FACTORS AFFECTING REAL EARNINGS MANAGEMENT

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ABSTRACT
The purpose of this research is to identify the influence of earnings change, debt/equity ratio, liquidity effect, growth effect, size effect, asset sale level, return on asset, market to book ratio, and board size to real earnings management. The other purpose of this research was to compare with the results of the previous research. This research used non-financial companies listed in Indonesia Stock Exchange (IDX) during the research period 2014 until 2017. Samples were collected using purposive sampling method, where 93 companies fulfill the criteria. Multiple linear regressions are used to test the hypothesis. The results of this research show that four variables: earnings change, debt/equity ratio, return on asset and market to book ratio statistically have significant effect on real earnings management.

Keywords: Real Earnings Management, Earnings Change, Debt/Equity Ratio, Liquidity Effect, Growth Effect
1. Background

The application of the strict regulations and less accounting standards nowadays has been concurrent with the increasing trend of investigating real earnings management (REM). To meet certain objective which is the desired earnings level as to attract more investors, REM occurs by managers who perform activities that deviate from the normal business practices although this may affect the future economic performance of the firm negatively (Rowchowdhury, 2006). Cohen et al. (2008) once conducted a research on the difference between real and accrual earnings management in the period before and after the Sarbanes-Oxley Act (SOX). He found that after the enactment of these changes, the level of real earnings management increased while the accrual decreased. It happened because the REM is more difficult to detect and restricted. Gunny (2010) also acknowledges that manipulation through real activities is costly due to the economic consequence but argues furthermore that the benefits of applying REM outperform the costs if earnings targets are met.

Some examples of real earnings management practices are discretionary expenditure management, delaying the start of a positive NPV project, early retirement of debt, sales manipulation by reducing prices or providing more easy credit terms, over production to reduce the cost of goods sold, altering shipping schedules, and the selective sale of assets. Proxy for real earnings management should be significant enough to matter, but it must also be discretionary (Schipper, 1989). In the current study, income from asset sales (IAS) is used as a proxy for real earnings management through the sale of assets. It examined as a real activity that managers may use to manage earnings since assets recorded at historical cost can hold large unrealized gain/loss which may affect managers to manipulate earnings. There are so many factors affecting real earnings management of a company, such as: earnings change, debt/equity ratio, liquidity effect, growth effect, size effect, asset sale level, return on asset, market to book ratio, and board size. Motivation to do this research is to examine if these factors are really affecting the real earnings management in non-financial company. Other than as a reference, this research is a development from Abdel-Azim and Ibrahim (2014), combined with Sun et al. (2014). The difference of this research and the previous one are this research added variables return on asset, market to book ratio, and board size from Sun et al. (2014).

This research used the data of selected firms included in the S&P 1500 index from the Compustat Execucomt database. This research took the data from non-financial companies listed on Indonesia Stock Exchange (IDX). This research uses data from 2014-2017.

Based on the explanation above, this paper will be titled: “The Factors Affecting Real Earnings Management”. Based on what has been described in the research background, writer determines nine research problem that will be formulated. The research questions are as follows:

1. Does earnings change affect real earnings management?
2. Does debt/equity ratio affect real earnings management?
3. Does liquidity affect real earnings management?
4. Does growth affect real earnings management?
5. Does company’s size affect real earnings management?
6. Does asset sale level affect real earnings management?
7. Does return on asset affect real earnings management?
8. Does market to book ratio affect real earnings management?
9. Does board size affect real earnings management?
2. Literature Review

2.1 Agency Theory
According to the standpoint of earnings management, one of the objectives of the company is to maximize the profit. That purpose only can be realized if the responsibility of corporate management handled by the professional which is called as agent or manager, because the owners of the capital must be have a limitation when they should make decisions and operate the company. Agency theory describes the relationship between shareholders as the principal and management as the agent. Management is a party that contracted to work for shareholders' concerns and because they are selected, they should be responsible to the shareholders of all their work. As an agent, the manager is morally responsible for optimizing principal profits with contractual compensation in return. Agency theory is a contract under which one or more person (the principals) engages another person (the agent) to perform some service on their behalf which involves delegating some decision-making authority to the agent. If company separates the function of management and the function of ownership will be susceptible to agency conflict where each party try to achieve and maintain the ended level of property. The cause of conflict between manager and shareholders are decisions making that relate with cash disbursements and how the funds is invested. The existence of an asymmetry between management and principal can provide an opportunity for managers to mislead owners about the company's economic performance when performing earnings management. Such conflicts of interest may result in the company having to bear the agency costs in order to align the interests of various parties within the entity.

2.2 Signaling Theory
Godfrey et al. (2010) explained that in signaling theory, manager or agent use accounts in financial statements to give hopes for the company’s future and fulfill board expectations, as they have more information about the company and compared with the principal. This information inequality is called information asymmetry. Agents are obliged to give a signal about the company's condition to the principal, as reflected in the financial statements where one of the indicators is profit (earnings). Agents convey signals of financial information to reduce information asymmetry. The existence of this signal gives less information inequality between the principal and the agent, so the possibility of agents to make earnings management will also become smaller because the opportunity is narrower. According to Godfrey, the concept of this theory is to direct managers in designing future expectations. Because the more investor who trust the signal, then the price will rise and shareholders get the benefit.

2.3 Dependent Variable

2.3.1 Real Earning Management
Real earnings management can be interpreted as management actions that are considered to deviate from business practices with the main objective to achieve the target profit of the company (Cohen and Zarowin, 2008). In the execution, real earnings management can be done anytime during the accounting period without waiting for the year end, making it easier for managers to achieve expected returns. It shows a good short-term performance of a company that will potentially decrease long-term firm value (Hidayanti and Paramita, 2014). Previous literatures and researches have examined various forms of real earnings management through different operating activities, including controlling production, sales and inventory, selling of fixed assets, and managing discretionary expenditures such as R&D, and general and administrative expenses. Furthermore, some studies examine real earnings
management via investing and financing activities and find that firms smooth quarterly or annual earnings through share repurchases, stock option issues, and financial instruments.

2.4 Independent Variable

2.4.1 Earning Change

Earnings change is used as a proxy for earnings management by income smoothing since it is expected that managers manipulate earnings in order to achieve a smaller variable and a smoother earnings level. Poitras et al. (2001) mentioned that when earnings changes report in the company’s current period is positive compared to previous period (earnings are increased), then the managers will have no intention to manipulate earnings. It means the asset sale is not used for earnings management. But when managers face a higher negative earnings change, they tend to use the sale of assets at historical cost in order to increase their net income by the large unrealized capital gains.

2.4.2 Debt/Equity Ratio

Debt is the amount of funding the company gets from external parties, resulting in an obligation for the company. According to Ross (2007, 49), Debt to Equity Ratio is the total liabilities of firm divided by its total equity. From the statement above, we can conclude that debt to equity ratio is a solvency measure that indicates the percentage of company’s equity provided by creditors. Based on some previous examination of the debt’s effect, which result is that a high debt ratio can minimize the firm’s ability to perform earnings management, so when managers face a higher debt/equity ratio, they do not decide to realize higher capital gains from the sale of historical cost assets in order to reduce the debt/equity ratio. The company will be also closely monitored by the agency that provides the loan. Debt payments also reduce available cash, which managers can use to invest in other projects (Ardison et al., 2012).

2.4.3 Liquidity Effect

The International Financial Reporting Standards (2006) define liquidity as the available cash for the near future, after taking into account the financial obligations corresponding to that period. It shows the ability to convert an asset to cash quickly and reflects the ability of the firm to manage normal working capital. Firm can use liquid assets to finance its activities and investments when external finance is not available (Liargovas and Skandalis, 2010). On the other hand, higher liquidity can allow a firm to deal with unexpected contingencies and to cope with its obligations during periods of low earnings. According to Mehari and Aemiro (2013), firms with more liquid assets have a lower tendency to be bankrupt because they can withdraw their cash even on a very difficult situation.

2.4.4 Growth Effect

A growth company has business that generates significant earnings or positive cash flow, which increase faster than the overall economy. Developing companies also desperately need a good financial statement to be in demand by investors, because in this phase additional funds are desired by management.

2.4.5 Size Effect

Firm size is a scale that can be classified based on several points of view, such as total assets, total sales, market value of company’s stock, and others (Amertha et al., 2014). According to Agustia (2013), the size of the company will affect their funding structure, whereby larger companies need more funds than smaller ones. The development of large companies is usually highlighted by analysts, the media, and the public thereby reducing the chances of managers to make earnings management. However, large companies also tend to attract more potential investors. In larger company, the more information will be available to the
investor that will be useful for decision making process (Wiyadi et al., 2015). Thus, financial statement that issued will be the source for investors as important information whether money that they invest is used properly or not.

2.4.6 Asset Sale Level
Asset sale is the compensated distribution of valuable property that can be tangible or intangible. In a typical business or private transaction involving a sale of assets, the seller gain ownership of some form of cash or its equivalent, while the buyer obtains ownership of the asset. According to Abdel-Azim and Ibrahim (2014), Lag (IAS) is used as the measurement for the effect of the asset sale level with an expectation of a positive correlation

2.4.7 Return on Asset
Return on assets is one of the probability ratios that measure the company's ability to generate profits with existing assets (Gitman and Zutter, 2014, 130). It refers to operational probability and efficiency. The higher the return on asset value, the more efficient the use of assets will increase the company's profit (Yuliana and Trisnawati, 2015). ROA is used as a comparison of performance between companies. The good or bad performance of the company can encourage the management to act opportunistically by increasing or decreasing the profit according to the condition of the company (Amertha, 2013).

2.4.8 Market to Book Ratio
Market to Book Ratio represents the ratio of the company’s equity market value to the book value. If the company makes a profit, the account balance in profit section will be increasing and automatically the book value of equity also increases. This condition will be followed by an increase in stock market prices (Yuliana and Trisnawati, 2015). The higher the MBV value, then the company is considered to be more efficient in using their assets performance to create higher value. When a company’s MBV considered as low, it could indicate undervaluation or happen by the result of negative market sentiment about the company’s prospects. However, in some cases a low market to book could also result from excessive market pessimism based on recent company restructuring actions and negative industry news.

2.4.9 Board Size
Board size refers to the number of directors sitting on the board (Levrau and Van den Berghe, 2007). Most boards over the world range from three to thirty members, but some researcher confirmed that the smaller board size is more correlated with the quality of monitoring. They recommended that board membership should be between eight and nine persons, and any additional benefits that can be gained from the increased monitoring by additional membership will offset the costs linked with slow decision making for earnings management.

3. Research Method
This research is classified as the causality research. Causality research objective is to discover one or some factors that cause an influence from one variable to other variables (Sekaran and Bougie, 2016). This research examines the influence of independent variables which are earnings change, debt/equity ratio, liquidity effect, growth effect, size effect, asset sale level, return on asset, market to book ratio, and board size toward the dependent variable which is real earnings management (income from asset sale). The population of this research is the non-financial companies that listed in Indonesia Stock Exchange (IDX) from 2014 to 2017.

The sample are chosen by using purposive sampling method, which means that the sample will be used only if it is fit with the criteria intended (Sekaran and Bougie, 2016). The criteria for research sample are as follows:

1. Non-financial companies that are consistently listed in Indonesia Stock Exchange (IDX) from 2014 to 2017.
2. Non-financial companies that published the financial statements as of December 31.
3. Non-financial companies that issued consistently financial statements in Indonesian Rupiah (IDR).
4. Non-financial companies that reported income (either gain or loss) from asset sales during the research period.
5. Non-financial companies that reported net income of the event year.

Data analysis technique used in this research is multiple linear regression analysis using IBM SPSS Statistics Analysis Application 19. The test will be done in this research include descriptive statistics, quality test data, classical assumption test, and hypothesis test.

In this research measurement that are used in descriptive statistics test includes the mean, sum, standard deviation, maximum value, and minimum value. In this test, we have to analyze the central tendency in the descriptive statistical result to get the mean, and dispersion. Mean is used to determine the average data is concerned. Standard deviation is used to determine how large the data in question varies from the average. The maximum is used to determine the greatest amount of pertinent data. The minimum is used to determine the smallest amount of data in question varies from the average. Sum is used to calculate how many data that is used in the research (Ghozali, 2016).

In data quality test, residual normality test is used. The residual normality test is done for the first step in the multivariate analysis. Normality test is used to test whether the residual value in a regression model is normally distributed. The Kolmogorov-Smirnov method is used to test the normality of residual value of data. The normality of data distribution results in the more suitable statistical test result (Ghozali, 2016). Kolmogorov-Smirnov test is begun by making the hypotheses:

1. H0: Data are normally distributed.
2. Ha: Data are not normally distributed.

After that, we have to find the unstandardized residual value of the regressions and then analyzing the unstandardized residual value using One-Sample Kolmogorov-Smirnov Test to get the significant value to be used in decision making. The residual value can be determined whether it is normally distributed using the criteria below:

1. If the significant value (asymp.sig.2-tailed) higher than 0.05, H0 is accepted, then the residual value is normally distributed.
2. If the significant value (asymp.sig.2-tailed) less than 0.05, H0 is rejected, then the residual value is not normally distributed.

Outlier data is the case which is residual value has unique characteristic which is totally different from the other observations and appear in a form of extreme values. Outlier test is done if the residual value is not normally distributed. Detection towards the outlier can be done by establishing the boundary value. This boundary value can be categorized as outlier data by converting the data value into standardized score or commonly called Z-score, which has means equal to zero and standard deviation equals to one (Ghozali, 2016). For the small sample case (less than 80), so the standard score with value ± 2.5 is classified outlier. For big sample, standard score is classified as outlier if the value is in above ± 3 (Ghozali, 2016).

The hypotheses tests in this research are multiple regressions, include the R test, Adjusted R², F test and t-test. The significant level that is used is 5%. Multiple regression analysis is used to test the effect of independent variables towards the dependent variable. Multiple regression analysis is done with the aim of estimating or predicting the population.
mean or average value of the dependent variable based on the independent variable values are known. Multiple regression analysis also measures the strength of the relationship between dependent variable and independent variables and shows the relationship between the dependent variable with independent variables.

4. Result and Discussion
The population used in this research is all Non-Financial Companies listed in Indonesia Stock Exchange from 2014 until 2017. Samples are selected using purposive sampling with the criteria as follows:

<table>
<thead>
<tr>
<th>No.</th>
<th>Criteria Description</th>
<th>Number of Companies</th>
<th>Number of Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Non-financial companies that are consistently listed in Indonesia Stock Exchange (IDX) from 2014 to 2017.</td>
<td>398</td>
<td>1,592</td>
</tr>
<tr>
<td>2</td>
<td>Non-financial companies that not published the financial statements as of December 31.</td>
<td>(7)</td>
<td>(28)</td>
</tr>
<tr>
<td>3</td>
<td>Non-financial companies that not issued consistently financial statements in Indonesian Rupiah (IDR).</td>
<td>(79)</td>
<td>(316)</td>
</tr>
<tr>
<td>4</td>
<td>Non-financial companies that not reported income (either gain or loss) from asset sales during the research period.</td>
<td>(95)</td>
<td>(380)</td>
</tr>
<tr>
<td>5</td>
<td>Non-financial companies that not reported positive net income of the event year.</td>
<td>(124)</td>
<td>(496)</td>
</tr>
<tr>
<td></td>
<td>Number of Sample</td>
<td>93</td>
<td>372</td>
</tr>
</tbody>
</table>

From Table 1 above indicates that total of the Non-Financial Companies listed in Indonesia Stock Exchange are 398 companies. There are 7 companies that do not consistently published financial statements as of December 31st, 79 companies that do not consistently issued financial statements in Indonesian Rupiah (IDR), 124 companies that do not consistently earned positive net income, and 95 companies that do not consistently reported income from asset sale during the research periods. Because of these criteria sample, the researcher gets 93 companies as result.

The t-test result is shown in the table 2 below:

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Significance</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Constant)</td>
<td>0.047</td>
<td>0.411</td>
<td></td>
</tr>
<tr>
<td>EARN</td>
<td>-0.400</td>
<td>0.000</td>
<td>Ha₁ Accepted</td>
</tr>
<tr>
<td>DER</td>
<td>0.008</td>
<td>0.011</td>
<td>Ha₂ Accepted</td>
</tr>
<tr>
<td>LIQ</td>
<td>-4.606</td>
<td>0.959</td>
<td>Ha₃ Not Accepted</td>
</tr>
<tr>
<td>GROWTH</td>
<td>7.314</td>
<td>0.986</td>
<td>Ha₄ Not Accepted</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.003</td>
<td>0.210</td>
<td>Ha₅ Not Accepted</td>
</tr>
<tr>
<td>ASL</td>
<td>-0.478</td>
<td>0.109</td>
<td>Ha₆ Not Accepted</td>
</tr>
<tr>
<td>ROA</td>
<td>0.453</td>
<td>0.000</td>
<td>Ha₇ Accepted</td>
</tr>
<tr>
<td>MBV</td>
<td>-0.003</td>
<td>0.000</td>
<td>Ha₈ Accepted</td>
</tr>
<tr>
<td>BOD</td>
<td>0.000</td>
<td>0.925</td>
<td>Ha₉ Not Accepted</td>
</tr>
</tbody>
</table>
The t-test result shows that earnings change has significance level 0.000 which is below 0.05, means that Ha1 is accepted. This shows that earnings change has an effect on the real earnings management (IAS) but in negative direction. So, managers are tending to perform the asset sale at historical cost to increase company’s profit level when earnings are decreased compared to previous period.

The t-test result shows that debt to equity has significance level 0.001 which is below 0.05, means that Ha2 is accepted. It means that debt to equity has a positive effect on the real earnings management (IAS). Unlike the other research, when managers face a higher debt/ equity ratio, they still realize higher capital gains from the sale of historical cost assets to show company’s performance.

The t-test result shows that liquidity effect has significance level 0.959 which is above 0.05, means that Ha3 is not accepted. It means that liquidity effect has no effect on the real earnings management (IAS).

The t-test result shows that growth effect has significance level 0.986 which is above 0.05, means that Ha4 is not accepted. It means that growth effect has no effect on the real earnings management (IAS).

The t-test result shows that size effect has significance level 0.210 which is above 0.05, means that Ha5 is not accepted. It means that size effect has no effect on the real earnings management (IAS).

The t-test result shows that asset sale level has significance level 0.109 which is above 0.05, means that Ha6 is not accepted. It means that asset sale level has no effect on the real earnings management (IAS).

The t-test result shows that return on asset has significance level 0.000 which is below 0.05, means that Ha7 is accepted. It means that return on asset has a positive effect on the real earnings management (IAS). The more intense practice of REM will make company’s performance looks better and in line with management’s expectation.

The t-test result shows that market to book value has significance level 0.000 which is below 0.05, means that Ha8 is accepted. It means that market to book value has an effect on the real earnings management (IAS) in the negative direction. Assuming the market price is going down, managers will perform higher earnings management as the other way to attract investors.

The t-test result shows that board size has significance level 0.925 which is above 0.05, means that Ha9 is not accepted. It means that board size has no effect on the real earnings management (IAS).

5. Conclusion

This research is done to find the empirical evidence of the influences of earnings change, debt to equity, liquidity effect, growth effect, size effect, asset sale level, return on asset, market to book value and board of directors on real earnings management (income from asset sale) of non-financial companies listed in Indonesia Stock Exchange during research period of 2014-2017. Based on the hypotheses test, the conclusion below is drawn:

1. Earnings change has a negative effect on real earnings management (IAS). This result is inconsistent with the research done by Abdel-Azim and Ibrahim (2014) or Chandegani (2016), but supported by Moradi (2014). Meanwhile, Poitras et al. (2001) agreed that this variable has effect on real earnings management but with positive correlation.

2. Debt to equity has a positive correlation on real earnings management (IAS). This result is inconsistent with all the research done by Abdel-Azim and

3. Liquidity effect has insignificant correlations with real earnings management (IAS). This result is not supported by the previous research from Abdel-Azim and Ibrahim (2014) or Chandegani (2016) who said it has positive effect towards REM.

4. Growth effect has no correlation with real earnings management (IAS). This result is consistent with the research done by Chandegani (2016) but it is not consistent with Abdel-Azim and Ibrahim (2014). According to Abdel Azim and Ibrahim (2014), growth has negative effect towards REM and their research supported by Matsuura (2008). Meanwhile, Lee et al. (2006) said the opposite one that growth is positively related to REM.

5. Size effect has no effect with real earnings management (IAS).

6. Asset sale level has no effect on real earnings management (IAS).

7. Return on asset has a positive effect on real earnings management (IAS). This result is supported by Zamri et al. (2013) but inconsistent with a lot of previous research such as Sun et al. (2014), Raoli (2013) and Joosten (2012) who said it has negative effects on REM, Xu (2007) who said it has no effect at all, or Poitras et al. (2001) who did not provide any specific result because of ambiguity.

8. Market to book value also has a negative effect on real earnings management (IAS). This result is inconsistent with the research done by Sun et al. (2014), Joosten (2012), Badertscher (2011) and Raoli (2004). They said that MBV has positive correlation with REM.

9. Board size has no effect on real earnings management (IAS). This result is inconsistent with the Sun et al. (2014)’s research who said it has positive correlation with REM. Meanwhile Susanto and Pradipta (2016) said it has negative effect towards real earnings management.

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