The Role of Corporate Diversification, Capital Structure Determinant, And Structure of Ownership on Earning Management with Information Asymmetry as Moderating Variable

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Abstract
Along with the development of the economy and technology, companies are expanding their businesses to be able to defend in the competition in the industry by diversification. In the diversified companies with high complexity, manager’s motivation to use various earnings management techniques is increase. Apart from diversification, there are various factors that influence earnings management, including capital structure and ownership, and also information asymmetry. The major objective of this study was to discusses a comprehensive understanding of earnings management and the factors that influence it, namely business diversification, capital structure, ownership structure, and information asymmetry; and second is to empirically investigate the effect of diversification, capital structure, ownership structure and asymmetry of information to earnings management, and to clarify whether information asymmetry can moderate the influence of the three other factors on earnings management as measured by the approach of Stubben (2010). The study used the Total Asset control, Growth Opportunity, ROA, ROE, and Leverage. Data obtained from observations 165 Financial Statements of Manufacturing Companies in the chemical, pharmaceutical, and consumer goods sectors in 2015-2017. These results indicate that diversification does not relation with earnings management, but the other three factors namely capital structure, ownership structure, and information asymmetry are proven to significantly affect earnings management. Information asymmetry variables can moderate the affect of capital structure and ownership structure on earnings management.

Keywords: Earning Management, Capital Structure, Ownership Structure, as information asymmetry

DOI: 10.7176/RJFA/10-14-05
Publication date: July 31st 2019

1. Introduction
Along with the development of the economy and technology, more and more companies are expanding their businesses to survive in the competition in the industry. One of things that the company does is diversification. Diversified companies have a high level of complexity and are more aggressive in managing income, thus increasing the motivation of managers to use various earnings management techniques. Earnings management can decrease the realibility of financial reporting and damage the accuracy of income. Executives can be involved in earnings management to meet analytical outlook, avoid losses (or maximize their personal profits).

The phenomenon related to earnings management occurred at PT Bank Bukopin Tbk, which revised the 2016 financial statements. The revised financial report precisely appeared on April 25, 2018. A number of variables in the report also changed significantly. For example, profit in 2016 was previously recorded at Rp 1.08 trillion. However, in the company's financial statements for 2017, the company's profits were recorded at Rp 183.53 billion.

The information asymmetry between managers and shareholders also can influence the emergence of earnings management. According to (Jensen & Meckling, 1976), in a company there is a contract between shareholders and managers which is an agency relationship, where shareholders are principals who give authority to managers as agents to manage companies on behalf of shareholders. Information asymmetry occurs because managers have more opportunity to master information than owners or shareholders.

Apart from information asymmetry, there are some factors that effect earnings management there are ownership structure and capital structure (Bao & Lewellyn, 2017; Nikoomaram, 2016). Nikoomaram (2016) found that there is a significant impact between capital structure measured by using a debt ratio with accrual earnings management that uses the Jones Model for its measurement. Capital structure can be seen with the value of LDER which concluded the significant impact between the number of long-term loans given by creditors with the own capital.

Companies with a high degree of leverage face high default risk. The company will not to be able to fulfill its obligations so that it seeks to do earnings management. As for the ownership structure, the results of research (Bao & Lewellyn, 2017) dispute that the role of institutional investors protect company by giving them the power to discipline managers, provide incentives through more monitoring costs low, and by limit the contracts of manager’s personal benefit. The output of this study are different from Anggraeni & Hadiprajitno (2013) which did not find evidence of significant effect between ownership structure and earnings management. because of the
small number of people so that it has less role in management decision making including earnings management. The aim of this research will be to analyze the factors that affect earnings management, namely corporate diversification, capital structure and ownership structure using the proprietary conditional revenue model (Stubben, 2010). In addition, differences in the results of previous research can be resolved through a contingency approach by including other variables that might influence company diversification, capital structure and ownership with earnings management. In this study, information asymmetry variables were used as moderating variables.

2. Literature and Hypothesis Development

2.1 Agency Theory
Agency problems arise including if the management (agent) does not have ordinary shares of the company. With this condition, the agent does not try to maximize the profits of the company and the agent tries to take advantage of the burden borne by the shareholders, in the form of increasing wealth and satisfaction and company facilities, including manipulating the company's financial statements to get a reward or bonuses are calculated based on the achievement of financial figures presented in the Financial Report. Agency theory wants to solve problems that arise from agency relationships, namely when the principal cannot know for certain whether the agent has acted appropriately, and when the principal has a different view from the risk-related agent (Eisenhardt, 2015).

2.2 Company Diversification
The company runs a diversification policy as its corporate strategy for several reasons. According to (Montgomery, Wernerfelt, Rand, Winter, & Montgomery, 1988) there are three perspectives on corporate diversification motives, namely market power views, resource-based views, and agency view. The application of diversification will result in a more complex organizational structure within the company and a lower level of transparency and complexity of information for investors and higher financial analysis (Khanchel El Mehdi & Seboui, 2011).

2.3 Capital Structure
Capital structure theory began to get attention since Modigliani & Miller (1958) revealed his thesis that funding decisions did not affect company value. The essence of capital structure theory Modigliani & Miller argue that the economic value of company assets is determined entirely by the operating cash flow and not by the financing structure (Jaros & Bartosova, 2015).

2.4 Information Asymmetry
Information asymmetry occur when managers know all the information in the company that are not known to shareholders or stakeholders. When this condition occur, stakeholders do not have sufficient resources for relevant information in monitoring manager actions so that practices of earnings management will emerge (Yamaditya, 2014). As a result, this information asymmetry will encourage managers to do not provide complete information of manager’s performance.

2.5 Ownership Structure
Ownership structure is a mechanism that is useful for reducing conflicts between managers and shareholders. The ownership structure is used as a way to reduce the imbalance of information between internal parties and external parties of interested companies. The ownership structure is used to show the most important part contained in the capital structure which is not only determined by the amount of debt or equity but also by the percentage of ownership by managerial, institutional and public (Jensen & Meckling, 1976). Institutional ownership will monitor management and be expected reduce earnings management. Research results stated by (Hartanto, Dedy, Nugrahanti, 2016), show that institutional ownership variables negatively affect earnings management.

2.6 Hypothesis Development
2.6.1 Effects of Corporate Diversification on Profit Management
The researchers found empirical evidence that companies operating in more than one industry will have a more potency to make accrual earnings management than companies operating in one industry (Khanchel El Mehdi & Seboui, 2011). According to Farooqi, Harris, & Nge (2014), real earnings management in diversified companies is higher compared to non-diversified companies.

Hypothesis 1: There is a significant impact on the relation of Diversification to EM

2.6.2 Structure of Capital on Earning Management
Capital structure is very important because it involves the policy of using the most profitable sources of funds. In funding needs companies can use their own capital and foreign capital or debt (Horizons, Chowdhury, & Chowdhury, 2010). Leverage ratio is a ratio found in financial statements that can find out the level of debt financing with the ability of the company described by capital, or can also show some parts of assets used to guarantee debt (Li,
Leverage has a relationship with the practice of earnings management, where investors will see the smallest company leverage ratio because the leverage ratio affects the impact of the risks that occur. So, the smaller the leverage ratio the smaller the risk, and vice versa.

Hypothesis 2: There is a significant positive effect on the relation of Capital Structure to earnings management.

2.6.3 Effect of Institutional Ownership on Earning Management
The results of the study (Lassoued, Ben Rejeb Atta, & Sassi, 2017) show that ownership structure has a superior influence to produce financial reporting quality. Ownership structure like institutional ownership can reduce profit management. The greater structure of managerial ownership will support better performance achievement. Dominant share ownership, in economic terms, gives the authority to monitor the operations of the company (Murwaningsari & Rachmawati, 2017).

Hypothesis 3: There is a significant impact of Institutional Ownership on EM

2.6.4 Effects of Information Asymmetry on Earning Management
The level of information held by managers compared to shareholders gives flexibility opportunity to earnings management practice by manager. Therefore, the higher level of information asymmetry (IS) that occurs in a company, the manager tends to do earnings management (EM) because of the lack of knowledge of shareholders on the condition of the company (Habib & Jiang, 2012).

Hypothesis 4: There is a significant effect of IS on EM

Diversified corporate organizational structure is more complex so there is a risk of lower levels of financial reporting transparency and the complexity of information for investors is getting higher (Khanchel El Mehdi & Seboui, 2011). The complexity of this information, when strengthened by the existence of information asymmetry, will cause stakeholders not to have sufficient resources to monitor the manager's actions, to practice earnings management. In addition, the existence of a capital structure that prefers external funding will increase the company's leverage ratio. Information asymmetry will reduce the supervision of institutional shareholders due to information imbalances received by institutional owners.

Hypothesis 5: There is a significant moderating effect of IS on diversification and EM

Hypothesis 6: There is a significant moderating impact of IS on capital structure and earnings management.

Hypothesis 7: There is a significant moderating impact of IS on ownership structure and EM

3. Research Methodology
3.1 Sample Selection
A purposive sampling method used with the criteria of manufacturing companies in the consumer goods, pharmaceutical and chemical goods. The manufacturing sector was the most attractive sector for investors to enable manager motivation in making earnings management so that the company is attractive to investors.

3.2 Variable Operationalization
The independent variables used in this study are (1) Corporate Diversification proxied by the number of segments in each company, (2) Capital structure proxied with Long Term Debt to Equity (LDER) obtained from the comparison of Total Debt with Total Assets. Ownership Structure is calculated by the level of Institutional Ownership in the company which is the study sample. Dependent variable measured by using the Conditional Revenue Model (Stubben 2010) approach as follows:

\[ \Delta AR_{it} = \alpha + \beta_1 \Delta R_{it} + \beta_2 \Delta R_{it} \times SIZE_{it} + \beta_3 \Delta R_{it} \times AGE_{it} + \beta_4 \Delta R_{it} \times AGE_{it}^2 + \beta_5 \Delta R_{it} \times GRM_{it} + \beta_6 \Delta R_{it} \times GRM_{it}^2 + e \]  

(1)


This model from Stubben (2010) uses receivables as a function of income changes. Receivables are considered to have a strong relationship and a direct relationship to income. The moderating variable in this study is IS. The bid-ask spread is used to measure information asymmetry because it can more reflect the level of information asymmetry than using returns with the following models:

\[ BIDASK_{it} = (\text{ask}_{i,t} - \text{bidi}_{i,t}) / ((\text{ask}_{i,t} + \text{bidi}_{i,t}) / 2) \times 100\% \]  

(2)

Where: aski, t = closing ask price at the end of each year on the company i. bidi, t = closing bid price at the end of each year at the company i.

Control variables in this study are (1) Leverage calculated; (2) Growth Opportunity; (3) Return on Assets (ROA); (4) Return on equity (ROE) and (5) Company size (SIZE)

3.3 Data analysis
The first hypothesis up to two is tested by multiple linear regression tests and in the third and fourth hypotheses an interaction test is performed to test the moderating variable in the form of information asymmetry using the Moderated Regression Analyze (MRA). The MRA equation model used:
\[ MLA = \alpha + \beta_1 \text{DIVER} + \beta_2 \text{LDER} - \beta_3 \text{IO} + \beta_4 \text{BIDASK} + \beta_5 \text{DIVER} \ast \text{BIDASK} + \beta_6 \text{LDER} \ast \text{BIDASK} - \beta_7 \log(\text{IO}) \ast \text{BIDASK} + \beta_8 \text{LEVERAGE} + \beta_9 \text{ROA} + \beta_{10} \text{ROE} + \beta_{11} \text{TA} + \beta_{12} \text{GO} + e \] 

(3)

Where, MLA: Profit Management; DIVER: Diversification; LDER: Long Debt to Equity Ratio; IO: Institutional Ownership; BIDASK: Information Asymmetry; LEVERAGE: Debt Ratio; ROA: Return on Assets; ROE: Return on Equity; TA: Total Assets;

4. Results and Analysis

4.1 Descriptive statistics

<table>
<thead>
<tr>
<th></th>
<th>MLA</th>
<th>DIVER</th>
<th>LDER</th>
<th>IO</th>
<th>BIDASK</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean</td>
<td>13.48595</td>
<td>0.004991</td>
<td>0.341246</td>
<td>-1.621249</td>
<td>0.024117</td>
</tr>
<tr>
<td>Median</td>
<td>13.56601</td>
<td>0.094048</td>
<td>0.251641</td>
<td>-1.514133</td>
<td>0.009318</td>
</tr>
<tr>
<td>Maximum</td>
<td>15.26658</td>
<td>0.732099</td>
<td>4.031272</td>
<td>-0.056552</td>
<td>0.138240</td>
</tr>
<tr>
<td>Minimum</td>
<td>10.49641</td>
<td>-0.366513</td>
<td>0.005092</td>
<td>-5.216408</td>
<td>0.002567</td>
</tr>
<tr>
<td>Std. Dev.</td>
<td>1.044125</td>
<td>0.333244</td>
<td>0.561329</td>
<td>1.152312</td>
<td>0.030970</td>
</tr>
</tbody>
</table>

Description: MLA: Profit Management, DIVER: Diversification, LDER: Long to Debt Equity Ratio, IO: Institutional Ownership, BIDASK: Information Asymmetry

Table 1 contains the descriptive statistics in the research model. From the results of Table 1 above the Diversification, the variable has an average value of 0.004991 smaller than the diversification standard deviation which is worth 0.333244 so that it can be indicated that earnings management does not respond to diversification. For the Capital Structure variable, the minimum value of 0.005092 is generated from several samples. The standard deviation of 0.561329 shows that the company's capital structure that is the sample is varied and heterogeneous. Likewise, with the Ownership Structure which is proxied by Institutional Ownership, the average value that exceeds the standard deviation of 1.152312 indicates that earnings management is sufficient to respond to the existence of such institutional ownership. For information asymmetry the average value indicates the number 0.024117 is smaller than the standard deviation information asymmetry of 0.030970, then the average value cannot be used as a representation of the entire sample.

4.2 Assumption test

Before multiple linear regression analysis, the heterokedacity test, autocorrelation and multicollinearity has been perform. The value of the Prob. Chi-Square is 0.7948 > 0.05, so it can be stated that there is no heterokedacity in this regression model. For multicollinearity test, the value of the Prob. Chi-Square is 0.5971 > 0.05, so it can be stated that there is no autocorrelation in this regression model. The Centered VIF value for all variables is less than 10, so it can be stated that there is no multicollinearity problem in the prediction model.

4.3 Panel Data Regression Test

4.3.1 Determination Coefficient Test

The coefficient of determination can measure the model in this study can explain company diversification, capital structure, ownership structure and information asymmetry which can be seen from the adjusted R-squared value of 0.225573 shows that this model can explain variations in Earning Management as a variable Dependent is 0.225573 and the rest is 0.774427 explained by other influences outside of the variables studied.

4.3.2 Hypothesis testing

This t-test are carried out using a 5% significance level and 1 side. Based on the test results, the results of the t-test are as follows:
Table 2. Table of Hypothesis testing

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistic</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>12.98875</td>
<td>1.198928</td>
<td>10.83364</td>
<td>0.0000</td>
</tr>
<tr>
<td>DIVER</td>
<td>0.226681</td>
<td>0.625091</td>
<td>0.362636</td>
<td>0.7189</td>
</tr>
<tr>
<td>LDER</td>
<td>2.305826</td>
<td>0.913741</td>
<td>-2.523500</td>
<td>0.0159 **</td>
</tr>
<tr>
<td>IO</td>
<td>-0.527292</td>
<td>0.243282</td>
<td>2.167410</td>
<td>0.0365 **</td>
</tr>
<tr>
<td>BIDASK</td>
<td>33.36506</td>
<td>17.02439</td>
<td>1.926996</td>
<td>0.0615 *</td>
</tr>
<tr>
<td>DIVER*BIDASK</td>
<td>-8.158096</td>
<td>16.61878</td>
<td>-0.490896</td>
<td>0.6263</td>
</tr>
<tr>
<td>LDER*BIDASK</td>
<td>57.75930</td>
<td>29.97375</td>
<td>1.926996</td>
<td>0.0615 *</td>
</tr>
<tr>
<td>IO*BIDASK</td>
<td>-15.12285</td>
<td>9.472027</td>
<td>-1.596850</td>
<td>0.1186 *</td>
</tr>
<tr>
<td>LEVERAGE</td>
<td>1.177189</td>
<td>0.943080</td>
<td>1.248238</td>
<td>0.2196</td>
</tr>
<tr>
<td>ROA</td>
<td>0.020655</td>
<td>0.042162</td>
<td>0.489900</td>
<td>0.6270</td>
</tr>
<tr>
<td>ROE</td>
<td>-0.001409</td>
<td>0.017951</td>
<td>-0.078493</td>
<td>0.9378</td>
</tr>
<tr>
<td>TA</td>
<td>5.13E-08</td>
<td>1.59E-08</td>
<td>3.225539</td>
<td>0.0026</td>
</tr>
<tr>
<td>GO</td>
<td>0.071987</td>
<td>0.084931</td>
<td>0.847597</td>
<td>0.4020</td>
</tr>
</tbody>
</table>

5. Discussion

5.1 Corporate Diversification on Earning Management
From the results above, company diversification does not significantly influence earnings management. Based on this hypothesis 1 is rejected. This is in line with (Lupitasari, 2012) which states the results that diversification of operations does not have a significant effect on EM. The results of this study do not produce the same result with the research conducted by (Khanchel El Mehdi & Sebou, 2011). This inconsistency might occur because this research was conducted in a different country than the research conducted by El Mehdi & Sebou (2011). This research was conducted in Indonesia while the research was conducted in America. This state difference certainly results in differences in organizational culture in running a business. The test results in this study also produce findings similar to the research conducted by (Dimarcia & Krisnadewi, 2016), wherein his research states the results that operating diversification does not affect earnings management.

5.2 Capital Structure on earnings management
From the calculation above, the Capital Structure variable has a significant effect on the positive direction of Earning Management. Based on this hypothesis 2 is accepted. One of the choices of the company's capital structure is to calculate the LDER value which can be interpreted as the amount of the fixed financial burden used by the company. The company's fixed financial costs usually come from interest payments for debts used by the company. Therefore, LDER talks are related to the company's capital structure. Companies that use high fixed costs means using high debt so the company is said to have a high LDER level.

5.3 Institutional Ownership Structure on earnings management
From Table 2 it is known that the significance value of the Ownership Structure variable proxied by Institutional Ownership is 0.0365 < 0.05 means that Hypothesis 3 is accepted. Regression coefficient value of -0.527292 shows the direction of negative influence. Institutional investors have a more complete ability to process information than individual investors. Thus, it will further limit management in many reports to conduct investment analysis, therefore institutional investors have a good ability to oversee management actions. Based on the theory, the higher ownership by the institution, the smaller the opportunity for company management to practice earnings management will be smaller, as stated (Muse, Popoola, Ratnawati, Ali, & Hamid, 2017).

From the regression test, it is concluded that Hypothesis 4 is accepted. This result are in line with (Yamaditya, 2014). The existence of IS between managers and shareholders as users of Financial Reports causes shareholders not to be able to observe all company performance and prospects in the future. In situations where the information held by shareholders is less than the information held by managers, managers can use of this information imbalance to implement earnings management.

The moderating effect of IS and diversification has no significant effect so (Hypothesis 5 is rejected). This finding shows that there is no interaction between information asymmetry and company diversification. In a diversified company, a company that consists of various divisions that are diversified in a geographical area or an industry segment is considered more difficult for managers to conduct earnings management because the information comes from a variety of different lines in a company.
For the moderating effect of the capital structure on earnings management, we find that the interaction between information asymmetry and Capital Structure has a significant effect on Earnings Management (Hypothesis 6 is accepted). The level of corporate capital structure financed by debt will increase the motivation of managers to do earnings management. This will increase with the existence of information asymmetry.

Regarding the relation between information asymmetry and Institutional Ownership Structure, Hypothesis 7 is accepted. This finding shows that there is an interaction between Institutional Leadership and information asymmetry in a company. The findings indicate that information asymmetry weakens the effect of institutional ownership on earnings management. For control variables, Total Assets is proven to significantly affect earnings management. Companies with large amounts of assets have an incentive to do earnings management compared to small companies. Large companies are often a concern for many investors, so they often get demands to have better profit information. These demands often make management try to report higher profits, thus management takes action on earnings management to manipulate its profits to attract investors.

6. Conclusion

Testing Hypothesis 1 shows that the application of Diversification does not affect earnings management. Testing of Hypothesis 2 shows that Capital Structure has a effect on earnings management. Companies with high debt have a high LDER level will increase the risk that must be borne by investors so and it will increase the motive of earning management. For Hypothesis 3, it is meaning that the more shares owned by institutional shareholders, the higher the level of supervision for managers that limits the practice of earnings management.

Moderation test results show that Information Asymmetry strengthens the Capital Structure and Institutional Ownership Structure in influencing earnings management, but does not strengthen diversification in influencing earnings management. As for the control variables, company size will increase the demand for the company to show good performance for investors, so it often encourages companies to manage earnings to attract investors.

References


