitalization of companies using the presence of independent commissioners, institutional ownership and the employment of Big 4 auditors (Ernst & Young, Deloitte, PwC and KPMG) as variables. This research used the size of the board of commissioners and the percentage of independent commissioners as proxies for corporate governance to investigate manufacturing firms as a sample as these engage in complex business activities and this can lead to tax avoidance practices.

The results provide several contributions. First, they can provide input for the Commissionerate General of Taxes, enabling the development of better policy to reduce thin capitalization in Indonesia companies. Second, it is hoped this study will add new insight into how corporate governance interacts with tax avoidance, addressing at least in part the inconsistencies in the results of previous research.

2 LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

2.1 Thin capitalization

The Organization of Economic Cooperation and Development (OECD) in 2012 defined thin capitalization as a situation in which a company is financed through a relatively high level of debt compared to equity. Thinly capitalized companies are sometimes referred to as highly leveraged or highly geared. The OECD (2012) stated that country tax rules typically allow a deduction for interest paid or payable in arriving at the tax measure of profit: the higher the level of debt in a company − and thus the amount of interest it pays − the lower will be its taxable profit. The excessive use of debt financing in the form of thinly capitalized structures by subsidiary firms located in higher tax jurisdictions constitutes an important international corporate tax avoidance technique used by multinational firms (Shackelford and Shevlin, 2001; Shackelford et al., 2007; Taylor and Richardson, 2013). Martins (2012) stated that tax authorities try to fight thin capitalization, usually limiting the amount of interest paid by the affiliate. The OECD (2012) determined that the thin capitalization rules are generally: (1) determining a maximum amount of debt on which deductible interest payments are available and (2)

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determining a maximum amount of interest that may be deducted with reference to the ratio of interest (paid or payable) to another variable.

Several countries have used the debt-to-equity ratio as a basis for determining the thin capitalization level (Blouin et al., 2014), although in Australia new capitalization rules are based on the debt-to-asset ratio (Ting, 2004). The maximum value differs: the Australian Taxation Office has determined a debt-to-equity ratio of 1.5:1; Kenya uses a debt-to-equity approach and employs a ratio of 3:1; Ghana and Canada use a debt-to-equity ratio of 2:1. In applying such ratios, some countries use only related-party debt in the equation, whereas others apply this approach using total debt as the basis. Indonesia recently applied new rules for thin capitalization. This regulation, entitled 'Determination of Company's Debt and Equity Ratio for Income Tax Calculation Purposes', is set out in the Indonesian Minister of Finance Regulation (PMK) Number 169/PMK.010/2015. The rule established essentially limits the amount of tax-deductible borrowing costs arising from debt to a maximum debt-to-equity ratio of 4:1, effective as of the fiscal year 2016. Any borrowing costs on debt which exceeds this ratio will not be tax deductible for corporate income tax purposes. The rule applies to both related- and third-party debt, whether foreign or domestically availed.

2.2 Corporate governance

Research relating corporate governance to thin capitalization is still rare (Armstrong et al., 2015), but as transfer pricing is a tax avoidance scheme, we can examine relationships such as that between corporate governance and tax avoidance. Several previous studies have shown that corporate governance is vital to overcome the problems of mismanagement and lack of compliance (Desai and Dharmapala, 2006; Minnick and Noga, 2010). Corporate governance provides a monitoring mechanism and reduces practices deemed to be unethical, like tax avoidance. Taylor and Richarsdon's (2013) research used corporate governance as a variable to determine the practice of thin capitalization. The results showed that the independence of the board of commissioners, institutional ownership and use of Big 4 auditors are significantly negatively associated with firms adopting thin capitalization tax avoidance structures. Lanis and Richardson (2012) found that the addition of a higher proportion of independent commissioners on the board reduces tax avoidance. This research employed the size of the board of commissioners and percentage of independent commissioners as proxies for corporate governance. The following hypotheses are proposed:

> *H_1: The size of the board of commissioners negatively influences thin capitalization.*
>
> *H_2: The percentage of independent commissioners negatively influences thin capitalization .*

2.3 Control variables

This research employed two control variables, the profitability of the company and its size. Thin capitalization and tax avoidance tend to arise in firms with high levels of profit and of larger size. Larger firms can achieve economies of scale through tax planning and have the incentives and resources readily available to them to reduce the amount of corporate taxes payable (Rego, 2003; Taylor and Richardson, 2013). Several previous studies have confirmed that the size and profitability of the company positively influence thin capitalization and/or tax avoidance practices (Jones and

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Temouri, 2016; Lanis and Richardson, 2015; Taylor and Richardson, 2013). Thus, the following hypotheses are proposed:

H_3: The profitability of the company positively influences thin capitalization.

H_4: The size of the company positively influences thin capitalization.

3 RESEARCH METHODOLOGY

This research was exploratory in nature and used a descriptive approach, following quantitative methodology. Such research is undertaken when not much is known about the phenomenon (Sekaran and Bougie, 2012). The population in this research consisted of all manufacturing companies listed on the Indonesian Stock Exchange, a total of 145 companies. Manufacturing companies were chosen as they have a complex business process. Purposive sampling was employed in line with Sekaran and Bougie's (2012) point that this is the appropriate method if one or more criteria are used to select the sample. This approach yielded 31 companies and 93 observations for the period 2013–2015. The data were collected using the financial statements of the companies for the years ending 2013–2015. The criteria for sample selection are presented in Table 1.

Table 1 Sample selection criteria

Number of manufacturing companies listed on the IDX in the year 2015	145
Number of companies listed on the IDX after 31 December 2013	(9)
Number of companies with negative profit	(39)
Number of companies operating in a functional currency other than IDR	(26)
Number of companies with negative equity	(30)
Number of companies with incomplete information in their financial statements	(10)
Total number of companies	31
Observation year	3
Total observations	93

The measurement of variables is described in Table 2.

Table 2 Variable measurement

Variable	Symbol	Measurement
Thin capitalization	TC	Debt-to-equity ratio
Size of board	SIZE_BRD	Total number of members of the board of commissioners
Degree of independence of board of commissioners/number of independent commissioners	IND_BRD	Total number of independent commissioners/total number of commissioners
Control Variables		
Company size	SIZE_COMP	Natural logarithm (Ln) of total assets
Company profitability	PROFIT	ROA (net income/total assets)

To address the hypotheses, the following model was estimated:

$$TC=\alpha_0+\alpha_1 SIZE_BRD+\alpha_2 ND_BRD+\alpha_3 PROFIT+\alpha_4 SIZE_COMP+\varepsilon \quad (1)$$

Data analysis was conducted using multiple regression analysis. Classic assumption tests for normality, multicollinearity, heteroscedasticity and autocorrelation were

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undertaken to assure the model fit before undertaking the regression process. The test of normality was undertaken using the one-sample Kolgomorov−Smirnov test, multicollinearity was tested by analysing the variance inflation factor (VIF) values, heteroscedasticity was tested using the Glejster test and autocorrelation was assessed using the Durbin−Watson (DW) statistic. All data analyses were conducted in the E-Views 8.0 software.

4 RESULTS AND DISCUSSION

4.1 Descriptive statistics

The descriptive statistics for the 93 observations are presented in Table 3 below:

Table 3 Descriptive statistics

	SIZE_BRD	IND_BRD	PROF	SIZE_COMP	TC
Mean	4.419355	0.350225	0.097078	28.82697	0.706686
Maximum	8.000000	0.600000	0.312000	32.15100	1.973600
Minimum	2.000000	0.000000	0.006000	25.88320	0.070900
Std. Dev.	1.643978	0.104589	0.063246	1.554192	0.505327

From the table, it can be seen that the level of the debt-to-equity ratio, as a proxy for the thin capitalization of a company, is 0.7 on average. The highest value is 1.97 and the lowest 0.07. For the corporate governance variables, the boards of commissioners on average comprise 4.22 members, with a maximum of 8. Moreover, boards are on average dominated by independent board members (35.02%). The Financial Services Authority in Indonesia obliges companies listed on the IDX to have at least 30% of independent commissioners and this result shows that nearly all the companies met the minimum requirement; however, there are also companies that have no independent commissioners. In terms of the control variables, the profitability ratio, measured by ROA, is 9.78% on average, with the highest value being 31.20% and the lowest 0.01%. The natural logarithm of assets, proxy for the size of the company, is on average around IDR 3.129.208.521.703 ($2,7128^{28,83}$), with a maximum of IDR 85.976.848.745.878 ($2,7128^{32,15}$) and a minimum of IDR 164.760.106.044 ($2,7128^{25,88}$).

4.2 Multiple linear regression with HAC-Newey−West adjustment

Before conducting multiple linear regression, classic assumption tests were conducted. These showed problems with heteroscedasticity and autocorrelation as a result of which a robust regression model was adopted using heteroscedasticity autocorrelation correction (HAC) with the Newey−West method. The Newey–West estimator is used in statistics and econometrics to provide an estimate of the covariance matrix of the parameters of a regression-type model when applying such models under circumstances in which the standard assumptions of regression analysis do not apply. The estimator is used to overcome autocorrelation (also called serial correlation) and heteroscedasticity in the error terms in the models, often for regressions applied to time series data. The analyses were conducted in the Eviews 8.0 statistical software. The results are presented in Table 3.

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Table 3 Multiple regression results

Variable	Sign	Coefficient	Std. Error	t-statistic	Probability
C	?	-1.968889	1.336533	-1.473131	0.1443
SIZE_BOARD	-	-0.088009	0.049035	-1.794809	0.0761*
IND_BOARD	-	-0.338697	0.476368	-0.710999	0.4790
PROFIT	?	-4.362601	1.047440	-4.165014	0.0001***
SIZE_COMP	+	0.125114	0.051302	2.438770	0.0167**
R-squared	0.434656				
F-statistic	16.91438				
Probability (F-statistic)	0.000000 ***				

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

From Table 3, it is apparent that the overall model can be considered to provide a good fit, based on the F-statistic of 16.92 and significance level of .0000. The determination coefficient is 43.47%. Examining the variables, the variables PROFIT, SIZE_COMP and SIZE_BOARD significantly affect TC at $\alpha = 0.01$, 0.05 and 0.10, respectively. Therefore, we can conclude that H_1 H_3 and H_4 are accepted. The independence of commissioners is not significant, even at $\alpha = 0.1$, so H_2 is rejected.

4.3 Discussion

There are several points of interest in the results. Theoretically, corporate governance should reduce the use of thin capitalization as a tax avoidance practice, but the results show that corporate governance barely exerts an influence. The size of the board of commissioners significantly reduces thin capitalization, but only at a significance of $\alpha = 0.10$, thus being partially in line with Desai and Dharmapala (2006). Independent commissioners do not significantly affect the practice of thin capitalization, in contrast to the findings of Lanis and Richardson (2012). Debt is not just used to create thin capitalization, but also as a choice for capital structure. Many companies choose a debt structure as optimal gearing can lead to the better operation of the firm. We can also look at the structure of governance itself. Many companies in Indonesia have commissioners appointed by shareholders. As thin capitalization involves transactions between related parties, i.e. shareholders, it can be used by shareholders for their own personal benefit; moreover, as commissioners are appointed by shareholders, they cannot act independently (Jensen, 1993; Hermawan, 2011). Independent commissioners, who have no relations with the shareholders or the company, are still in a minority. Thus, they cannot ensure proper control of the company.

The results for profitability differed from the findings in the previous research of Jones and Temouri (2016), Taylor and Richardson (2013) and Lanis and Richardson (2012). We can attribute this to stakeholder theory. Stakeholder theory argues that there are other parties involved in business that pay attention to the business activities (Freeman, 1984; Miles, 2012). The company mission is to satisfy the needs of all stakeholders. As profits increase, so does the attention stakeholders pay to the company

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and therefore the company will stop using aggressive schemes to manage their profits, including thin capitalization, to avoid negative repercussions for the firm's reputation. The size of company shows the same results as in previous research (Rego, 2003; Taylor and Richardson, 2013): the larger the company, the more resources it has to conduct aggressive tax planning.

5 CONCLUSION AND SUGGESTIONS

This research provides several interesting results, particularly given the inconsistent findings regarding the role of corporate governance in inhibiting the practice of thin capitalization. Based the results of this research, regulators and companies need to review and strengthen the monitoring mechanism of companies' governance structure. Debt is regarded as a source of capital that is often more easily obtained than equity. Regulators might design new thin capitalization criteria that really limit the use of debt by companies. Profitability and size exhibit control over all other independent variables. In particular, the results for profitability are of interest as they demonstrate that companies care for their reputation and aim to protect this by not engaging in aggressive earnings and tax management.

This research has several limitations. First, it was exploratory in nature due to the lack of previous work on thin capitalization activity. Second, data constraints limited the number of companies researched. Third, it was not possible to explore all corporate governance activities. Future research might explore several additional variables regarding corporate governance, such as ownership structure, auditing and the governance perception index. Studies might also want to modify several measurements of variables; for example, thin capitalization might be measured using Indonesia's new thin capitalization rules, or by adding several other considerations (debt to shareholders, or debt to related parties). Finally, this study might be expanded to non-manufacturing firms, such as technology-based companies, as tax avoidance phenomena are widespread.

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