Conference Paper

Analysis of Financial and Non Financial Factors to Revaluation of Fixed Asset
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Abstract

This study aimed to examine the effect of Financial and Nonfinancial Factors to Fixed Asset Revaluation. Financial Factors consist of Leverage, Liquidity, Fixed Asset Intensity, Firm Size, and Firm Value. Nonfinancial Factors consist of Managerial Ownerships, Government Ownerships, and Independent Board of Commissioners. The population are 71 companies from Property, Real Estate, Building Construction, Infrastructure, Utility, and Transportation sector listed on the Indonesian Stock Exchange in 2014. Technique sampling using population sampling so obtained by 71 units analysis from annual report company’s sample in 2014. The analytical tool used descriptive statistic and logistic regression. The result showed that Managerial Ownerships, and Government Ownerships have significantly positive effect on Fixed Asset revaluation. Leverage, Liquidity, Fixed Asset Intensity, Firm Size, Firm Value, and Independent Board of Commissioner have no effect on Fixed Asset Revaluation. The conclusions of this study is Non Financial Factors such as Managerial Ownerships, and Government Ownerships are more likely to revalue fixed assets.

Keywords: Financial Factors; Nonfinancial Factors; Fixed Asset Revaluation

1. Preliminary

Globalization makes it easier for investors to invest in various countries only by looking at the condition of the company through financial statements. Revaluation is one of the fixed asset measurement methods adopted from IFRS where revaluation can improve transparency, competitiveness, and comparability of financial statements [3]. The fair value in the revaluation model may reflect the real potential of fixed assets which is a reflection of the company’s condition [20]. The revaluation also received support from the Government of Indonesia through PMK191/PMK.010/2015 which conclude the revaluation of fixed assets tax.

The phenomenon that occurs not many companies that utilize fixed asset revaluation although various benefits will be obtained if the company revalues. Research
from Purwanti et al. (2017) shows that of 531 companies listed on the Indonesia Stock Exchange 2008-2016 only 76 companies are revaluing fixed assets. The phenomenon is interesting to investigate, especially related to the motives behind some companies to implement asset revaluation while other companies do not.

Research gaps also occur in several research variables such as leverage, liquidity, fixed asset intensity, and firm size. Leverage is evidenced by Cheng & Lin (2009); Tabari & Adi (2014); Sudrajat et al. (2017) have a positive effect on revaluation decisions, in contrast to Seng & Su (2010); Rahman (2017) who found no relationship between leverage and the revaluation decision. Liquidity is evidenced by Barac & Sodan (2011); Manihuruk & Farahmita (2015) negatively affected the revaluation decision, in contrast to Tay (2009); Latifa & Haridhi (2016) who did not find the effect of liquidity with the asset revaluation decision. Intensity of fixed assets by Choi et al. (2013); Tabari & Adi (2014) dan Sudrajat et al. (2017) proved to be positively related to revaluation, while Aziz & Yuyetta (2017); Rahman (2017) actually found a negative relationship of fixed asset intensity with asset revaluation decisions. Firm size by Tabari & Adi (2014); Hidayat & Hati (2017) proved to be positively related to revaluation, while Ballas et al. (2014); Sudrajat et al. (2017) did not find a firm size relationship with the asset revaluation decision.

This study aims to examine the effect of independent variables consisting of financial and nonfinancial factors to the dependent variable that is the revaluation decision of fixed assets. Financial factors consist of leverage, liquidity, fixed asset intensity, firm size, and firm value. Nonfinancial factors consist of managerial ownership, government ownership, and independent board of commissioners. The originality of this study is the use of variables that are still rarely studied in Indonesia such as variable firm value, managerial ownership, government ownership and independent board of commissioners.

Theories used are positive accounting theory and also agency theory. Positive accounting theory to explain and predict an action to be taken company through the three hypotheses in the theory of positive accounting, among others: (1) the debt cost contract hypothesis, (2) the political cost hypothesis. (3) the bonus plan hypothesis. Agency theory is used to describe actions taken by companies to reduce the existence of information asymmetry.

Leverage is the ratio used to measure how much equity and assets that are used as collateral for corporate debt payments. The high leverage value is not favored by the creditor as it shows the low guarantee of disbursement of equity or assets if the company is liquidated. In addition, the high value of leverage also shows the company’s
proximity to breach of debt agreement. Based on the hypothesis of debt contracting costs of positive accounting theory, firms close to breach of debt agreements such as having high leverage ratios would be more likely to choose accounting methods that could shun the company from credit risk for breach of debt agreement. Revaluation can be used to loosen debt agreement constraints such as possible fines [12]. Asset revaluation can increase the value of the equity that decreases the company’s leverage ratio [25]. Low leverage ratio will increase creditor trust [19] making it easier to obtain a capital loan. Based on this, firms with high leverage will be more likely to choose to use revaluation methods on their fixed assets. Further Aziz & Yuyetta (2017); Wali (2015) successfully proves leverage has a positive effect on the revaluation of fixed assets.

H1: Leverage positively affects fixed asset revaluation decisions

Liquidity is a ratio that shows how much the company’s ability to fund current liabilities / debt that has matured the company by using current assets. Low liquidity ratios indicate potential problems that indicate the company’s close to breach of debt agreement [5]. Based on the positive accounting theory of the hypothesis of debt relief costs, firms close to breach of debt agreements such as having low liquidity value will seek to choose accounting methods that may prevent the company from credit risk due to breach of debt agreement so that the company will be motivated to perform fixed asset revaluation. The purpose of the revaluation is to show the true value of the fixed asset so as to inform the creditor about the assurance of the sale of the asset if the company is unable to repay the debts of the maturing company. Further Barac & Sodan (2011); Lopes & Walker (2012) succeeded in proving liquidity negatively affecting fixed asset revaluation decisions.

H2: Liquidity negatively affects fixed asset revaluation decisions

Fixed assets is one of the creditor’s concerns because it can be used as collateral if the company is unable to pay the debt. The high value of fixed assets will make it easier for companies to obtain loans from creditors [24]. Based on positive accounting theory, firms with high fixed asset intensity will try to choose the method that can benefit the company, one of them by choosing to do revaluation. The revaluation can make the asset’s value higher so it can be used as an additional asset sale to the creditor if the company is liquidated. Tabari & Adi (2014); Seng & Su (2010) states that asset revaluation would be more profitable if the fixed asset ratio to total assets is significant. In addition, the revaluation also requires a lot of costs so that the proportion of low
fixed assets is not proportional to the cost to be issued by the company if it revalues. Under this framework, firms with high fixed assets will be more likely to revalue than firms with low fixed assets. Further Tabari & Adi (2014); Aziz & Yuyetta (2017); Martini & Kurniawati (2018) managed to find a positive relationship between the intensity of fixed assets against asset revaluation.

\( H_3: \) Fixed asset intensity is positively related to fixed asset revaluation decisions

Firm size is a grouping of companies into small, medium and large scale. Large companies will be easier to see than small companies. Large companies are vulnerable to the demands of stakeholders that can increase the company’s political costs, one of which is higher taxation. As a result large enterprise managers are more likely to adopt more conservative accounting methods so as to reduce the company’s political attention.

Positive accounting theory of the hypothesis of political costs, large companies tend to choose methods that can prevent companies from large political costs. Revaluation of assets can increase the value of assets which then used as the basis for calculating the depreciation expense of the company. Automatic depreciation expense will be greater and will reduce the company’s profit. A fall in profits will also lower the company’s political costs (taxes). According to Iatridis & Kilirgiotis (2012) large companies also have high levels of information requests from stakeholders. Revaluation was chosen because it has a better disclosure value \[10\]. Further Iatridis & Kilirgiotis (2012); Hidayat & Hati (2017) managed to find a positive relationship between firm size against asset revaluation.

\( H_4: \) Firm size positively affects fixed asset revaluation decisions

Tobin’Q is one of the indicators of corporate value. The value of the tobin’Q can show how much market valuation compares to the value recorded in the company. Low tobin’Q values represent companies in undervalued conditions and management failures managing corporate assets \[26\]. Low tobin’Q values may cause a conflict of interest because the management diaggap fails to achieve the stakeholder objectives. Based on agency theory, management may take steps to overcome a conflict of interest by informing the true value of the company’s assets through revaluation of the firm’s fixed assets. Asset revaluation has been empirically proven to make it easier for companies to obtain loans in debt markets \[13\], increasing price, and stock returns \[1\]. Further Baek & Lee (2016); Martini & Kurniawati (2018) managed to find a negative relationship between the value of the company against asset revaluation.
Managerial ownership is essential in agency theory to reduce the conflict of interest between agents and principals and reduce agency costs incurred by the company. The agency theory Jensen & Meckling (1976) states that the larger shares owned by management within the company will make management more active to run the interests of shareholders who essentially are themselves.

Management as a principal as well as agents will try to select accounting methods that can be useful for achieving corporate goals. Increased managerial ownership is expected to encourage companies to choose fixed asset revaluation methods. Revaluation may increase the creditor’s trust, can be used to reduce corporate income tax, and may increase the value of the stock \([1, 9, 14]\). Menurut Missonier & Piera (2007); Wali (2015) asset revaluation decision is a decision of management, so management will be more flexible to take asset revaluation decisions.

\(H_6\): Managerial ownership positively affects fixed asset revaluation decisions

The revaluation set out in PMK191/PMK.010/2015 is one of the volcanic economic policy packages of V that are primarily targeted to a company majority owned by the Government of the Republic of Indonesia. The revaluation is beneficial to the Government of the Republic of Indonesia both as a shareholder of the company and as a tax regulator. From the shareholder side, the Government can increase the value of the shares because the revaluation surplus can be used as share bonus for shareholders and from the tax regulator side, the Government will get the fund injection on the fixed assets revaluation tax. The Government as the majority shareholder is also entitled to determine the composition of management and directors within the company and to intervene in the decision of the company for the benefit of the government. Based on positive accounting theory, management may choose to use revaluation method which has many benefits for shareholders (Government) with the aim of pleasing shareholders so that management get high bonus.

\(H_7\): Government ownership positively affects the revaluation of fixed assets

Independent board of commissioners have an important role of oversight within the company. Where independent board is one part of corporate governance mechanism in agency theory that can suppress opportunistic management action. Companies that are majority owned and managed by the same person (management) will cause a conflict of interest that is no longer between management and shareholders, but
between principals who are also agents with minority shareholders. An independent board of commissioners is elected by a minority shareholder who has no voting rights in the GMS. The purpose of the independent board of commissioners is to protect the interests of shareholders of the company so as to demand good management of management and have more interest to reveal the true value of the company [30]. Revaluation is one method that can be used to reveal the value of an asset that is a reflection of the true value of the company. So that the number of independent board of directors in the company allegedly will increase the company’s motivation to perform asset revaluation.

\[ H_0: \text{Independent board of commissioners positively influence fixed asset revaluation decisions} \]

2. Research Methods

This research is quantitative research with secondary data type. The research population is 71 companies from the property sector, real estate, building construction, infrastructure, utilities and transportation listed on Indonesia Stock Exchange in 2014. The sampling technique used the population technique to get 71 units of analysis. Dependent variable in research that is Decision Revaluation of Fixed Assets. The independent variables in the research are Leverage, Liquidity, Fixed Asset Intensity, Company Size, Corporate Value, Managerial Ownership, Government Ownership, and Independent Board of Commissioners. The definitions and measurements of variables are summarized in Table 1. below:

Data collection techniques using documentary techniques are taken from the company’s 2014 financial statements for independent variables of leverage, liquidity, fixed asset intensity, firm size, firm value, managerial ownership, government ownership, and independent board of commissioners, while variable Y is derived from the company’s annual financial statements 2015 and 2016 as per PMK191 / PMK.010 / 2015. The analytical technique used descriptive statistics and logistic regression. Logistic regression model used is as follows:

\[ Y = \beta_0 + \beta_1 \text{LEV} + \beta_2 \text{LIQ} + \beta_3 \text{FAI} + \beta_4 \text{FS} + \beta_5 \text{FV} + \beta_6 \text{MO} + \beta_7 \text{GO} + \beta_8 \text{IBC} \] (1)
Table 1: Research Variables and Measurement Indicators.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Definition</th>
<th>Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td>Revaluation of fixed asset (Y)</td>
<td>Revaluation of fixed asset is to change the book value of assets previously recorded at acquisition cost and then recorded based on fair value of assets [3].</td>
<td>1 for companies that perform asset revaluation. 0 for companies that do not revaluate assets [3].</td>
</tr>
<tr>
<td>Leverage (LEV)</td>
<td>Leverage is a description of the proportion of debt to equity owned by the company [6].</td>
<td>Total Liabilities/Equity</td>
</tr>
<tr>
<td>Liquidity (LIQ)</td>
<td>Liquidity represents the proportion of current assets compared to current liabilities of the company [5].</td>
<td>Current Assets/Current Liabilities</td>
</tr>
<tr>
<td>Fixed asset intensity (FAI)</td>
<td>Fixed asset intensity is a description of the proportion of property and equipment owned by the company [19].</td>
<td>Total Fixed Assets/Total Assets</td>
</tr>
<tr>
<td>Firm Size (FS)</td>
<td>Firm size is grouping companies into small, medium and large size [2].</td>
<td>Ln Total Asset [2]</td>
</tr>
<tr>
<td>Firm Value (FV)</td>
<td>Firm Value (NP) Corporate value is a value that can indicate the condition of a company [26].</td>
<td>Tobin'Q = (MVS+D)/TA [26].</td>
</tr>
<tr>
<td>Managerial Ownership (MO)</td>
<td>Managerial ownership is the ownership of shares by directors, commissioners and employees who have certain requirements to own shares [30].</td>
<td>Total Ownership Manager/Total Owners [30].</td>
</tr>
<tr>
<td>Government Ownership (GO)</td>
<td>Government ownership is the share ownership by the government [31].</td>
<td>Total Government Ownership/Total Owners [31].</td>
</tr>
<tr>
<td>Independent Board of commissioners (IBC)</td>
<td>Independent board of commissioners is a board of commissioners who does not have any affiliation relationship with shareholders, company management and other board of commissioners [30].</td>
<td>Total Independent Commissioner/Total Commissioner [30].</td>
</tr>
</tbody>
</table>

Source: various studies, 2018

3. Results and Discussion

Descriptive statistical test results show that leverage has a minimum value of 0.07 maximum of 5.93 and an average of 1.29. Liquidity has a minimum value of 0.18 maximum of 18.99 and an average of 2.24. Fixed asset intensity has a minimum value of 0.00 maximum of 0.94 and an average of 0.19. Firm size has a minimum value of 25.25 maximum 32.59 and an average of 29.11. Firm Value has a minimum value of -0.29 maximum of 3.61 and an average of 1.13. Managerial ownership has a minimum value of 0.00 maximum of 0.67 and an average of 0.03. Government ownership has a minimum value of 0.00 maximum of 0.70 and an average of 0.07. The independent
board of commissioners has a minimum value of 0.14 maximum of 0.67 and an average of 0.39.

Logistic regression test value -2Log Likelihood showed a decrease of 25,642 indicating regression model better because fit with data. The chi-square value of 3,037 probability significance of 0.932 > \( \alpha \) 0.05 then the model is acceptable. The ability of independent variables describes the dependent variable of 56.9%. The company’s predictive power did not revalue the fixed assets of 95.2%, the strength of the regression model predicts a reversing company of 44.4% indicating as many as 4 companies can be precisely predicted by the research model. The total percentage value is 88.7%.

Logistic regression model of research that is formed is as follows,

\[
Y = -18.37 + 0.398 LEV + 0.109 LIQ - 0.921 FAI + 0.419 FS + 0.681 FV + 16.47 MO + 4.817 GO + 2.34 IBC
\]  
(2)

The result of hypothesis testing with significance level \( \alpha \) 0.05 is presented in Table 2. below:

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>B</th>
<th>Sig.</th>
<th>Results</th>
</tr>
</thead>
<tbody>
<tr>
<td>( H_1 )</td>
<td>Leverage has a positive effect on the revaluation of fixed assets</td>
<td>0.398</td>
<td>0.277</td>
</tr>
<tr>
<td>( H_2 )</td>
<td>Liquidity has a negative effect on the revaluation of fixed assets</td>
<td>0.109</td>
<td>0.733</td>
</tr>
<tr>
<td>( H_3 )</td>
<td>Fixed asset intensity positively effect on the revaluation of fixed assets</td>
<td>-0.921</td>
<td>0.700</td>
</tr>
<tr>
<td>( H_4 )</td>
<td>Firm size positively effect on the revaluation of fixed assets</td>
<td>0.419</td>
<td>0.461</td>
</tr>
<tr>
<td>( H_5 )</td>
<td>Firm value negatively effect on the revaluation of fixed assets</td>
<td>0.681</td>
<td>0.336</td>
</tr>
<tr>
<td>( H_6 )</td>
<td>Managerial ownership positively effect on the revaluation of fixed assets</td>
<td>16.47</td>
<td>0.029</td>
</tr>
<tr>
<td>( H_7 )</td>
<td>Government ownership positively effect on the revaluation of fixed assets</td>
<td>4.817</td>
<td>0.046</td>
</tr>
<tr>
<td>( H_8 )</td>
<td>Independent board of commissioners positively effect on the revaluation of fixed assets</td>
<td>2.340</td>
<td>0.661</td>
</tr>
</tbody>
</table>

Source: secondary data processed, 2018

3.1. Effect of leverage on fixed assets revaluation

The result of logistic regression test yields positive regression coefficient. The value of positive coefficients supported by positive accounting theory says that companies close to breach of debt agreements such as having high leverage ratios will be more likely to choose accounting methods that may prevent companies from credit risk for
breach of debt agreement. So firms with high leverage are more likely to choose to use fixed asset revaluation methods in order to decrease leverage ratios.

Leverage has no effect on the asset revaluation decisions because based on the research data, the average sample company does not have a high leverage level so the firms are not too interested in revaluing assets. In addition, the cost will be issued to conduct a revaluation is also not small. The company’s expectations lowered the leverage ratio to ease the burden on the company, making it easier to obtain a loan, but the costs for revaluation would add to the company’s burden. The results of this study are in line with research conducted by Seng & Su (2010) which also found no leverage relationship with fixed asset revaluation decisions.

3.2. Effect of liquidity on fixed assets revaluation

The liquidity regression coefficient is positive, it is because the revaluation of fixed assets requires considerable costs as well as for revaluation taxes and also for the payment of independent appraisers. The researcher failed to find the negative effect of liquidity on the revaluation of fixed assets due to the low value of fixed assets owned by the company is not large enough to be able to provide confidence to the creditor regarding the disbursement guarantee of fixed assets if the company is unable to pay the liabilities of the company that has matured. Revaluation is also not significant if assets are not in a position to be sold and will increase the company’s liquidity burden in the future as it has to incur additional costs. The results did not match with the research of Barac & Sodan (2011); Lopes & Walker (2012) who successfully proved liquidity negatively affects fixed asset revaluation decisions. This study is in line with the research of Latifa & Haridhi (2016) who did not find any liquidity relationship with the asset revaluation decision.

3.3. Effect of fixed asset intensity on fixed assets revaluation

Logistic regression coefficients show negative but insignificant results. The negative coefficient is explained by positive accounting theory where low asset value in the firm adds to the creditor’s concerns so that the company will revalue to increase the value of the company’s fixed assets. H3 is rejected, the intensity of fixed assets has no effect on fixed asset revaluation decisions. The intensity of fixed assets has no effect on fixed asset revaluation decisions allegedly due to the too low fixed assets value of the company that can be revalued and generate a surplus so that it will not be
significant enough if it is revalued. The results of this study are in line with research from Barac & Sodan (2011) and different research results with Tabari & Adi (2014); Aziz & Yuyetta (2017); Martini & Kurniawati (2018) who managed to find a positive relationship between the intensity of fixed assets against fixed asset revaluation.

3.4. Effect of firm size on fixed assets revaluation

The result of logistic regression shows the positive firm size regression coefficient according to the initial hypothesis of the study. The positive coefficients are explained by positive accounting theory where firm size is often associated with political attention. Large companies will be more visible than small firms and thus vulnerable to the demands of stakeholders that can increase the company’s political costs. Consequently large firms are thought to be more likely to apply more conservative accounting methods that can reduce profits so as to reduce the company’s political attention in accordance with positive accounting estimates of the political cost hypothesis.

Firm size has no effect on fixed asset revaluation decisions allegedly due to the effects of a fixed asset revaluation whereby the company’s objective of revaluation is to avoid political attention from stakeholders due to the size of the firm. However, the effect of asset revaluation will increase the size of the company. So it is not in line with the original purpose of revaluation that is to avoid political attention. In addition, revaluation of property and equipment is also taxed on the excess of revaluation of property and equipment. So the company’s goal to avoid taxes instead actually have to pay taxes.

The results of this study are not in accordance with the results of research from Iatridis & Kilirgiotis (2012); This study has consistent results with research from Ballas et al. (2014); Sudrajat et al. (2017) which also found no correlation between firm size and fixed asset revaluation decisions.

3.5. Effect of firm value on fixed assets revaluation

Based on the logistic regression test, H5 is rejected as the value of the company has no effect on fixed asset revaluation decisions. The company’s value proxied by tobin’Q has no effect on asset revaluation decisions allegedly because shareholders and creditors will not pay much attention to the value of tobin’Q. Shareholders and creditors will be more focused on achieving management through the high profits earned by the company, and the success or failure of the programs that run the company. To earn
profits, expand, and fund projects that benefit the company requires a lot of funds, whereas if the company revalues the assets it will suck up the company’s funds that could otherwise be allocated to other more profitable programs.

In addition, the objective of fixed asset revaluation in accordance with the agency theory is to conduct the company to avoid conflicts of interest between management and stakeholders outside the company. Management may take steps to address conflicts of interest by informing the true value of the company’s assets. One of the chosen ways is by choosing a revaluation model. For that purpose, management does not need to pay too much attention to the value of the company’s tobacco in a low or high state if the objective is to provide relevant information about the exact value of the company’s assets. This result is inconsistent with research from Baek & Lee (2016); Martini & Kurniawati (2018) who managed to find a negative relationship between tobin’Q on asset revaluation.

3.6. Effect of managerial ownership on fixed assets revaluation

The result of logistic regression shows that managerial ownership has an effect on fixed asset revaluation decisions. The role of managerial ownership is critical in agency theory to reduce the conflict of interest between agents and principals. Managerial ownership can reduce the agency costs incurred by the company. Management will also act in accordance with the wishes of the principal because after all management is part of the principal itself. Management will take actions that can benefit all parties both from the side of management and stakeholders. One of them with the management took action revaluation of fixed assets. Some of the benefits will be obtained by the principal due to management decisions to revalue such as can increase the creditor trust, can be used to reduce corporate income tax, and can increase the value of shares. Revaluation of assets may increase share ownership because the excess of asset value can be used as bonus shares to the non-taxable owner (PMK191 / PMK.010 / 2015).

3.7. Effect of government ownership on fixed assets revaluation

The logistic regression result shows that Government ownership has a positive effect on fixed asset revaluation decisions. Positive influence is explained by positive accounting theory where management will choose accounting methods that can
please shareholders’ heart for the purpose of getting bonus. Revaluation will provide many benefits to the Government both from the side of the Government as a shareholder and the Government as a tax regulator so that management will also be rewarded by giving higher bonuses.

3.8. Effect of independent board of commissioners on fixed assets revaluation

The independent board of commissioners has no effect on fixed assets revaluation decisions. Although based on research data the average sample company has complied with the rules of the Financial Services Authority regulation no. 33 which requires the company to own at least 30% of the independent board of commissioners, it appears that the regulation is only an excuse to comply with the rules and not for the purpose of monitoring the management to be effective. In addition, based on the results of this study majority ownership has a significant influence on the decisions taken by the company, so the policy of independent board of commissioners is not too influential on the decisions taken company. The results of this study support the results of research from Wali (2015) who also did not find the influence of independent board of commissioners against the asset revaluation decisions.

4. Conclusion

Based on the test results, nonfinancial factors play a role in determining fixed asset revaluation decisions where managerial ownership, government ownership has proven to positively affect fixed asset revaluation decisions. While leverage, liquidity, fixed asset intensity, firm size, firm value, and independent board of commissioners have no effect on fixed asset revaluation decisions. Further research is expected to conduct research in the period before and after the implementation of PMK191 / PMK.010 / 2015 so that the results of further research can provide information relating to the effects or benefits if the company revalued fixed assets in accordance PMK191 / PMK.010.2015.

References


