# DOES ACCOUNTING INFORMATION BECOME PERTINENT TO ASSET REVALUATION DECISION?

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# DOES ACCOUNTING INFORMATION BECOME PERTINENT TO ASSET REVALUATION DECISION?

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### ABSTRACT

This research aims to examine whether accounting information proxical by fixed asset intensity, financial leverage, and liquidity affect fixed asset revaluation decisions in the manufacturing sector in Indonesia. This study used the purposive sampling method with 80 firm-year observations derived from 20 chosen companies using logistic regression and generalized effect estimation analysis with panel data. Results from pooled data found a positive association between fixed asset intensity and fixed asset revaluation, a positive association between financial leverage and fixed asset revaluation, and a negative relationship between liquidity and fixed asset revaluation. Take study found public firms revaluing their fixed asset can provide more relevant accounting information for users of financial statements. The research implies that fixed asset revaluation also improves borrowing capacity and capital structure.

Keywords: Revaluation; Fixed Assets; Logistic Regression; Generalized Estimation Effect; Data Panel

### ABSTRAK

Penelitian ini bertujuan untuk menganalisis apakah informasi akuntansi yang diukur melalui intensitas perolehan dikuiditas akan mempengaruhi keputusan revaluasi aset tetap pada perusahaan sektor manufaktur di Indonesia. Penelitian ini menggunakan metode purposive sampling untuk mengumpulkan data dari 80 perusahaan-tahun yang diana 15 melalui regresi logistik data panel dan regresi efek rerata populasi. Hasil penelitian ini menunjukkan bahwa intensitas pembelian aset tetap dan financial leverage berpengaruh positif signifikan terhadap keputusan revaluasi aset, sedangkan likuiditas berpengaruh negatif terhadap keputusan revaluasi tersebut. Selain itu, diperoleh kesimpulan bahwa emiten yang merevaluasi aset tetapnya akan meningkatkan kualitas informasi akuntansi yang bermanfaat bagi pengguna laporan keuangan. Implikasi dari penelitian ini adalah perusahaan yang melakukan revaluasi aset tetap akan meningkatkan kapasitas struktur permodalannya.

Kata Kunci: Revaluasi; Aset Tetap; Regresi Logistik; Efek Rerata Populasi; Data Panel



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### **INTRODUCTION**

The economic crisis caused by the COVID-19 outbreak has led to administrative business shutdowns, quarantines and restrictions on mobility, and social contact have brought large parts of our economies almost to a standstill (OECD, 2020; Wren-Lewis, 2020). This event not only yields in humanitarian crisis, but also large-scale catastrophe in the butters sector as productivity slows down and earnings expectations reverse sharply. According to The World Economic Outlook update, global growth was projected negative at -4,9% in 2020, and in 2021 global growth is only projected at 5,5% (OECD, 2020; World Bank, 2020). Pieces of evidence also show the pandemic had caused layoffs and even permanent job loss (Altig et al., 2020). Economic fallout affects the normal business cycle and the company's accounting information in the form of capital and debt structure. In the US alone, the amount of distressed debt has surged to nearly US\$1 Trillion in a week (Momberg, 2020). Reuters (2020), based on a study of 900 top firms, also reported that companies around the world would take on as much as US\$1 trillion of new debt in 2020. In some countries, financial instability is likely to increase because of rapid growth in private sector debt. The non-financial corporate foreign currency-denominated debt in Indonesia tends to decline over the decade. Still, in March 2020, there is a sudden spike in the amount due to a gradual increase of private debt driven by households and non-financial corporates (World Bank, 2020).

In the middle of financial distress, companies may have opted to improve their accounting information to secure financing support or renegotiate their existing obligation (Deloitte, 2020). The fact that companies do not perform well throughout the COVID-19 pandemic adds a new layer of complexity for companies to access additional capital such as by loan or debt. Therefore, a different approach has to be taken to access a broader credit spectrum. One way that companies can do to get a more flexible debt coverage it is by revaluating their fixed assets (Jaggi & Tsui, 2001). In the commercial sector, the decision to implement a revaluation of fixed assets may benefit the entity in that fixed asset revaluation brings a more relevant report of financial statements where the value of fixed assets is presented at fair value (Azouzi & Anis, 2012).

Even though fixed assets revaluation does not necessarily change the company's cash flow, it will allow the company to improve its balance sheet performance as revaluation of fixed assets will enhance its leverage level. In a volatile economy, revaluation of fixed assets is considered capable of maintaining business stability and encouraging economic growth. However, a firm's decision to carry out fixed asset revaluation is not always preferable. Some factors like tax imposition on surplus of revaluation, expensive appraisal services cost, and utilization of cost model cause companies not to carry out revaluation of fixed assets. These reasons illustrate various considerations a company takes before carrying out fixed asset revaluation.

While contrasting needs of company and government regulation of tax imposition exist, economic growth will not recover quickly. 4 ence, government intervention such as the issuance of tax incentives is expected. In 2015, the Ministry of Finance issued PMK 191/PMK.010/2015 regarding Fixed Assets Revaluation for Taxation Purposes for Applications Filed in 2015 and 2016. This policy provides special treatment for taxpayers who carry out asset revaluation by imposing a tax rate of 3%, 4%, or 6%. The rate is lower than the general tax rate on fixed asset revaluation according 21PMK 79/PMK.03/2008, which is 10%. This regulation can be adopted to be applied in the revaluation of fixed assets during the pandemic.

In Indonesia, stewardship practice can be represented by managers' behavior towards issuing the government's set of laws that regulate the rate of income tax of stewardship theory as a special agency theory case that questions the principal-agent relationship assumption, which is always characterized by agency conflict. In addition, Sundaramurthy and Lewis (2003) claim that stewardship theory is an extension of the theory that assumes the agent's goals are perfectly aligned with the goals of stakeholders. Aligned with the stewardship theory, the manager's decision or evalue the company's fixed assets is partly motivated by the issuance of the Minister of Finance Regulation Number PMK 191/PMK.010/2015 regarding Revaluation of Fixed Assets for Taxation Purposes for Applications Filed in 2015 and 2016. Directorate General of Taxes (DGT) through PMK 191/PMK.010/2015 provided incentives in kind of tax rate reduction for the Final Income Tax (PPh Final) to the Corporate Taxpayers and Individual 12 payers for the surplus amount over revaluation of fixed assets. This regulation aims to motivate companies in the capital market to report the value of their fixed assets based on fair value.

Previously, numerous studies explored what variables affect a company's decision to reprice fixed assets. These factors mostly are related to information asymmetry, namely fixed asset intensity (FAI) (Fioni et al., 2019; Ghozali & Tedjasuksmana, 2019; Gunawan & Nuswandari, 2019; Kurniawati & Yushuda, 2019; Latifa & Haridhi, 2016; Manihuruk & Farahmita, 2015; Nailufaroh, 2019; Sitepu & Silalahi, 2019; Yulistia M et al., 2015; Zakaria, 2015), company size (Fahmie & Triandi, 2016; Nailufaroh, 2019; Yulistia M et al., 2015), lggerage (Army, 2013; Fahmie & Triandi, 2016; Fathmaningrum & Yudhanto, 2019; D. Firmansyah et al., 2017; Ghozali & Tedjasuksmana, 2019; Gunawan & Nuswandari, 2019; Yulistia M et al., 2015), market assessment (Andison, 2015; Jaggi & Tsui, 2001; Tay, 2009), as well as variables associated with the company's creditworthiness such as liquidity (Army, 2013; Ghozali & Tedjasuksmana, 2019; Gunawan & Nuswandari, 2019; Nailufaroh, 2019; Tay, 2009). Previous studies involved variables that were not much different from one another, but the results of these studies revealed mixed conclusions. Additionally, prior researches have investigated the relationship between fixed asset revaluation decisions and window dressing activity, but none of them use stewardship theory as the underlying theory of revaluation decisions. Although the decision to conduct asset revaluation remains under the assessment of an appraiser, the manager's subjective view plays a big part in the decision. This is because the financial manager has the right to determine how long the economic useful life of fixed assets lasts, when to revalue fixed assets, how much the residual value, and how much the amount of depreciation needs to be calculated (Barlev et al., 2007).

Measurement of fixed asset intensity (FAI) is carried out to determine the composition of fixed assets to total company assets and to test the existence of information asymmetry factors in corporate financial reporting (Seng & Su, 2010). 2 ompanies with high FAI ratios tend to conduct a revaluation of fixed assets because revaluation is considered to increase the value of fixed assets significantly. In addition to increasing the asset base, revaluation is also regarded as important because an increase in asset value can signal investors to know about an increase in company managem 26 performance (Ghozali & Tedjasuksmana, 2019). Based on previous research, fixed asset intensity has a significant positive effect on the company's decision to reassess fixed assets. This statement is supported by research conducted by Diantimala et al. (2019), Fioni et al. (2019), and Tay (2009). Fathmaningrum & Yudhanto (2019) also stated that the case study he carried out proved a tendency for companies to reflate fixed assets because a high FAI ratio would positively influence the company's financial statements. In addition, the intensity of fixed assets can

illustrate the expectation of cash that can be received if the fixed assets are sold, so companies with high fixed asset intensity tend to prioritize the method of recording and recognizing fixed assets that better reflect the true asset value (Manihuruk & Farahmita, 2015). In line with previous studies, the company with higher fixed asset intensity will reevaluate its asset to represent a more relevant financial statement and keep representation of its assets' price the same as its real condition.

H1 = Fixed asset intensity positively affects fixed asset revaluation decisions.

Leverage defines how much of a company's debt is utilized to finance its assets. The use of external finance to accelerate the business's growth is viewed normally as long as the company can create income larger than the interest expense paid. However, emphasizing debt funding rather than equity is deemed hazardous and frequently inhibits firms' ability to obtain stronger financial facilities. As a response, organizations with high leverage choose to perform fixed asset revaluation since it allows them to raise the value of fixed assets and equity while decreasing the DER ratio (Zakaria, 2015). As per past studies, a hike in the leverage ratio would strengthen the company's financial credibility in the eyes of reditors (Sitepu & Silalahi, 2019). This study supports the statement that leverage has a significant positive effect on the company's fixed-assets repricing decision. This statement is also in line with the research results of Andison (2015), E. Firmansyah & Sherlita (2012), Ghozali & Tedjasuksmana (2019). Kasmir (2011) has a similar opinion that states that companies with high levels of leverage will use fixed asset revaluation. From the previous explanation, we believe that companies with higher debt composition will revaluate to escalate their DER performance. 3

H2 = Leverage has a positive effect on fixed asset revaluation decisions.

A low liquidity ratio indicates that a company is having trouble paying off its short-term debt. This condition will greatly affect the level of trust of external parties in credit fulfillm performance and company investment performance. In these conditions, the company will increase the value of its assets to increase the potential for payment of obligations and provide assurance that the company can pay off all of its obligations at maturity. This condition follows the practice of positive accounting theory in which companies will make efforts to display good financial reports. Another effort made by the company is to revalue fixed assets. Tay (2009) stated that the implementation of fixed asset revaluation could improve the quality of information regarding the amount of cash a company can receive in a sale of assets. Kasmir (2011) argued that companies with low liquidity levels would use fixed asset revaluation and vice versa. One of the earliest studies on the correlation of liquidity and the revaluation method says that liquidity has a significant negative effect on the choice of the revaluation method (Black et al., 1998). Zakaria (2015) stated that upward revaluation needs to be carried out by companies with low liquidity levels to get new sources of funding and improve the quality of their collaterals in the event when the company plans to apply for credit. Consequently, the final hypothesis to be tested is that liquidity has a negative impact on revaluation decisions.

H3 = Liquidity has a negative effect on the decision to revalue fixed assets.

### **METHODOLOGY**

This study employed quantitative research inquiry and relied of 27 econdary data acquired from financial statements of manufacturing businesses filed on the Indonesia Stock Exchange (IDX) between 2016 and 2019. The secondary data collection technique

was carried out utilizing the purposive sampling strategy. As a result, only companies with representative inquiries were evaluated and examined. Criteria used to determine samples and observations of this research were summarized in Table 1 as follows.

**Table 1. Purposive Sampling Summary** 

| <b>No.</b> | Purposive Sampling Criteria                     | Number of<br>Company | Count of<br>Year (n) |
|------------|---|----------------------|----------------------|
| 1          | Manufacturing companies listed on the Indonesia | 51                   | 4                    |
|            | Stock Exchange (IDX) in 2016-2019               |                      |                      |
| 2          | Financial statements that independent auditors  | (17)                 | 4                    |
|            | have audited during 2016-2019                   |                      |                      |
| 3          | Companies didn't experience delisting from      | (0)                  | 4                    |
|            | Indonesia Stock Exchange                        |                      |                      |
| 4          | Companies provide complete information for the  | (14)                 | 4                    |
|            | measurement variables under the needs of this   |                      |                      |
|            | study   |                      |                      |
|            | Number of observations                          | 20                   | 80                   |

Source: Research Data, 2022

This research employed three types of variables: 8ndependent, control, and dependent variables. The first independent variable was fixed assets intensity. Fixed Asset Intensity measured the number of fixed assets compared to the company's total assets. The second independent variable was leverage. Leverage measurement was conducted using the Debt Equity Ratio (DER) formula. DER proxy illustrates how much a company uses debt to finance its equity. A company is considered to have a high dependence on debt if the firm has a high DER ratio (more than 0,00). It means that the company has a quite material credit risk because a high dependence on the debt will burden the company with future loan principal and interest pay gents. The last independent variable was company liquidity. Liquidity denotes the company's ability to pay off short-term obligations to external parties such as the government or creditors who provided loans. Creditors use this ratio to assess the company's credit risk and usually is one of the clauses set out in the debt covenant. According to Fields et al. (2001), companies will choose accounting policies in such a way as to avoid violating the debt covenant. This study also employs one control variable, is firm size. Firm size is measured by the natural logarithm of the company's total assets.

The panel logistic regression (logit) was used to analyze the interaction between predictors and the dependent variable in the hypothesis test. The panel logit can be implemented even if the assumption of multivariate normality is not met (Hair et al., 2010). Researchers may avoid performing classical assumptions tests when a sing this regression model. The panel logit was adopted for this study because the dependent variable was represented by non-metric data in the form of a revaluation judgment with only two feasible replies: 0 and 1. We followed Agresti's (2002) and Mood's (2010) proposition to undergo the panel logit procedures in this study. Our panel logit steps consisted of five tests: (1) pre-estimation, (2) model specification, (3) estimator selection, (4) post-estimation, and (5) hypothesis test. The regression model utilized in this work is based on the models used by Sitepu & Silalahi (2019) as well as Latifa & Haridhi (2016). Based on previously developed hypotheses, we propose an analogous research model with the following modifications:

$$Log\left(\frac{P_{AR}}{1 - P_{AR}}\right) = \alpha + \beta_1 FAI_{it} + \beta_2 LEV_{it} + \beta_3 LIQ_{it} + \beta_4 SIZE_{it}$$

Where:

 $Log(\frac{P_{AR}}{1-P_{AR}})$ : Log of odds shows the probability of asset revaluation, has a value of 1 if the company chooses the revaluation method, and has a

value of 0 if the company decides the cost method.

 $\alpha$  : Constant.

 $\beta_1, \beta_2, \beta_3$  : Region coefficient.

FAI : Fix Asset Intensity shows the number of fixed assets to the

company's total assets.

LEV : Leverage shows how the company finances its assets by dividing

total debt 25 th total equity.

LIQ : Liquidity shows the company's ability to pay off its short-term

obligations by dividing current assets with current liabilities.

SIZE : A company's size shows the scale of business run by the company

by measuring the natural log of total assets.

 $\varepsilon$  : Residual error.

### RESULTS AND DISCUSSION

This section explains six important findings: (1) descriptive statistics, (2) preestimation, (3) model specification, (4) estimator selection, (5) post-estimation, and (6) hypothesis testing. The elaboration of each finding is as follows.

### Descriptive Statistics

The fixed-asset intensity (FAI) calculation is obtained by comparing the number of fixed assets to total assets with a maximum scale of 1.00. Based on the data shown in Table 2, companies have a fixed asset intensity average percentage of 35.69%, which indicates that the miscellaneous sub-sector manufacturing companies have 35.69% of fixed assets of total assets. The smallest FAI percentage with a value of 0.12% is obtained from the FAI calculation of companies with the issuer code STAR in the 2019 reporting year. Leverage measurement (LEV) is calculated by comparing total debt to total equity. According to Table 2, on average, the sample companies have a leverage profile with a debt-to-equity ratio scale of 1.35, which means that the company's capital structure consists of debt which is 1.35 times the total equity. However, a DER ratio that is far above the average like that of the issuer code LPIN, whose total debt is 8.26 times its total equity, must be managed very carefully because it has the potential to have a high default risk.

The liquidity ratio (LIQ) is calculated using the current ratio, which compares current assets to the company's current liabilities. This measurement is used to determine the company's ability to settle short-term liabilities with liquid assets. Based on the data processing results shown in Table 2, on average, the sample companies obtained an LIQ ratio of 2.49, which indicates that the company can fulfill its current obligations properly. The calculation of company capacity (SIZE) is used to determine the extent of the business scale run by the company. Based on Table 2, the average company size is 27.64. In comparison, the company with the largest size scored 34.12 on behalf of the MYTX issuer, one of Indonesia's largest garment and textile companies.

**Table 2. Descriptive Statistics** 

| 24 Item      | AR       | FAI      | LEV      | LIQ      | SIZE     |
|--------------|----------|----------|----------|----------|----------|
| Mean         | 0.387500 | 0.356937 | 1.352453 | 2.497642 | 27.64144 |
| Median       | 0.000000 | 0.345721 | 0.985026 | 1.713455 | 27.85453 |
| Maximum      | 1.000000 | 0.645092 | 8.261326 | 13.04157 | 34.12082 |
| Minimum      | 0.000000 | 0.001218 | 0.071274 | 0.713502 | 18.00547 |
| Std. Dev.    | 0.490253 | 0.162384 | 1.222896 | 2.039458 | 3.709955 |
| Sum          | 31.00000 | 28.55492 | 108.1962 | 199.8114 | 2211.315 |
| Observations | 80       | 80       | 80       | 80       | 80       |

Source: Research Data, 2022

Five kinds of tests can be performed to test the hypothesis in research. The tests are pre-estimation, model specification, estimator selection, post-estimation, and hypothesis testing. The output of each test is as follows.

### Pre-estimation Result

Table 3 demonstrates the results of the classical assumption tests for the selected estimators bringing about the best linear unbiased predictors for determining the decision of asset revaluation, which are FAI, LEV, LIQ, and SIZE. The complete test four tests: normality, multicollinearity, autocorrelation, and heteroscedasticity. The dependent variable data should range from negative to positive infinite to fulfill the normal distribution assumption. In contrast, our dependent data contains dummy numbers that only have two values: zero "0" or one "1". Based on this condition, and most statisticians propose researchers put into practice the central limit theorem, which presupposes the normality compliance for logistic regression model (Agresti, 2002; Williams, 2009). A similar condition applies to the heteroscedasticity test for our binomial model, which poses probability. The predictive value generated from the logit model will not provide exact numbers of the dependent variable. Instead, the generated value may bring forth the probability to alter the dependent variable value. Consequently, the probability imposes uncertainty derived from all variables not included in our model. Regardless of this uncertainty, statisticians suggest that researchers may have to give a counterfactual conjecture towards the categorical data model as the conjecture will only be correct when scholars effectuate the surmise of noheteroscedasticity under logit circumstance (Agresti, 2002; Buis, 2010; Long & Mustillo, 2021).

Table 3. Best Linear Unbiased Estimator (BLUE) Test

| Test                         | Result               |
|------------------------------|----------------------|
| Shapiro-Wilk                 | Normal               |
| Variance Inflation Factor    | No Multicollinearity |
| Wooldridge                   | No Autocorrelation   |
| Breusch-Pagan                | Homoscedasticity     |
| Cross-Tab of Dummy Dependent | 60-40                |
| Conclusion                   | Unbiased             |

Source: Research Data, 2022

### Model Specification Result

Breusch-Pagan Test to determine the usage of Random Effect Model (REM) or Pooled Ordinary Least Square Model (CEM) cannot be executed for the panel logit.

Hence we perform the IIC-BIC test to analyze which model provides the lowest error value. As a result, the Random Effect Model is the best model for testing the hypothesis regarding the asset revaluation decision. Table 4 summarizes how to appoint the best model specification to be used in the hypothesis testing stage.

Table 4. Model Fitting Test

| Item    | Pooled OLS | Fixed Effect | Random Effect | Conclusion             |
|---------|------------|--------------|---------------|------------------------|
| Chow    | V          |              |               | Dan Jama               |
| Hausman |            |              | V             | Random<br>Effect Model |
| AIC-BIC |            |              | V             | Effect Model           |

Source: Research Data, 2022

### Estimators Selection Result

We present the hypothesis testing result in Model 1, which summarizes the odds ratio and probability of panel logit using random effect estimation (Table 5). This research's probability of REM output is cut in half because the hypothesis has determined the positive and negative significance of each independent variable involved (one-tailed). This research has proved that all predictors: FAI, LEV, and LIQ, as controlled by SIZE, have a significant influence on a firm's revaluation decision with significance levels ranging from 1% to 5%. The estimators' power to estimate the probability of revaluation decision is about 12.05%.

Table 5. Panel Logistic Regression Results - Random Effect Model

|                |            | Model 1   |          |               |      |     |
|----------------|------------|-----------|----------|---------------|------|-----|
| Predictors     | Prediction | Coef.     | Odds     | <b>Z-Stat</b> | Prob | Sig |
| Constanta      |            | -28.51308 | 4.14E-13 | -1.87         | 0.03 | **  |
| FAI            | +          | 28.92144  | 3.63E+12 | 2.72          | 0.00 | *** |
| LEV            | +          | 8.204296  | 3656.624 | 2.45          | 0.00 | *** |
| LIQ            | -          | -34.50996 | 1.03E-15 | -1.91         | 0.02 | **  |
| SIZE           |            | 0.754531  | 2.126614 | 1.61          | 0.05 | **  |
| Wald-chi2      | 12.05      |           |          |               |      |     |
| Prob>chi2      | 0.00       |           |          |               |      |     |
| Log-Likelihood | -26.83     |           |          |               |      |     |
|                |            |           |          |               |      |     |

Source: Research Data, 2022

However, we found uncommon odds ratios in Model 1, which will bias our interpretation towards the logit result. To tackle the issue, we further playact the robustness analysis by executing the Generalized Estimating Equation (GEE) procedures towards the chosen model resulting in the unbiased odds ratio values presented in Model 2. Table 6 summarizes the GEE robust model for interpreting the factors that affect asset revaluation decisions.

Table 6. Robustness Test - General Effect Estimation Model

| Model 2    |            |           |          |        |      |     |
|------------|------------|-----------|----------|--------|------|-----|
| Predictors | Prediction | Coef.     | Odds     | Z-Stat | Prob | Sig |
| FAI        | +          | 3.86188   | 47.55468 | 2.44   | 0.00 | *** |
| LEV        | +          | 0.9602734 | 2.612411 | 1.83   | 0.03 | **  |

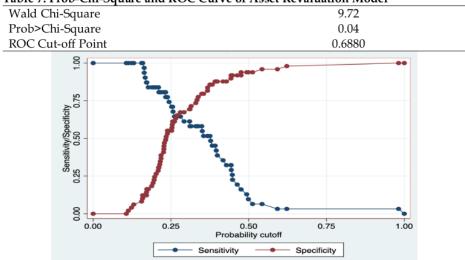
| Model 2        |            |           |          |               |      |     |
|----------------|------------|-----------|----------|---------------|------|-----|
| Predictors     | Prediction | Coef.     | Odds     | <b>Z-Stat</b> | Prob | Sig |
| LIQ            | -          | -3.646031 | 0.026094 | -1.29         | 0.09 | *   |
| SIZE           |            | 0.0688445 | 1.07127  | 0.57          | 0.28 |     |
| Constanta      |            | -3.373716 | 0.034262 | -0.93         | 0.17 |     |
| Wald-chi2      | 9.72       |           |          |               |      |     |
| Prob>chi2      | 0.04       |           |          |               |      |     |
| Log-Likelihood | -26.83     |           |          |               |      |     |

Source: Research Data, 2022

### The Post-estimation Result

Nonetheless, conducting the post-estimation test is pivotal to ensure the model's validity in predicting the dependent variable using asset revaluation motives. We found a major constraint during the test execution using Stata14 related to the statistical program's insufficiency to perform full pictures of the panel logit post-estimation test. As proposed by Agresti (Agresti, 2002), the full test consists of a goodness-of-fit (GOF) test, sensitivity-specificity examination, and classification table. As a corollary, we conducted another way of measuring GOF for panel logit by identifying the probability of chi-square from our most robust model: the GEE model. The probability of Wald chi-square value under 0.05, as illustrated in Table 7, means the model is valid for measuring the dependent variable values. We replaced the sensitivity-specificity examination and classification table by performing the receiver operating characteristic (ROC) test to specify the cut-off point of the selected model. The cut-off point of 0.6880, as shown in Table 7, provides us the threshold to classify the decision of "revaluating fixed assets" or "not enacting the revaluation."

Table 7. Prob-Chi-Square and ROC Curve of Asset Revaluation Model



**ROC Sensitivity and Specificity** 

Source: Research Data, 2022

The Hypothesis Testing Result

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The final model of asset revaluation decision model is as follows:

$$Log\left(\frac{P_{AR}}{1 - P_{AR}}\right) = -3.37 + 3.86FAI_{it} + 0.96LEV_{it} - 3.64LIQ_{it} + 0.06SIZE_{it}$$

The elucidation of the final model is as follows. The researchers adopt model 2 as the final model, which is already robust for discerning the research findings. All variables have a significant P-value at a 1% -10% significance level. After being regulated by LEV and LIQ, FAI is the accounting information that has the most important effect in prompting fixed asset revaluation choices based on the odds ratio value of 47.55.

FAI has a P-value of 0.00, less than 1% significant, and a positive coefficient of 3.86, indicating that FAI has positively influenced fixed asset revaluation choices. As a result, hypothesis 1 is supported. We can firmly say that public companies with high FAI have a 47-fold larger capacity to reassess fixed assets after being controlled by LEV and LIQ than issuers without FAI.

LEV has a P-value of 0.03 below the 5% significance threshold and a positive coefficient of 0.96, indicating that it has a substantial positive influence on the decision to revalue fixed assets. Thus, hypothesis 2 is accepted. It can be stated that public firms with high LEV values are *twice* as likely as companies with low LEV values to reevaluate fixed presents after being regulated by FAI and LIQ.

LIQ has a P-value of 0.09, which is less than the 10% significance level, and a negative score of -3.64, implying a significant negative influence on fixed asset revaluation decisions. As a result, hypothesis 3 is supported. We can conclude that after being regulated by FAI and LEV, public corporations with high LIQ have a 0.02 larger likelihood of not revaluing fixed assets than firms with low LIQ values. The conclusion drawn from the findings of this investigation is depicted in Table 8.

**Table 8. Summary of Research Results** 

| Variable  | Hypothesis | Conclusion |
|-----------|------------|------------|
| FAI >> AR | H1         | Accepted   |
| LEV >> AR | H2         | Accepted   |
| LIQ >> AR | H3         | Accepted   |

Source: Research Data, 2022

## [Causality 1] Fixed Asset Intensity and Fixed Assets Revaluation Motives

This result supports the results of the research conducted by Diantimala et al. (2019), Fathmaningrum & Yudhanto (2019), Fioni et al. (2019), and Manihuruk & Farahmita (2015). The features of manufacturing businesses may have a significant impact on this finding. In general, fixed assets account for most total assets reported in financial statements in industrial enterprises. Fixed assets are critical to a company's operational longevity. The revaluations applied by manufacturing enterprises in this study are upward revaluations. Such demonstrates that the revaluation mechanism is used to increase the firm's worth in the case of investment.

Moreover, there are two critical aspects. Surplus revaluation is most common on fixed assets that are more likely to increase in fair value years after years, such as land and buildings. Meanwhile, revaluation is not often performed for fixed assets that have the potential to depreciate in fair value, such as factories and machinery. In this case, industries prefer to employ the historical technique. According to PMK 191, the manager's judgments, in this case, conform with the government's plea while still advancing the firm's purpose of improving its worth.

### [Causality 2] Leverage and Fixed Assets Revaluation Motives

As previously stated, all manufacturing firms that implement the revaluation method in this research produce a surplus revaluation. As a result of this fact, inflation of shareholder's equity happened. This scenario then has a domino effect, leading to a decrease in the firm's leverage ratio and the possibility of more borrowing from creditors. Consequently, the firm's leverage is commensurate with the fixed asset intensity. The reason is due to the nature of the liabilities. Manufacturing enterprises' indebtedness is often productive debts. It means that loans are assigned to fixed assets that aid in the long-term profitability of the company's performance. A higher fixed asset intensity will result from increased leverage. Both are mutually important in a manager's decision to select a model. High leverage ratios may reflect a company's reliance on its capital structure in the form of indebtedness. Even if the debt is used for productive reasons, a high leverage profile may provoke investor concerns about the firm and impede credit extension. In conclusion, high leverage will further push enterprises to revalue fixed assets. By expanding the firm's total assets and total equity, companies can lower their leverage ratio to zero. Our findings corroborate the findings of Andison (2015), E. Firmansyah & Sherlita (2012), Ghozali & Tedjasuksmana (2019).

### [Causality 3] Liquidity and Fixed Assets Revaluation Motives

In the initial hypothesis, we have the same view as Black et al. (1998), Tay (2009), and Zakaria (2015), which stated that upward revaluation needs to be carried out by firms with a low level of liquidity. In doing that, the firms can get a new source of funding and improve the quality of their collaterals in events such as credit appliances. Our findings substantiate the initial hypothesis of Black et al. (1998), Tay (2009), and Zakaria (2015). PMK 191 policy encourages enterprises to utilize the revaluation model by providing facilities. Yet, those amenities are only available in 2015 and 2016. The presence of PMK 191 does not nullify the terms of PMK 79 of 2008. After two years, the income tax rate owing to revaluation will revert to 10%.

Although the decision to use the revaluation model may have been motivated by the facilities provided by PMK 191, it is a long-term decision. In the future, if there is an excess of revaluation, corporations will be liable for a 10% Final Income Tax. This tax must be paid in the year in which the excess occurs. It will not result in deferred tax obligations that can be repaid. This tax must be paid in the same year excess happened. It will not generate deferred tax debt, which can be reversed in the following year if the asset value decreases. Surplus revaluations are generated by all manufacturing enterprises in this study that employ the revaluation strategy. Fixed asset components in the excess revaluation are indeed unlikely to lose value. If the business applies revaluation and the price increases every year, the firm must likewise pay a 10% Final Income Tax each year. Based on this reason, it is possible to conclude that the decision to use the revaluation technique is a long-term decision. This is in contrast to the nature of liquidity, which is short-term.

### CONCLUSION

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The research seeks to determine the effect of fixed asset intensity, leverage, and liquidity on fixed asset revaluation decisions among 20 listed manufacturing companies in Indonesia using the Random Effect Model and financial ratios. The study covers 2016 to 2019 fiscal years. We use the data panel regression technique to find a

correlation between financial ratios proxy, which see FAI, DER, and CA, and the decision to implement revaluation of the fixed asset. The results demonstrate that fixed asset intensity and leverage variables have been proven to affect fixed asset revaluation motives positively. Liquidity, on the other hand, has a negative effect on fixed asset revaluation decisions. Revaluation of fixed assets has one major drawback: the absence of cash inflow. It is essentially a window dressing and goes hand in hand with the concept of agency theory. However, it should be noted that in Indonesia, the implications for fixed asset revaluation are a bit different. From a tax perspective, the manufacturing sector has the largest share of total tax revenue over the years. For example, the realization of manufacturing sector tax revenue until the end of 2019 reached IDR 365.39 trillion. This figure confirms the manufacturing sector as the main contributor to tax revenue with a contribution of 29.4% of the total tax revenue. Sis significant contribution became one of the bases for the issuance of PMK 191 of 2015 concerning the Revaluation of Fixed Assets for Taxation Purposes for Applications Filed in 2015 and 2016.

The implication of PMK 191 policy is to stimulate decision-makers to ignore the weaknesses and focus on the benefits offered in the revaluation method. A similar case also happened in the post-monetary crisis events that urged the issuance of KMK Number 384/ KMK.04/1998 concerning the Revaluation of Company Fixed Assets. At that time, almost all firms reported losses and caused inflation at a significant level. In response to this critical situation, the government provided incentives through the issuance of regulations related to fixed asset revaluation. This regulation aims to motivate the firms to revaluate fixed assets and produce financial reports that can attract investors. In this scenario, window dressing through fixed asset revaluation seems to be something the government recommends. This is why window dressing implications in Indonesia are different, especially from a tax perspective. Managers who choose to use the revaluation model reflect the firm's objectives and comply with government recommendations, so in this case, we think stewardship theory is more relevant than agency theory.

The limitations of this research include: first, the study was conducted using data from 2016 to 2019. We do not take into account existing macroeconomic factors, so there may be a bias in the data used in this research; second, limited research time so that we are unable to extract more in-depth information on the profile and activities of each issuer, especially those that are not included in the financial statements; and third, there are other variables that we cannot discuss in more depth. Our suggestions for future research: firstly, include other variables that can influence fixed asset revaluation decisions, such as deferred tax liability, market-to-book ratio, operating cash flow, tax incentives, differences in tax and accounting regulations, and other factors; secondly, use a wider range sample of data, namely by increasing the period of the data studied and adding to the sub-sectors studied such as the basic industry and chemicals and the consumer goods industry. Future research can also dig deeper into the revaluation of fixed assets in the financial sector as well as trade, services, and investment; thirdly, Subsequent analysis can find conclusions whether the provision of incentives from the government such as reducing tax rates can have a significant impact on tax revenues and also on the tendency of companies to reevaluate fixed assets.

To the government, we also suggest encouraging the level of participation of firms to implement fixed asset revaluation by providing more tax incentives. Fixed asset revaluation will increase market value in certain sectors to present more relevant matters. By expanding the company's market value, the potential for tax revenue will

also increase. The government also needs to help make revaluation for firms easier, so it can be another push for doing that. This policy is especially needed during the COVID-19 pandemic. In this pandemic, firms are in direct need to revalue their fixed assets. The government can play a crucial role by providing tax incentives similar to PMK 191/PMK.010/2015. It is proven that revaluation is more relevant because it displays the current fixed-assets prices in financial statements. It helps investors provide the right investment because relevant information portrays the real ongoing economic conditions, especially during the COVID-19 pandemic. This is also true for authority agencies such as the Indonesian Accountant Association (IAI) in making policies following the latest conditions and relevant information.

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