The Effect of Financial Leverage on Profit Management with Managerial Ownership as Moderating

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Abstract
This study aims to determine and analyze the effect of financial leverage on earnings management and moderation of managerial ownership on the effect of financial leverage on earnings management. The type of data used is panel data which is a combination of time series data, namely 2016 to 2018 and cross section data, which are 19 property and real estate sector companies listed on the Indonesia Stock Exchange (IDX). This study uses multiple linear data regression analysis and moderation regression with the help of software Eviews 9. The results of the study show that: (1) financial leverage has a positive effect on earnings management, and (2) managerial ownership moderates the effect of financial leverage on earnings management.

Key words
Financial leverage, managerial ownership, earnings management

1. Introduction
The company has a goal to maximize profits which is a reflection of the company’s performance where profits originate from the difference in income realized from transactions in one period and costs arising from these revenues. According Harahap (2005) profit is an important number in the financial statement because earnings are used as a basis for tax calculation, guidelines governing investment policy and decision-making, as well as the basis for forecasting earnings and economic events of other companies in the future, basic in calculating and evaluating efficiency in running a company, as well as the basis for evaluating company performance or performance. Profit is one component of the company’s financial statements where Financial reporting aims to communicate accounting information so that it helps users make relevant business decisions for companies to maintain and improve the company’s financial position and performance.

In particular, reported earnings must reflect the economic conditions of the company’s operations and allocate owned economic resources efficiently. However, given the manager’s advantage in controlling reporting, and obtaining company-specific information on users of external information, managers have the opportunity to present company profits according to company needs or for themselves. In general, this behavior is referred to as earnings management, this topic is an interesting consideration for academics and practitioners (Hatam et al., 2013). The definition of earnings management is still controversial. Setiawati and Na’im (2000) say that earnings management is an act that is not justified and violates accounting principles. Earnings management is one of the factors that can reduce the credibility of financial...
statements, and increase bias in the financial statements and disrupt financial statement users who believe the engineered profit figures as profit figures without engineering. While Aryani (2012) said that earnings management does not have to be associated with the selection of accounting methods to regulate the benefits that can be made because it is permissible according to accounting. This is consistent with positive accounting theory that allows managers to choose a particular accounting method. Positive Accounting Theory formulated by Watts and Zimmerman (1986) states that there are three hypotheses that encourage the emergence of earnings management phenomena, namely the first bonus plan hypothesis states that company managers with bonus plans are more likely to choose accounting procedures that move earnings for the future period into period earnings now. Therefore, managers have initiatives to manipulate or regulate reported earnings by using their authority through the selection of accounting methods that can affect the size of profits.

Agency theory (Jensen and Meckling, 1976) states that management and company owners have different interests. Management wants high compensation for the performance of the company, while owners tend to want companies that can develop and produce a large rate of return on investments made, so that differences in interests between management and owners will lead to agency conflicts.

One of the factors that influence earnings management is financial leverage. The condition of a company's financial leverage can also influence a manager's actions. Financial leverage is a ratio that is used to assess how much the company's assets are financed using debt. Companies with more assets financed by debt tend to take action to increase the amount of profits earned due to the high interest burden (Rice, 2016). The results of research conducted by Putri and Budiasih (2018), Agustia (2013) prove that financial leverage has a positive effect on income smoothing. But the results of the study by Oktoriza (2018), Purnama (2017) and Adriani et al. (2018) found that financial leverage had no significant effect on income smoothing practices. In addition, managerial ownership also contributes to earnings management. Several previous studies regarding the influence of managerial ownership on earnings management showed differences in research results. The results of the research by Boediono (2005) state that the application of managerial ownership mechanisms contributes less in controlling earnings management. In line with the research conducted by Starga (2014), Agustia (2013), Oktariza (2018), Gunan and Herawaty (2010) stated that managerial ownership does not affect the amount of earnings management. But it is different from the results of Anggani's study (2015) which states that managerial ownership has a significant positive effect on earnings management.

The property and real estate sector is one of the most important sectors in a country. This can be used as an indicator for analyzing the economic health of a country. According to Santoso (2009) the property and real estate industry is one sector that signals a fall or the development of a country's economy. This indicates that more and more engaged in the property and real estate sector indicate the growing economy in Indonesia. There are several phenomena that have emerged lately in the property and real estate business in global and regional environments that are interesting to observe, among others: (1) The high growth rate of the property and real estate industry in Indonesia after the monetary crisis. This increase was mainly driven by the many construction of trade centers and office buildings; (2) the property and real estate industry is known as a business that has a cycle of fast changing resistance and complexity. The description of this phenomenon can certainly affect the level of return shares in property and real estate companies (Hadriyani, 2018). Development of the property and real estate sector in Indonesia from 2012-2017 as shown in the following figure.

From the picture it can be seen that the movement of shares in this sector is fairly volatile. Based on the explanation above, this study refers to the Purnama study (2017) regarding the effect of profitability, leverage, firm size, institutional ownership and managerial ownership on earnings management. The difference between this research and previous research is that this study only uses three variables consisting of financial leverage, company size, and profitability with using managerial ownership as a moderating variable besides the object of this research are property and real estate while previous research uses manufacturing objects.

Based on the description of the background of the above problems, the problems in this study can be formulated, namely whether financial leverage influences earnings management and whether managerial ownership moderates financial leverage variables to earnings management.
2. Literature review

2.1. Agency Theory

Agency theory according to Jensen and Meckling (1976) is a contract between the principal (owner/shareholder) and an agent (manager) in which both the owner and manager are the maximum welfare. This separation can lead to agency problems between owners and managers who may not act the best for the interests of the owner because of conflict of interest.

Agency theory perspective is the basis used to understand the good issue corporate governance and earnings management. Agency theory results in an asymmetrical relationship between owner and manager, to avoid a relationship that is asymmetry requires a concept that is the concept of good corporate governance that aims to make the company healthier. Implementation of good Corporate governance is based on agency theory, namely agency theory can be explained by the relationship between management and the owner, management as an agent is morally responsible for optimizing the profits of the owners (principal) and in return will receive compensation in accordance with the contract.

2.2. Positive Accounting Theory

There are various motivations that encourage earnings management. Positive accounting theory (positive accounting theory) proposed three hypotheses motivation of earnings management, namely: (1) the hypothesis bonus program (the bonus plan hypothesis), (2) the hypothesis debt agreement (the debt covenants hypothesis), and (3) the hypothesis political costs (the political cost hypothesis) (Watts and Zimmerman, 1986).

Contract motivation arises because agreements between managers and company owners are based on managerial compensation and debt agreements (debt covenants). Bonus motivation is the encouragement of company managers to report the profits they earn to obtain bonuses that are calculated on the basis of these profits. Motivation of political regulation is the motivation of management in anticipating various government regulations.

2.3. Financial leverage

Financial leverage is the use of assets and sources of funds that have fixed costs or expenses originating from loans in order to increase the potential profit of shareholders and show the proportion of how much the company is financed by debt. Fahmi (2011) states that the use of excessively high debt will endanger the company because the company would fall into the category of extreme leverage (debt extreme), a company stuck in a high debt level and difficult to remove the burden of the debt. So the company should be able to balance how much debt is worth taking and where the sources that can be used to pay the debt.

The term financial leverage is generally used to describe the ability of a company to use assets or funds that have a fixed burden to increase the level of income (return) for the owner of the company.
According to Sudana (2011) leverage is the use of assets or funds which then results from the use of these funds the company must pay a fixed fee or pay a fixed burden.

### 2.4. Managerial ownership

Jensen and Meckling (1976) stated that managerial ownership succeeded in becoming a mechanism to reduce agency problems from managers by harmonizing the interests of managers and shareholders. Agency problems can be minimized by increasing managerial ownership so that management will tend to try to improve its performance for the benefit of shareholders. This will affect the management of the profits generated and the value of the company.

Managerial ownership is the amount of share ownership by the management of all the managed share capital of the company. Midiastuty and Machfoedz (2003) state that managerial ownership is one mechanism that can be applied in limiting manager’s opportunistic behavior in the form of earnings management. From the point of view of accounting theory, earnings management is largely determined by the motivation of company managers. By increasing share ownership by managers, it is expected that managers will be motivated to improve performance, Shleifer and Vishny (1986) state that large shareholdings in terms of economic value have incentives to monitor. Theoretically when management ownership is low, then incentives for the possibility of opportunistic managers will increase. Agency problems are assumed to be lost if a manager is also at the same time as an owner.

### 2.5. Profit management

Scoot (2009) states that earnings management is an option made by managers in accounting policies, or real actions in influencing earnings, so that it can achieve certain goals in reporting earnings. According to Sulistyanto (2008), earnings management is an attempt by company managers to intervene or influence information in financial statements with the aim of tricking stakeholders who want to know the performance and conditions of the company.

Healy and Wahlen (1999), states that the definition of earnings management contains several aspects. The first earnings management intervention on financial reporting can be done using judgment, for example judgment is needed in estimating a number of future economic events to be shown in financial statements, such as estimated economic life and residual value of fixed assets, liabilities for pensions, deferred taxes, losses accounts receivable and decrease in asset value. Besides that managers have choices for accounting methods, such as depreciation methods and cost methods. Second, the purpose of earnings management is to mislead stakeholders regarding the company’s economic performance. This arises when management has access to information that is not accessible to outsiders.

### 3. Methodology of research

This study aims to test the hypothesis. The type of relationship between the variables studied is a correlational relationship. The time horizon in this study is panel data. The variables in this study consisted of independent variables namely financial leverage, dependent variable used, namely earnings management, and moderating variables, namely managerial ownership.

The population in this study is a sector company property and real estate listed on the Indonesia Stock Exchange (IDX) for the period 2016-2018. Consideration in choosing a population of property and real estate companies because the company has bright prospects for the future investment climate. The selection of samples in this study was determined using a purposive sampling method from all property and real estate companies listed on the Indonesia Stock Exchange (IDX) in 2016-2018. The hypothesis in this study was tested using multiple linear regression and linear regression moderation using Eviews 9 software.

### 4. Research results

#### 4.1. Descriptive statistics

In this study, the management of descriptive statistical analysis data using the Eviews 9 program automatically displays the mean (mean), middle (median), maximum value, minimum value and standard deviation as shown in the following table.
Table 1. Descriptive Statistics of Property and Real Estate Companies in 2016-2018

<table>
<thead>
<tr>
<th></th>
<th>Financial leverage</th>
<th>Managerial ownership</th>
<th>Profit management</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mean</strong></td>
<td>89.44509</td>
<td>0.116042</td>
<td>0.009148</td>
</tr>
<tr>
<td><strong>Maximum</strong></td>
<td>182,5300</td>
<td>0.475300</td>
<td>0.034700</td>
</tr>
<tr>
<td><strong>Minimum</strong></td>
<td>19.17000</td>
<td>0.010000</td>
<td>0.000670</td>
</tr>
<tr>
<td><strong>Std. Dev.</strong></td>
<td>21.78799</td>
<td>0.115328</td>
<td>0.006395</td>
</tr>
<tr>
<td><strong>Observations</strong></td>
<td>57</td>
<td>57</td>
<td>57</td>
</tr>
</tbody>
</table>

Source: data processed 2019

Based on Table 1, variable financial leverage is the minimum value of 19.17 and the value of financial leverage to a maximum of 182.53. This means that from the 57 observations the lowest leverage value is 19.17 percent while the highest financial leverage value is 182.53 percent. The average financial leverage of property and real estate companies is 89.45 with a standard deviation of 21.79. The standard deviation value is smaller than the average value which indicates the variable financial leverage is normally distributed.

Managerial ownership variables the minimum value is 0.01 and the maximum managerial ownership value is 0.48. This means that of the 57 observations the lowest value of managerial ownership is 0.01 percent while the highest value of managerial ownership is 0.48 percent. The average managerial ownership of property and real estate companies is 0.116 with a standard deviation of 0.115. The standard deviation value is smaller than the average value which indicates that managerial ownership variables are normally distributed.

The earnings management variable the minimum value is 0,00067 and the maximum earnings management value is 0,0347. This means that from the 57 observations the lowest earnings management value is 0,00067 percent while the highest earnings management value is 0.0347 percent. The average earnings management of property and real estate companies is 0.00915 with a standard deviation of 0.00640. The standard deviation value is smaller than the average value which indicates the variable earnings management is normally distributed.

4.2. Testing of Classical Assumptions

Model testing of classical assumptions is applied to structural equations which include multicollinearity tests, heteroscedastic tests, and normality tests. H acyl testing to detect multicollinearity by using the correlation matrix in Eviews program 9.

Table 2. Multicollinearity Test Results

<table>
<thead>
<tr>
<th></th>
<th>Financial leverage</th>
<th>Managerial ownership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial leverage</td>
<td>1.000000</td>
<td>0.229093</td>
</tr>
<tr>
<td>Managerial ownership</td>
<td>0.229093</td>
<td>1.000000</td>
</tr>
</tbody>
</table>

Source: data processed, 2019

Based on Table 2, the output of the correlation matrix above the correlation between financial leverage and managerial ownership shows that there is no correlation between independent variables which is high above 0.80. So, it can be concluded that there is no multicollinearity between independent variables.

The results of heteroscedasticity research are shown in the following table.

Table 3. Heteroscedasticity Test Results

<table>
<thead>
<tr>
<th>Variable</th>
<th>t-Statistics</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial leverage</td>
<td>-1.286673</td>
<td>0.2069</td>
</tr>
<tr>
<td>Managerial ownership</td>
<td>0.703692</td>
<td>0.4864</td>
</tr>
</tbody>
</table>

Source: data processed, 2019
Based on Table 3, the results of residual analysis using program Eviews 9 obtained the probability value of the overall independent variable> alpha value 0.05 so that the H0 hypothesis was accepted and concluded that there was no heteroscedasticity in the model.

Next, testing the normality of research data is shown in the following figure.

Based on Figure 2, the results of testing the normality of data obtained by the Jarque-Bera value of 1.680071 with a probability of 0.431695. Thus the probability value of Jarque-Bera is greater than alpha 0.05 so the assumption of normality is fulfilled.

4.3. Hypothesis Testing
4.3.1. Linear Bergand Regression Testing α

The results of multiple regression testing without moderating variables can be seen in the following table.

Table 4. Regression Testing Results Without Moderating Variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>t-statistics</th>
<th>Prob.</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-0.5893</td>
<td>-2.6506</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>Financial leverage</td>
<td>0.1004</td>
<td>5.4227</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>α</td>
<td>= 5% = 0.05</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-square</td>
<td>= 0.8481</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: data processed, 2019

Based on Table 4, the coefficient of determination (R-square) in the above test results shows a value of 0.8481 or 84.81 percent. These results indicate that the earnings management variable can be explained by a leverage variable of 81.08 percent. The remaining 15.19 percent is influenced by other variables outside the independent variables examined in this study.

4.3.2. Moderate Regression Testing

The results of multiple regression testing with moderating managerial ownership variables can be seen in the following table.

Table 5. Moderation Regression Test Results

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Coefficient</th>
<th>t-statistics</th>
<th>Prob.</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-20.3342</td>
<td>-9.6597</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>Managerial ownership</td>
<td>-5.1267</td>
<td>-18.0011</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>Financial leverage * Managerial Ownership</td>
<td>0.0513</td>
<td>6.7811</td>
<td>0.0000</td>
<td>Significant</td>
</tr>
<tr>
<td>α = 5% = 0.05</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>R-square = 0.9476</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: data processed, 2019
Based on Table 5, the coefficient of determination (R-square) in the results of the above test shows a value of 0.9476 or 94.76 percent. These results indicate that the company's earnings management variable (Y) can be explained by financial leverage (X1), firm size (X2), and profitability after interacting with managerial ownership (Z) variables of 94.76 percent. The remaining 5.24 percent is influenced by other variables outside the independent variables examined in this study.

5. Discussions

5.1. The Effect of Financial Leverage on Profit Management

The results of the research data analysis in the previous chapter show that financial leverage affects earnings management. The higher the company's financial leverage, the higher earnings management.

The findings of this study are consistent with Agency Theory proposed by Jensen and Meckling (1976) that there is an agency relationship between managers and creditors (debt to equity hypothesis) where companies that have a high leverage ratio, managers of these companies tend to use accounting methods which will increase profits so that the company's performance looks good in the hope that creditors can trust the company's performance. So that the information can convince creditors who think that the debtor can pay the debt to the principal (creditor).

The results of this study are in accordance with the opinion of Kustyaningrum et al. (2016) which states that leverage is used to measure how much the company is financed with debt. The use of debt that is too high will endanger the company because the company will be in the category of extreme leverage, namely the company is caught in a high debt level and it is difficult to release the debt burden. Therefore, the company should balance the amount of debt that is worth taking and from which sources can be used to pay the debt. This is made clear by the opinion of Agustia (2013), that financial leverage must be analyzed to see how well the funds are handled, the short-term and long-term funds mix obtained from outside must be in accordance with the objectives and company policies. If the handling of funds is not done properly, then the company's financial leverage can trigger management to do earnings management.

The results of this study found that leverage has a positive and significant effect on earnings management of property and real estate companies listed on the Indonesia Stock Exchange (IDX) for the 2016-2018 period. The results of this study are relevant to the research findings conducted by Saleh et al. (2005), Tarjo (2008) and Lin et al. (2009), who found that leverage has a positive relationship with earnings management.

The findings of this study are reinforced by research conducted by Agustia (2013), it is known that leverage ratio has an effect on earnings management. These results indicate that a company that has a high leverage ratio, means the proportion of debt is higher than the proportion of assets will tend to manipulate in the form of earnings management. Leverage increases will lead to increased earnings management practices. Companies that have high leverage tend to do income smoothing. The greater the leverage ratio shows that the greater the level of dependence of the company on external parties (creditors) and the greater the cost of debt (interest costs) that must be paid by the company. Management will make policies that can increase revenue, for example to improve its bargaining position when negotiating debt or to get funds from creditors or investors.

5.2. The Effect of Financial Leverage on Profit Management Moderated Managerial Ownership

The results of the research data analysis in the previous chapter show that managerial ownership strengthens the influence of financial leverage on earnings management. The stronger managerial ownership will strengthen the influence of corporate financial leverage on earnings management.

The results show that managerial ownership as a moderating variable can weaken the relationship between financial leverage on earnings management and expressed as quasi moderation. Managerial ownership can weaken the relationship between leverage and earnings management because the greater management ownership in the company, management will tend to try to improve its performance in the interests of shareholders and for their own interests. Jensen and Meckling (1976) in agency theory, states that company share ownership by management can equalize the interests of shareholders with the interests of managers so that conflicts of interest between shareholders and managers can be reduced.
6. Conclusions

Based on the results of testing hypotheses and a discussion of the effect of financial leverage, company size, and profitability towards earnings management moderated managerial ownership, then conclusions can be drawn as follows:

1. Financial leverage affects earnings management. It can be interpreted that the higher the financial leverage, hence the higher the earnings management. This is in line with agency theory which assumes that there is an agency relationship between managers and creditors (debt to equity hypothesis) where companies that have a high leverage ratio, managers of companies tend to use accounting methods that will increase profits so that company performance looks good with the expectations of creditors can trust the performance of the company. So that the information can convince creditors who think that the debtor can pay the debt to the principal (creditor).

2. Managerial ownership moderates the relationship between financial leverage to earnings management. It can be interpreted that the high managerial ownership affects the interaction between financial leverage to earnings management to be increasing. This is in line with the agency theory that the company's share ownership by management can balance the interests of shareholders with the interests of managers so that conflicts of interest between shareholders and managers can be reduced.

References


