Leverage, Corporate Strategy and Earnings Management: Case of Indonesia

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Abstract- **This study examine weather leverage can motivate company to manipulate their earnings in Indonesian manufacturing industry for the periods 2009-2011. Particularly, we use accrual earnings management and real earnings management to catch broader scope of earnings management. We also examined weather corporate strategy, namely diversification, have the moderating effect on the relationship between leverage and accrual earnings management. The number of samples of this research were 141 of manufacturing companies, which are selected using purposive sampling method. Our results suggest that leverage have a positive effect to accrual earnings management, but leverage have a negative effect to real earnings management. This study also find that diversification do not moderate the relationship between leverage and accrual earnings management.**

Keywords: Leverage, Diversification of Operation, Accrual Earnings Management, Real Earnings Management.

1. INTRODUCTION

The relationship between leverage and earnings management has been a concern for some researchers in financial accounting (Defond and Jiambalvo, 1994; Lobo and Zhou, 2001; Klein, 2002; Gul*et al.*,2003; Chung*et al.*,2005, and Lee*et al.*, 2007). In the accounting literature, the relationship between leverage and earnings management showed mixed results. Research conducted by Defond and Jiambalvo (1994), Klein (2002), and Gul*et al.*(2003) show thatleveragehas positive effect onearnings management.However, different results found by Lobo and Zhou (2001), Chung *et al.*(2005), and Lee*et al.* (2007) show that leverage negatively affect earnings management. Previous research that found a positive relationship between leverage andearnings management (Defond and Jiambalvo, 1994; Sweeney, 1994; Klein, 2002, and Othman and Zhegal, 2006; to companies in France, but not for companies in Canada) stated that when leverage is high, the earnings management will be high and this is because the company strives to improve its bargaining position for negotiating the debt and reduce debt covenant violations. Previous studies found a negative relationship between leverage and earnings management (Chung et al, 2005; Lee et al, 2007) states that managers in companies that have leverage may be at the control of creditors, making it difficult for them to engage inearnings management.

In the development of today's business world, the complexity of the activities of the company arising from diversification. Based on

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transparency diversification hypothesisis considered to have a complex organizational structure, thus increasing the high information asymmetry between companies and stakeholders (creditors). The state is used by management to engage earnings manipulation practices, so that diversification can strengthen the effect between leverage and earnings management.

The main objective of this study is to examine whether leverage can motivate company to manipulate their earnings in Indonesian manufacturing industry. Especially, we use accrual earnings management and real earnings management to catch broader scope of earnings management. This study motivated by two reasons. ***First***, previous research linking betweenleverageandearnings managementare many.However, studies linking betweenleverageandearnings managementthat focuses on the strategy of the company in the form of diversification in Indonesia is still rarely studied**.** ***Second***, the relationship betweenleverageandearnings managementstill needs to be researched as Leuz et al. (2003) said. This study focuses on the pattern of increasing incomebecause the phenomenon of real earnings management more appropriately implemented on the pattern of increasing earnings (Januarsi, 2009).

II. Related literature and hypothesis development

Related Literature

The relationship between leverage and earnings management can be described in agency theory. Agency relationship arises because the difference between the interests of creditors as principal and corporate management as the agent. Agent regarded as having better information than the principal will use this situation to take action that may affect reporting/performance. Agency theory perspective, transparency hypothesis assumes that diversification increases the complexity of the organization, which leads to high levels of information asymmetry between managers and suppliers of finance (Thomas, 2002). Information asymmetry is high on diversified company able to provide the flexibility for managers to avoid creditor monitoring. According to Indraswari (2010) companies with high leverage will offer accounting standards decrease or increase reported earnings. Thus the bargaining position will provide a relatively better in the negotiation or debt rescheduling company. Previous research that found a positive relationship between leverage and earnings management (Defond and Jiambalvo, 1994; Sweeney, 1994; Klein, 2002, and Othman and Zhegal, 2006; to companies in France, but not for companies in Canada) stated that when leverage is high, the earnings management will be high and this is because the company strives to improve its bargaining position for negotiating the debt and reduce debt covenant violations. While previous studies that found a negative relationship between leverage and earnings management (Chung et al, 2005; Lee et al, 2007) states that managers in companies that have leverage may be at the control of creditors, making it difficult for them to engage inearnings management

Hypothesis Development

According to Scott (2003) one of the motivations managers to manipulate earnings because the company has a debt-covenant with others. The manager will improve the bottom line in order not to violate the credit agreement has been made, and in order to maintain the good name and reputation. Defond and Jiambalvo (1994), Klein (2002) find evidence thatleveragehas positive effect onincome increasing discretionary accruals. This is because the company strives to improve its bargaining position for negotiating the debt and reduce debt covenant violations.However, research conducted by Chung *et al.* (2005) and Lee *et al.* (2007) found a negative relationship betweenleverageandincome increasing discretionary accruals.Previous research linking betweenleverageandearnings managementstill vague. On one hand, companies withleverageto face the control of creditors. Creditors always want the performance of the company is reflected in the financial statements are presented as they should either profit or loss. On the other hand, when a company wants to apply for new loans, the company trying to make its financial statements look good. Financial statements in order to perform well, the company is able to manipulate earnings. Efforts are made so that prospective lenders keen to lend its own funds and by the time the debt negotiation company can obtain the desired amount of debt. Based on the explanation above, the first hypothesis in this study are:

H1: Leverage effect on accrual earnings management.

According to Jelinek (2007) debt tends to reduce discretionary accruals, the underlying reason for this opinion is when a company has a high level ofleverage, the company may face strict control from the lender, making it difficult for managers to manipulate accrualearnings.According Zagers-Mamedova (2009) conclusion from research conducted Jelinek (2007) may not be correct. Zagers-Mamedova (2009) found that companies with highleveragewill reduce discretionary accrualsbecause managers may switch toreal earnings management.Roychodhury (2006) states that earnings management can be done in two ways, namely accrual earnings management and earnings management based on real events. However, only little literature examines the relationship between leverage and real earnings management. Zagers-Mamedova (2009) find evidence that firms with high long-term debt are more likely to manipulate cash flow from operations. Thus, it can be concluded that companies with high leverage tend to reduce discretionary accrualand switch to real earnings management, because it's real activities manipulation through providing space for managers to influence the company's performance which is reflected in the financial statements. Based on the explanation above, the second hypothesis in this study are:

H2: **Leverage effect on real earnings management**.

*I*nformation asymmetry tends to be more severe in a diversified company. Unlike the diversification strategy, focus strategy is seen much more transparent, the reported accounting numbers more informative (Best *et al.,* 2004) and the activities within the company is not overly complex. Therefore, the asymmetry of information in focused companies lower than the diversified company.Thus, it can be concluded that the high levels of leveragecan motivate managers to manipulate earnings accruals and more motivated in a diversified company. Because the company has a diversified high information asymmetry, so flexibility is higher managers to manipulate earnings in the company while the managers flexibility strategy focus wane and aggravated due to the strategy. Based on the explanation above, the third hypothesis in this study are:

H3: The effect of leverage on the accrual earnings management stronger in diversified companies

III. DATA AND EMPIRICAL MODEL

The data used in this study is a secondary data for the period 2009-2011. We obtain data from all the manufacturing companies listed on the Indonesia Stock Exchange (IDX) which have publish annual report ended on December 31 during the observationperiods, have no merger activities, company consistently pursuing a strategy of diversification and focus during 2009-2011, and Presentation of financial statements in dollars.We also obtain firms that include in category income increasing EM. Determining the increasing EM company: corporate profits this year (NI_t) are deflated by total assets of the previous year (TA_{t-1}) as the dependent variable and profit last year (NI_{t-1}) are deflated by total assets two years ago (TA_{t-2}) as independent variables (Ardiyati, 2003) and when formulated into:

Formula : $NI_t/TA_{t-1} = \alpha + \beta_1 NI_{t-1}/TA_{t-2} + e$

From the model, the error that occurs is the difference between actual earnings to earnings expectations, is used to determine whether the company is in error positive or negative on error. If the error is positive, then the company is estimated to increase relative to the industry earnings (profits raised pattern), and if the error is negative, then the company did not increase earnings (earnings lower pattern).

This research uses regressionanalysis. The research model used in hypothesis testing are:

Regression model for hypothesis 1:

$$AEM_{it} = \alpha_0 + \alpha_1 LEV_{it} + \alpha_2 LOGTAit + \alpha_3 EFTAXit + \alpha_4 KUAit + E_{it}$$

Regression model for hypothesis 2 :

$$REM_{it} = \alpha_0 + \alpha_1 LEV_{it} + \alpha_2 LOGTAit + \alpha_3 EFTAXit + \alpha_4 KUAit + E_{it}$$

Regression model for hypothesis 3 :

$$AEM_{it} = \alpha_0 + \alpha_1 LEV_{it} + \alpha_2 DIV_{it} + \alpha_3 |LEV\text{-}DIV_{it}| + \alpha_4 LOGTAit + \alpha_5 EFTAXit + \alpha_6 KUAit + E_{it}$$

RESEARCH VARIABLES VARIABLE AND MEASUREMENT

1. Accrual Earnings Management

The dependent variable in this study is the accrual earnings management by using models modified Jones combined with the CFO or known by the model Kaznik (1999). The reason for the use of the model because, according to Siregar, et al. (2005) Kaznik models have adjusted $R^2$the most high and the proportion of the sign according to predictions that can be considered better.

2. Real Earnings Management

The next dependent variable isreal earnings management are proxied by abnormal cash flows from operating, abnormal production costs and abnormal discretionary expenses by using a model of Roychowdhury (2006).

3. Leverage

Leverage variable is the proportion of total debt to total assets. The ratio is used to provide an overview of the company's capital structure, so it can be seen the level of risk of uncollectible debts.

4. Moderating Veriable : The company's strategy

The company's strategy is a moderating variable betweenleverage and accrual earnings management.

The measurement for assessing the company's strategy of simply ignoring the operating segments and geographic segments. The company's strategy is measured by the amount the company reported operating segments. If a company has only one product then the value of the company's strategy is 1. However, when the company reported results of operations of the various products, the value of the company's strategy is the number of products/units produced by the company in accordance operation the reported segment reporting. Measurements refer to the company's strategy on research conducted Indraswari (2010).

V. RESULT

Here are the test results of multiple regression of variables used in this study:

Table 4.1
Hypothesis Result

Information	Model 1		Model 2		Model 3	
	B	Sig.	B	Sig.	B	Sig.
ZLEV (X1)	.123	.002	-.088	.072	.030	.004
ZDIV (X2)					.020	.050
MODERASI [X1-X2]					-.003	.796
ZLOGTA (X3)	.007	.679	-.018	.405	-.007	.605
ZEFTAX (X4)	-.043	.649	.221	.059	-.006	.513
ZKUA (X5)	-.072	.003	.073	.015	-.026	.047

First hypothesis shows that the manipulation of earnings by discretionary accruals showed significant positive β_1 value of 0.123 with a significant level of 0.002 to accrual earnings management that results of this study support the hypothesis proposed by researchers. It can be concluded that the higher the leverage, the accrual earnings management will be higher.These findings are consistent with research conducted Defond and Jiambalvo (1994), Klein (2002) who found a positive relationship between leverage and income increasing discretionary accruals. Defond and Jiambalvo (1994), Klein (2002) states that managers in companies with high leverage will motivated to manipulate earnings accruals as the company strives to improve its bargaining position for negotiating the debt and reduce debt covenant violations.

Second hypotheses shows that a significant negative impact to the value of β_1 at -0.088 a significant level of 0.072 to accrual earnings management that results of this study support the hypothesis proposed by researchers. It can be concluded that the higher the leverage the lower real earnings management. Based on the analysis, leveragenegatively affect earnings manipulation by real activity. Managers may be reluctant to take actions such as raising the discount, cutting discretionary spending, or by reducing the cost of production due to these efforts will only be beneficial in the short term. In the long term patterns of real earnings manipulation, will negatively impact future cash flows (Rhoychodhury, 2006). Therefore, managers in companies with high leverage tend to be reluctant to manipulate real earnings because managers are more concerned about the long-term impact of real earnings manipulationthat tend to harm the company despite the manipulation of earnings rill provide flexibility for managers to manipulate earnings because it is difficult to detect by auditors .

The third hypothesis shows that the company's strategy has an influence on discretionary accruals management with β_2 of 0.020 with a significant level of 0.050. However, the results of the interaction betweenleverageand diversification has no effect on accrual earnings management with β_3 -0.003 and a significance level of 0.796. It is concluded that a diversified company does not affect the behavior of managers to performaccrual earnings management when corporate leverage is high.The results of this study are not consistent with studies conducted Rodriguez-Perez and van Hemmen (2010) who found evidence that diversification affects the relationship between leverage and accrual earnings management. Thomas (2002), states that diversification does not always lead to higher information asymmetry due to the disclosures made by the management.Disclosures made by management regarding the company's business segments may provide insight to outsiders (creditors) so that high information asymmetry does not happen to companies that implement diversification strategies. It can be concluded that diversification does not strengthen the relationship between leverage and accrual earnings management due to the disclosures made by the management so as to reduce the information asymmetry between management and outside parties in this case is the creditors.

CONCLUSION AND LIMITATION

Based on the results of hypothesis testing that has been described previously, it can generally be concluded that the leverage effect on earnings manipulation practices both accrual and rill. Moreover, diversification does not moderate the effect of leverage on accrual earnings management. Information asymmetry is high on diversified company did not prove to be the higher the aggressiveness of the management to manipulate earnings, because, according to Thomas (2002) diversification does not always lead to higher information asymmetry due to the disclosures made by the management. The higher the disclosure made by the management, the lower the level of information asymmetry that occurs in a diversified company. This study does not escape from some limitations. First, previous studies examining the topic of diversification as moderating variables are infrequently studied, leading researchers difficult to compare results with previous studies. Second, the relatively small number of samples, from observations in 2009-2011 only obtained a sample of 141 manufacturing companies, so the researchers feel this research is less representative. Future studies are expected to examine other forms of diversification, diversification in this study were tested for the diversification.

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