

Article Type: Research Paper

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction: A Comparative Study in Indonesia and Singapore

Erni Suryandari Fathmaningrum 1\* and Satrio Kusumo Yudhanto<sup>1</sup>

ABSTRACT: The purpose of this study is to examine the influence of firm size, fixed asset intensity, liquidity, leverage, declining cash flow from the operation, and its impact on market reaction. The population in this study is manufacturing companies in Indonesia and Singapore in 2015-2016 period. The sample in this research was taken using a purposive sampling method, a total of 228 manufacturing companies in Indonesia and 255 in Singapore were used as the sample. The data were analyzed using logistic regression and simple linear regression. The results showed that firm size, fixed asset, and leverage affected revaluation policy in Indonesia, while liquidity and declining cash flow from operation did not affect fixed asset revaluation policy in Indonesia. In contrast to what occurred in Singapore, the results showed that fixed asset intensity and leverage proved to affect fixed assets revaluation policy, and firm size, liquidity, and declining cash flow from operation variables did not affect the policy of fixed asset revaluation in Singapore. In addition, this study also found the effect of fixed asset revaluation on market reaction in Indonesia and Singapore. Finally, the study also found differences in the adoption of fixed asset revaluation policies in Indonesia and Singapore.

**KEYWORDS:** firm size; fixed asset intensity; liquidity; leverage; declining cash flow from operation; revaluation of fixed assets; market reaction

# Introduction

The continuously growing globalization flow demands everyone in the world to improve the financial reporting standards in their own countries. The International Accounting Standard Board (IASB) has issued the latest financial accounting namely International Financial Reporting Standards (IFRS). The IFRS convergence aims at closing the gap between *Pernyataan Standar Akuntansi Keuangan* (PSAK) and IFRS (IAI, 2008). IFRS convergence in Indonesia has been initiated since 2008 as characterized by an amendment to PSAK



#### AFFILIATION:

<sup>1</sup> Department of Accounting, Universitas Muhammadiyah Yogyakarta, Daerah Istimewa Yogyakarta, Indonesia.

\*CORRESPONDENCE: ernisuryandari34@gmail.com

#### THIS ARTICLE IS AVAILABLE IN:

http://journal.umy.ac.id/index.php/ai

#### DOI: 10.18196/jai.2002118

#### CITATION:

Fathmaningrum, E., S., & Yudhanto, S., K. (2019). Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction: A Comparative Study in Indonesia and Singapore. *Journal of Accounting and Investment, 20*(2), 76-98.

ARTICLE HISTORY Received: 12 January 2018

Reviewed: 13 February 2019

Revised: 21 March 2019

Accepted: 13 April 2019

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

as a result of IFRS adoption in Indonesia (Kurniawati, 2013). The *Dewan Standar Akuntansi Keuangan* (DSAK) or Financial Accounting Standard Board of IAI formulated an IFRS Convergence Roadmap stage 1 into three phases, namely: (1) Adoption phase (2008-2010), i.e. by establishing a program for adopting IFRS completely into PSAK, preparing the necessary infrastructure, and evaluating the impacts of IFRS adoption on the applicable PSAK; (2) Final preparation phase (2011) by completing the infrastructure and gradually applying some IFRS-based PSAK; (3) Implementation phase (2012) by implementing IFRS-based PSAK gradually and comprehensively evaluating the impacts of this PSAK implementation. Meanwhile, IFRS convergence stage 2 which was initiated in 2015 aimed at minimizing further the gap between *Standar Akuntansi Keuangan* (SAK) or Financial Accounting Standards and IFRS from 3 years to just one year.

Converging IFRS in Indonesia has a significant effect on the business world, particularly regarding the financial statements of a company entity. An IFRS-based Indonesian Financial Accounting Standard is expected to improve the quality of financial statement standard and the financial statement comparability (IAI, 2017). Financial statements are the means used to account for the managerial activities of the owner's resources. Financial statements are also a means of communication used to inform the parties related to the company. Additionally, it is also used by investors in assessing the company's performance.

The IFRS adoption into PSAK causes changes, and one of these changes is in PSAK No 16 on fixed assets. PSAK (1994) differs in many ways from PSAK 16 (2007 Revision), i.e., in terms of its use of the word "aktiva" which was replaced with "aset" (both mean "asset") in PSAK entirely and measurement after initial recognition. In PSAK 16 (2007 Revision), there are two models regarding the measurement after initial recognition which can be used by an entity, namely, cost model and revaluation model, and these two models can be applied to all fixed assets of companies in the same group. Fixed assets are important components in running a company's operation process. According to PSAK 16 (2015 Revision), fixed assets are tangible assets employed for producing and providing goods and services, and for rent or administrative purpose; and it is expected to be usable for more than one period, thus it can be concluded that fixed assets play an important role in supporting the company's sustainable existence.

Fixed assets in cost method are valued based on the acquisition value minus accumulated depreciation. This makes the value of fixed assets less relevant since the presented asset value uses the acquisition value; thus it fails to reflect the actual value of fixed assets. In addition to its use of acquisition value for recording, another policy introduced by PSAK 16 (2015 Revision) on Plant, Power, and Equipment is the fixed asset revaluation policy. According to Kurniawati (2013) in fixed asset revaluation policy, the value of fixed assets is recorded using the market value of the assets. Thus it can reflect the actual value of fixed assets. This makes the asset value more relevant. Fixed asset revaluation policy should provide positive information for the company's external parties. Cahan, Courtenay, Gronnewoller, and Upto (2004) argue that fixed asset revaluation has a positive influence on market reaction as characterized by share return change. This is different from Tay (2009) who suggested that fixed asset revaluation

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

policy had a negative influence on market reaction. Seng and Su (2010) stated that the managerial decision to use value revaluation method was still influenced by several factors, including contracting factor, political factor, and information asymmetry which are related to the company. The factors suspected to have some influence on fixed asset revaluation decision are company size, fixed asset intensity, liquidity, declining cash flow from the operation, and leverage (Seng & Su, 2010).

A company's decision to prefer cost model to revaluation model, even though conceptually the revaluation model produces a more relevant value, might be because in practice revaluation model is still hard to implement since it is costly (Yulistia, Fauziati, Frinola, & Khairati, 2015). Nevertheless, the choices given by the accounting standards make some companies prefer the revaluation method. The advantages of fixed asset revaluation involve lowering debt contracting costs (Seng & Su, 2010), reducing political cost and information asymmetry (Seng & Su, 2010).

This research has some contribution due to the limited number of companies using the fixed asset revaluation model, despite the more relevant data this revaluation model could give thanks to the fact that the fixed asset value in this policy is recorded using its market value, thus reflecting the actual fixed asset value better. The researcher wanted to investigate the difference in results between a developing country (Indonesia) and a developed country (Singapore). Manihuruk and Farahmita (2015) found that the number of companies using fixed asset revaluation method is still very low since in Indonesia more companies prefer the cost model. The same occurs in Singapore where more companies use the cost model as opposed to the asset revaluation model. In 2008-2013, 1400 companies in Indonesia and 2265 in Singapore used the cost model, and only 39 companies in Indonesia and 249 in Singapore used the revaluation method. It is possible that this is because the fixed asset revaluation method is more likely to be performed by countries applying the common law legal system such as Singapore. This is because in a common law legal system the investor's interests are protected better (Manihuruk & Farahmita, 2015). In this research, Singapore and Indonesia were selected since they have something in common, i.e., both beginning to effectively perform IFRS convergence in 2012 and both also adopting IFRS gradually. In this research, the researcher also wanted to investigate whether or not the use of fixed asset revaluation affected the market reaction. This research is a compilation of studies developed by Yulistia et al. (2015) and Andison (2015). What made this research different from previous studies was that this research was a comparative study which compared manufacturing companies in Indonesia and Singapore.

# Literature Review and Hypotheses Development

## **Positive Accounting Theory**

The Positive Accounting Theory suggested by Watt and Zimmerman (1986) can explain why a company chooses the accounting method it will apply. This positive accounting theory explains that every company has its own accounting policy which may be varied

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

from one to another, and this company can freely decide on the accounting policy which can minimize the contract costs and maximize the company's value. The freedom given to the company's manager to decide on the accounting policy will make the manager more likely to take opportunistic action (Scott, 2009). The opportunistic action in deciding on an accounting policy aims at putting the manager in a favorable position and, eventually, improving the manager's satisfaction.

Three hypothesis theories are connected to the management behavior's opportunistic behavior by Watts and Zimmerman (1986) namely *bonus plan hypothesis, debt covenant hypothesis,* and *political cost hypothesis.* The research conducted by Watts and Zimmerman (1986) found that the bonus plan hypothesis was indicated by the manager's attitude towards the selection of an accounting method which could increase the compensation they received. The debt covenant hypothesis was indicated by the reduced possibility of the bond covenant being violated. Finally, the political cost hypothesis was indicated by the selection of accounting procedure, i.e., greater companies were more likely to choose an accounting procedure which could decrease their profits in financial statements.

Seng and Su (2010) classified the factors which could influence a manager in deciding on their accounting policy into three, namely: (1) *contracting factors*, explaining that the accounting policy selected was to influence debt covenants; (2) *political factors* which had tight relationship with *political cost hypothesis*, where the company's aim was to reduce profit in its financial statements to lower any possible political visibility and political cost; (3) *information asymmetry*, explaining that the accounting policy was decided by information asymmetry which tried to influence the appraisal or price of an asset.

## Signaling Theory

Signaling theory explains how investors share the same information with the company's managers on the company's situation. However, in practice, managers have more information than investors, and this is what we call information asymmetry. This occurs when a company's management does not tell all information regarding the company to investors. Thus, generally, investors will respond to it as a signal to the company's prospect which will influence its value and this value will usually be reflected in the share price fluctuation (Santosa, 2009).

Fixed asset revaluation is the action of reviewing the value of a fixed asset. Revaluation is frequently defined as a review which causes the asset's value to increase, while in practice it can make the value higher or lower than the recorded value (Tay, 2009). Asset revaluation can be used as a tool to lower the debt-to-equity ratio to avoid any debt failure, and it can also be used as a signal that the company grows (Azouzi & Jarboui, 2012). According to Kurniawati (2013), when an entity revaluates its assets, upon initial recognition of fixed assets, its assets are valued at the revaluation value, i.e., at a reasonable value during revaluation. This shows that in fixed asset revaluation policy, the

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

value of fixed assets in this policy is recorded using the asset's market value; hence it can reflect the actual value of fixed assets. This makes the asset's value more relevant.

The market reaction can be seen from the change in volume in stock trades. When information is announced, and all market players have obtained the information, these market players would first analyze the information as either a good signal (*good news*) or bad signal (bad news). If the information announcement is considered a good signal, these investors would be interested in making a stock trade. This way, the market will react as reflected by the change in stock trade volume (Suwardjono, 2010). An efficient capital market is defined as a market whose security price has reflected all relevant information.

A company's asset revaluation policy can also serve as a signal for investors or stakeholders to find out how the company performs. Thus, a fixed asset revaluation policy as information can be taken into consideration by investors or stakeholders in making decisions, as can be seen in a company's market reaction.

#### Hypothesis Development

Company size is an important factor for fixed asset revaluation decision. Greater companies are more likely to be politically sensitive and subjected to greater wealth transfer. Political factor frequently uses company size as its proxy (Seng & Su, 2010). Therefore, it can be concluded that the company of greater size is more likely to make asset revaluation. This is because fixed asset revaluation method can increase the assets' value which can lead to an increased depreciation cost and the need of additional costs for the company, i.e., the costs for assets valuation, therefore, the company can avoid public visibility which may result in the increased political costs.

Manihuruk and Farahmita (2015) who studied "the Factors Influencing the Selection of Fixed Asset Revaluation Method in Companies Listed in Stock Exchanges of Some ASEAN Countries", found that company size has an association with asset revaluation decision. Aljinović Barać and Šodan (2011) studied "the motive for choosing revaluation policy in companies in Croatia" and succeeded in finding the empirical evidence that greater companies with great return on equity (ROE) are more likely to reevaluate their assets to reduce profit reporting and attract less attention from the government. Based on the explanation above and previous studies, the researcher could formulate hypotheses as follows:

 $H_{1a}$ : Company size has a positive influence on fixed asset revaluation decision in Indonesia.

 $H_{1b}$ : Company size has a positive influence on fixed asset revaluation decision in Singapore.

Fixed asset intensity represents the proportion of fixed assets to the total assets of a company. Fixed asset intensity is one of those factors frequently used as a methodology

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

in testing the information asymmetry factor (Seng & Su, 2010). The largest part of total assets is the fixed assets which can increase the company's value. Therefore, it is highly potential to increase the asset base by increasing the company's loan capacity (Tay, 2010). Revaluation can be used to lower the company's profitability report, either by increasing the asset base or by increasing the depreciation. A company with high fixed asset intensity is more likely to prefer fixed asset revaluation method. This is because fixed asset revaluation can increase the company's value by increasing the asset base. The higher the company's fixed asset proportion, the more likely the managers to make revaluation. A company's long-term operating capital is shown by its fixed assets. Thus the high fixed asset intensity will have a significant impact on its financial statements as a result of the change in its fixed asset valuation. Fixed asset intensity can depict the possible cash to be received if the fixed assets are sold.

A company with high fixed asset intensity is more likely to choose a fixed asset revaluation recording method (Manihuruk and Farahmita, 2015). A study on fixed asset revaluation and a decrease in equity by Lin and Peasnell (2000) successfully gave empirical evidence to companies in the United Kingdom in 1989 and 1991. The study found that there was a positive and significant relationship between a company's fixed asset intensity and its selection of fixed asset revaluation method. The result was supported by the research conducted by Seng and Su (2010) in New Zealand in 1999 to 2003, and Manihuruk and Farahmita (2015) who researched several companies in ASEAN countries, as well as Ramadhani (2016) who researched Indonesia and Singapore. On the contrary, Lin and Peasnell (2000), Seng and Su (2010), and Yulistia et al. (2015) studies found no influence of fixed asset intensity on a company's choice to perform asset revaluation. Based on the explanation above and previous studies, the researcher could formulate the following hypotheses:

 $H_{2a}$ : Fixed asset intensity has a positive influence on fixed asset revaluation decision in Indonesia.

# $H_{2b}$ : Fixed asset intensity has a positive influence on fixed asset revaluation decision in Singapore.

Liquidity reflects a company's ability to repay its current liability (Andison, 2015). A company with lower liquidity is more likely to perform asset revaluation. Since liquidity indicates the company's ability in repaying their current liabilities, any company with low liquidity reflects its inability in repaying their current liabilities. Therefore, a company with lower liquidity is more likely revaluate its assets, since revaluation can provide more relevant information regarding the amount of cash it can receive from asset sales, and hence can help improve the loan capacity. Manihuruk and Farahmita (2015) who conducted a study in companies registered in stock exchanges of some ASEAN countries found that liquidity has a negative influence on fixed asset revaluation decision. This research finding was consistent with Tay (2009), Aljinović Barać and Šodan (2011). On the other hand, Black, Sellers, and Manly (1998) found that liquidity ratio had an insignificant positive influence on fixed asset revaluation policy. Based on the

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

# explanation above and previous studies, the researcher could formulate the following hypotheses:

 $H_{3a}$ : Liquidity has a significant negative influence on fixed asset revaluation decision di Indonesia.

# $H_{3b}$ : Liquidity has a significant negative influence on fixed asset revaluation decision in Singapore.

Leverage is the ratio which can be used to measure a company's ability in paying both their short- and long-term liabilities and to measure the proportion of the company's assets funded from the liabilities. The higher the leverage ratio of a company, the more likely for the manager to perform revaluation. This is because a high leverage ratio will lead to high loss risk to the company. Thus it will result in the company's decreased level of worthiness to creditors.

Research by Brown, Izan, and Loh (1992) successfully found that the higher the leverage level, the more likely for the manager to opt to use the revaluation method. Some studies failed to find the influence of leverage on asset revaluation in companies in New Zealand (Seng and Su, 2010) and in Indonesia (Yulistia et al., 2015; Nurjanah, 2013). Based on the explanation above and previous studies, the researcher could formulate hypotheses as follows:

### H<sub>4a</sub>: Leverage has a positive influence on the asset revaluation decision in Indonesia.

## $H_{4b}$ : Leverage has a positive influence on the asset revaluation decision in Singapore.

The higher the declining cash flow from the operation of a company, the more likely for the manager to perform revaluation. If the company's operating cash flow decreases compared to the previous period, then it will make the creditors pretty worried about the company. This is because shrinking operating cash flow will make it less likely for the company to repay the debts to the creditors. Fixed asset revaluation is performed by a company expecting that the value of assets it owns will increase and eventually improve the creditor's trust in the company.

In a previous study, Ramadhani (2016) who investigated the determination of fixed asset revaluation decision in manufacturing companies in Indonesia and Singapore found that declining. Cash flow from operation had a positive influence on fixed asset revaluation decision. This research finding was consistent with Seng and Su (2010) and Cotter and Zimmer (1995). On the contrary, Seng and Su (2010) failed to prove this in New Zeland and so was Nurjanah (2013) in Indonesia. Based on the explanation above and previous studies, the researcher could formulate hypotheses as follows:

 $H_{5a}$ : Declining cash flow from the operation has a positive influence on fixed asset revaluation decision in Indonesia.

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

# $H_{5a}$ : Declining cash flow from the operation has a positive influence on fixed asset revaluation decision in Singapore.

Fixed asset revaluation naturally can be positive information for a company's external parties since in addition to encouraging its performance improvement as reflected in its profits, it can also increase the company's share price (Andison, 2015). Revaluation policy can give a signal in the form of either *return* or *abnormal return* that Investors have the opportunity to gain profit of what they have invested in. In Andison's (2015) research, it was found that fixed asset revaluation has a positive influence on share return. This statement was confirmed by Courtenay and Cahan et al. (2004) who proved that fixed asset revaluation had a positive influence on share return. Based on the explanation above and previous studies, the researcher could formulate the following hypotheses:

# $H_{6a}$ : Fixed asset revaluation has a positive influence on the market reaction in Indonesia.

# $H_{6b}$ : Fixed asset revaluation has a positive influence on the market reaction in Singapore.

Manihuruk and Farahmita (2015) conducted a study in several ASEAN member countries, i.e., Indonesia, Singapore, Malaysia, and the Philippines from 2008 to 2013. In this research, a total of 3733 companies were studied, and 817 of them opted to perform fixed asset revaluation. This indicates that only 21.87% of companies chose to perform fixed asset revaluation, where the remaining 79.13% decided to use the cost model. Meanwhile, in Indonesia, only 39 (or 2.7%) out of 1439 companies chose to perform fixed asset revaluation, and 249 (or 9.9%) of a total of 2514 companies in Singapore performed fixed asset revaluation. Therefore, it was safe to say that more companies in Singapore applied fixed asset revaluation than in Indonesia. This is probably because the fixed asset revaluation method is more likely to be performed by those countries following a common law legal system such as Singapore. Moreover, this is because in common law legal system investors' interests are better protected (Manihuruk & Farahmita, 2015). Based on the explanation above, the writer drew the following hypothesis:

**H<sub>7</sub>:** There is a different application of fixed asset revaluation policy in Indonesia and Singapore.

# **Research Method**

## Population, Sample, and Sampling Technique

The population in this research were all companies registered in Indonesia Stock Exchange (BEI) and Singapore Stock Exchange. The sample used in this research was manufacturing companies registered in Indonesia Stock Exchange (BEI) and Singapore Exchange from 2015 to 2016. The data used in this research were secondary ones obtained from the official website of the Indonesian Stock Exchange at www.idx.co.id

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

and Singapore Stock Exchange at www.sgx.com as well as from Yahoo finance website. The sampling technique used in this research was Purposive Sampling.

#### **Operating Definitions and Variable Measurements**

Fixed Asset Revaluation

Fixed asset revaluation is the re-appraisal of the value of a fixed asset. The method used to measure fixed asset revaluation is a dummy method, i.e., by assigning 0 scores to companies which did not perform any revaluation and one score to companies which performed revaluation. Companies generally mention revaluation information in their note to financial statements (CALK).

#### **Market Reaction**

The market reaction in this research was proxied with share return. Return is a variable which arises from share price fluctuation, as a result of new information which invites reaction from investors. The market reaction can be measured using CAR (Cumulative Abnormal Return). CAR (Cumulative Abnormal Return) can be obtained from summing up Abnormal Return (AR). Abnormal return is the difference between the return received by investors (actual return) and the return they expected (expected return) (Hartono, 2014). Abnormal return can be calculated using the following formula:

 $AR_{it} = R_{it} - E(R_{it})$ 

Note:

ARit : abnormal return of company i at t-th period

Rit : actual return of company i at t-th period

E(Rit) : expected return of company i at t-th period

Company Size (SIZE)

Company size will give a picture of the size of a company which can be measured using the natural logarithm of total assets.

Fixed Asset Intensity (FAI)

Fixed asset intensity is a company's fixed asset proportion compared to its total assets, commonly used to measure information asymmetry. FAI can be measured using:

FAI = book value of total fixed assets / Total Assets

Liquidity (LIQ)

Liquidity is an asset's saleability or the ease for it to change into cash (Andison, 2015). Liquidity can be measured using an acid test ratio.

LIQ = (Current Assets – Inventories) / Current Liabilities

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

Declining Cash Flow from Operation (CFFO)

Declining cash flow from operation is the decline of several cash and cash equivalents from a company's routine (Seng and SU, 2010). CFFO can be measured using.

CFFO = CFFO changes for two years / Total fixed assets

Leverage (LEV)

*Leverage* is a company's debt level; leverage level, in general, is measured using the ratio as used in Seng and Su (2010).

#### LEV = Total Liabilities / Total Assets

#### Method for Analyzing Data

Descriptive Statistic

Descriptive statistic analysis was the technique for analyzing data used in this research. The descriptive analysis includes such values as mean, median, minimum, maximum, and standard deviation of the research data. Data Quality Test

This Research Model 1 would be tested using Logistic regression, and the Data Quality Test for Logistic Regression includes:

#### a. Overall Model Fit Test

The model fit test was done to figure out whether or not the hypothesized model fit the data. The model fit assessment in logistic regression used a statistic which was based on the likelihood function. The likelihood function in statistics was used to assess that the model fit in logistic regression. Likelihood L of a model is the probability that the hypothesized model depicted the data input (Ghozali, 2016; Nazaruddin & Basuki, 2016). The overall model assessed in logistic regression (-2 loglikelihood) was an assessment to -2 loglikelihood. See in number -2 loglikelihood at the beginning of block number = 0, and number -2 loglikelihood in block number = 1. If a decline occurs in value -2 loglikelihood (block number = 0 - block number = 1), then the model is acceptable since it fits the data.

#### b. Model Feasibility Test

The regression model feasibility test used Hosmer and Leweshow's Goodness of Fit Test. The basis for decision making is done by seeing the value of Chi-Square of Hosmer and Leweshow's test. If the p-value > 0,05 then no difference is found between the model and the data, yet if p-value < 0,05 then there is a difference between the model and the data (Ghozali, 2016)

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

Meanwhile, research model 2 would be tested using Simple Linear Regression. The data quality test for this simple linear regression include:

#### Data Normality Test

Normality test was used to see whether the residual in the regression was distributed normally. In this research, the Kolmogorov Smirnov test was used to test the data normality. Data can be said to be normally distributed if the value of sig >a (0.05).

#### Determination coefficient test

a. The Determination Coefficient Test for Logistic Regression

Determination coefficient test (R<sup>2</sup>) was used to measure to what extent the model was capable of explaining the variations of dependent variables. A small value of R<sup>2</sup> means the ability of independent variables in explaining dependent variables is highly limited (Ghozali, 2016). Cox and Snell's R square constitutes the measure which imitates R<sup>2</sup> measure in multiple regression based on likelihood estimation technique with a maximum value less than 1 (one), hence it is difficult to interpret. Negelkerke's R square is a modification of Cox and Snell's coefficient to ensure that its value is varied from 0 (zero) to 1 (one). Negelkerke's R<sup>2</sup> value can be interpreted as the R<sup>2</sup> value in multiple regression (Ghozali, 2016).

b. Determination Coefficient Test for Simple Linear Regression

Determination coefficient test ( $R^2$ ) was used to measure to what extent the model can explain the dependent variables. If the value of the determination coefficient is close to 1, then the independent variables can explain the dependent variables.

Hypothesis Testing

Hypotheses 1-5 or the ones in research model 1 were tested using logistic regression. This method was chosen since the dependent variables in this research were dummy variables. Thus, the equation of logistic regression in this research was as follows:

# $REV = \alpha + \beta 1SIZE + \beta 2FAI - \beta 3LIQ + \beta 4CFFO + \beta 5LEV + e$

Note:

REV	: Dummy variables for asset revaluation
α	: Constant
β1-β5	: Regression coefficient
SIZE	: Company Size
FAI	: Fixed Asset Intensity
LIQ	: Liquidity
CFFO	: Declining Cash Flow From Operation
LEV	: Leverage
E	: Error

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

The criteria for accepting the hypotheses were that if the significance value owned by each hypothesis in the logistic regression test was less than  $\alpha$  0.05 and the regression coefficient went to the direction of the proposed hypothesis.

Hypothesis 6 or research model 2 was tested using simple linear regression analysis since it tested the influence of one independent variable on one dependent variable. The simple linear regression equation in this research was as follows:

$$RP = \alpha + \beta RA + e$$

Note:

RP	: Market Reaction
α	: Constant
β	: Regression Coefficient
RA	: Asset Revaluation
e	: Error

The criteria for accepting the hypothesis were that if the significance value owned by each hypothesis in the simple linear regression test was less than  $\alpha$  0.05 and the regression coefficient went to the direction of the proposed hypothesis.

Hypothesis 7 was tested using independent sample t-test. This test was done to determine whether or not there was a difference in the fixed asset revaluation policy in Indonesia and Singapore. In an independent sample t-test, a variance was first performed by judging the sig value of levene test. The criteria for accepting the hypothesis were that if the sig value of levene test was greater than 0.05, then to test the hypothesis the sig (2-tailed) value was used in equal variance assume column, and if the sig value of levene test was less than 0.05, then the sig (2-tailed) value was used to test the hypothesis in equal variance not assume column. If the sig (2-tailed) value was less than alpha 0.05, then H<sub>7</sub> was accepted.

# **Result and Discussion**

# **Descriptive Statistic Test**

Table 1 showed the descriptive statistics of each variable. Based on Table 1, the number of data of each variable processed in this research was 228 sample companies. The size variable had a mean value of 8.8262E+12, which was higher than the median value 1.87E+12. Thus it could be concluded that the average size (manufacturing company size) in Indonesia was great. The fixed asset intensity variable had a mean value of 0.36834, which was higher than the median value 0.36834. Hence it could be concluded that the average fixed asset intensity owned by manufacturing companies in Indonesia was high. The liquidity variable had a mean value of 0.49254, which was higher than the median value 0.97003. Thus it could be concluded that on average the manufacturing companies in Indonesia had high liquidity level. The leverage variable had a higher mean

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

value than the median value. Thus it could be concluded that on average the manufacturing companies in Indonesia had high leverage level.

		REV	SIZE	FAI	LEV	LIQ	CFFO	CAR
N	Valid	228	228	228	228	228	228	228
	Missing	0	0	0	0	0	0	0
Mear	ı	0.13	8.8262E+12	0.36834	0.49254	1.81995	-0.08668	-1.01338
Medi	an	0.00	1.87E+12	0.36834	0.48213	0.97003	0.02400	-0.32260
Std. D	Deviation	0.334	2.169E+13	0.20120	0.30961	3.98103	2.94602	5.61305
Minin	num	0	1.47E+10	0.00517	0.00955	-0.67959	-41.55529	-23.69722
Maxir	mum	1	2.6186E+14	0.91741	3.02908	51.33504	5.93383	28.02989

Tahla	1	Doccrir	ntivo	Statistics	of	Indonesia
rable	Τ.	Descrip	Juve	SIGUISTICS	OL.	muonesia

The declining cash flow from operation variable had a mean value of -0.08668, which was lower than the median value 0.02400, hence it could be concluded that on average the manufacturing companies in Indonesia experienced low declining cash flow from operation. The market reaction variable had a mean value of -1.01338, which was lower than the median value -0.32260. Hence it could be concluded that on average the market reaction occurring in the manufacturing companies in Indonesia was low.

Table 2 showed the descriptive statistics of each variable. Based on Table 2, the number of data of each variable processed in this research was 255 sample companies. The size variable had a mean value of 9.6E+08, which was higher than the median value 1.1E+08. Thus it could be concluded that on average the size (manufacturing company size) in Singapore was great. The fixed asset intensity variable had a mean value of 0.22547, which was higher than the median value 0.20637. Hence it could be concluded that on average the fixed asset intensity owned by the manufacturing companies in Singapore was high.

		REV	SIZE	FAI	LIQ	LEV	DCFFO	CAR
N	Valid	255	255	255	255	255	255	255
IN	Missing	0	0	0	0	0	0	0
Mea	n	0.25	9.6E+08	0.22547	2.59722	0.49586	-0.02361	-3.09400
Med	ian	0.00	1.1E+08	0.20637	1.47245	0.17835	0.01363	0.00
Std.	Deviation	0.432	3.9E+09	0.18249	3.40953	3.34468	2.04067	21.48815
Mini	mum	0	118000	0.00011	-0.58730	0.00304	-19.14687	-179.6382
Maxi	imum	1	3.7E+10	1.49634	23.01982	48.11016	8.6969	66.59102

#### Table 2 Descriptive Statistics of Singapore

The liquidity variable had a mean value of 2.59722, which was higher than the median value 1.47245. Thus it could be concluded that on average the manufacturing companies in Singapore had a high liquidity level. The leverage variable had a mean value of 0.49586, which was higher than the median value 0.17835. Thus it could be concluded that on average the manufacturing companies in Singapore had a high leverage level. The declining cash flow from operation variable had a mean value of 0.02361, which was lower than the median value 0.01363, hence it could be concluded that on average the manufacturing companies in Singapore experienced low declining cash flow from operation. The market reaction variable had a mean value of 0.01363,

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

which was lower than the median value of 0.00. Hence it could be concluded that on average the market reaction occurring in the manufacturing companies in Singapore was low.

# **Overall Model Fit Test**

Table 3 showed the initial -2LL value (block number = 0) and final -2LL value (block number = 1) of Indonesia and Singapore. Indonesia had an initial -2LL value (block number = 0) of 173.743 and final -2LL value (block number = 1) of 140.717. There was a decline difference of 33.026; then it could be interpreted that the tested model fit the data. Table 4.4 showed that Singapore had an initial -2LL value (block number = 0) of 285.131 and final -2LL value (block number = 1) of 266.765. There was a decline difference of 18.366; then it could be interpreted that the tested model fit the data.

Table 3 Comparison of Initial -2LL and Final -2LL Values

-2 Log likelihood	Value		
	Indonesia	Singapore	
Initial (Block Number : 0)	173.743	285.131	
Final (Block Number : 1)	140.717	266.765	

## Model Feasibility Test

Table 4 showed the result of model feasibility test in Indonesia and Singapore using Omnimbus Tests of Model Coefficients. Based on the Omnimbus Tests of Model Coefficients, it could be seen that Indonesia had a significance value of  $0.000 < \alpha 0.05$ , and Singapore  $0.003 < \alpha 0.05$ . Thus, it could be concluded that both Indonesia and Singapore had feasible research data to be investigated.

Table 5 showed the result of Hosmer and Lameshow Test used to test the feasibility of the research model used by seeing the result of Chi-square and significance values. Indonesia had a Chi-square value of 14.607 and a significance value of  $0.067 > \alpha 0.05$ , and Singapore had a Chi-square value of 10.295 and significance value of  $0.245 > \alpha 0.05$ . Based on the result, it could be then concluded that Indonesia and Singapore's manufacturing companies had a feasible model to be used for the further test in this research.

	Sample Company		Chi-square	df	Sig.	Note
Model 1	Indonesia	Step	33.026	5	0.000	Feasible
		Block	33.026	5	0.000	
		Model	33.026	5	0.000	
Model 2	Singapore	Step	18.366	5	0.003	Feasible
		Block	18.366	5	0.003	
		Model	18.366	5	0.003	

#### Table 4 Assessing Overall Model Fit

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

Table 5 Result of Model Feasibility Test							
	Sample Company	Chi-square	Sig.	Note			
Model 1	Indonesia	14.607	0,067	Feasible			
Model 2	Singapore	10.295	0,245	Feasible			

## Data Normality Test

Based on Table 6, the result of data normality test for Indonesian manufacturing companies using Kolmogorov Smirnov (K-S) test showed Asymp. Sig (2-tailed) value of 0.52 and it was greater than alpha (0.05), meaning that the data was distributed normally.

Table 6 Result of Normality Test for Indonesia					
		Unstandardized			
		Residual			
Ν		228			
Normal	Mean	.0000000			
Parameters	Std. Deviation	5.60066815			
MostExtreme	Absolute	0.130			
Differences	Positive	0.101			
	Negative	-0.130			
Test Statistic		0.130			
Asymp. Sig. (2-taile	ed)	0.052			

Based on Table 7, the result of data normality test for Singaporean manufacturing companies using Kolmogorov Smirnov (K-S) test showed Asymp. Sig (2-tailed) value of 0.061 and it was greater than alpha (0.05), meaning that the data was distributed normally.

<b>Table /</b> Result of Normality Test for Singapore	e 7 Result of Normality Tes	st for Singapore
---	-----------------------------	------------------

	, ,	
		Unstandardized
		Residual
Ν		255
Normal	Mean	.0000000
Parameters	Std. Deviation	21.487104
Most Extreme	Absolute	0.213
Differences	Positive	0.191
	Negative	-0.213
Test Statistic		0.213
Asymp. Sig. (2-taile	ed)	0.061

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

## **Determination Coefficient Test**

Table 8 shows that Indonesia had Nagelkerke R Square value of 0.253, meaning that 25.3% of fixed asset revaluation decisions in manufacturing companies in Indonesia were explained by such variables as size, fixed asset intensity, liquidity, leverage, and declining cash flow from operation, and 74.7% of fixed asset revaluation decisions in manufacturing companies in Indonesia were explained by other variables beyond those investigated in this research. Singapore had Nagelkerke R Square value of 0.103. This meant 10.3% of fixed asset revaluation decisions in manufacturing companies in Singapore could be explained by such variables as size, fixed asset intensity, liquidity, leverage, and declining cash flow from operation, and 89.7% of fixed asset revaluation decisions in manufacturing companies in Singapore were explained by other variables which were not investigated in this research.

indeficitio	
Step -2 Log likelihood Cox & Snell R Square Nagel	kerke R Square
1 140.717 0,135	0,253
Singapore	
Step -2 Log likelihood Cox & Snell R Square Nagell	kerke R Square
1 266.765 0,069	0,103

Table 8 Result of Determination Coefficient Test for Research Model 1

Based on Table 9, Indonesia had R Square value of 0,029, meaning that 2.9% of market reaction variable in manufacturing companies in Indonesia were explained by fixed asset revaluation variable, and 96.1% of market reaction decision in manufacturing companies in Indonesia were explained by other variables not investigated in this research. Singapore had *R Square* value of 0.018, meaning that 1.8% of market reaction variable in manufacturing companies in Singapore were explained by fixed asset revaluation variable, and 98.2% of market reaction decision in manufacturing companies in Singapore were explained by other variables not investigated in this research.

Indonesia						
Model	R	<b>R Square</b>	Adjusted R Square	Std. Error of the Estimate		
2	.171ª	.029	.024	3.41338339		
Singapore						
Model	R	R Square	Adjusted R Square	Std. Error of the Estimate		
2	.134a	.018	.013	8.53432921		

 Table 9 Result of Determination Coefficient Test for Research Model 2

## Hypothesis Testing Results

The hypotheses in this research were tested using logistic regression analysis using SPSS for Windows version 23. The result of regression logistic and simple linear analyses was presented in the Table 10. Based on Table 10, it was found that for firm's size variable,

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

Indonesian manufacturing companies had sig value of  $0.009 < \alpha 0.05$  and the coefficient direction was positive 0.363, meaning that firm's size (SIZE) variable had a positive and significant influence on fixed asset revaluation policy (REV). Thus, H<sub>1a</sub> which suggested that a firm's size had a positive influence on fixed asset revaluation policy in Indonesia **is accepted**. This was because companies of greater size were more likely to do asset revaluation, since fixed asset revaluation method could increase the asset's value which, in turn, could increase depreciation costs and required additional costs for the companies, i.e., the costs for asset valuation, hence the company could avoid public visibility which might result in an increased political costs. This test result confirmed the research conducted by Seng and Su (2010) on managerial incentive behind fixed asset revaluation on companies in New Zealand which found that company size had a positive and significant influence on fixed asset revaluation since it was used to reduce political costs.

	Indor	iesia	Singapore		
	β	Sig.	β	Sig.	
SIZE	0.363	0.009	-0.090	0.347	
FAI	3.057	0.007	3.035	0.005	
LIQ	0.752	0.346	0.027	0.534	
LEV	0.979	0.033	2.231	0.041	
DCFFO	-0.049	0.594	0.024	0.808	
Constant	-13.173	0.002	0.227	0.902	

 Table 10 Result of Logistic Regression test for Indonesia and Singapore (Hypothesis 1-5)

From the result of firm's size variable test, it was found that Singapore had sig value of  $0.347 > \alpha 0.05$  and a negative coefficient direction of -0.090, meaning that firm's size (SIZE) variable did not influence fixed asset revaluation policy (REV). Therefore, H<sub>1b</sub> which stated that the firm's size had a positive and significant influence on fixed asset revaluation policy in Singapore **is rejected**. The ascending fixed asset revaluation performed by a company would result in the difference between the book value of fixed assets and its revaluation value.

Thus the company's comprehensive profit balance would increase, and this would lead to the imposition of additional tax by the government. PMK No. 191/2015 on fixed asset revaluation for taxation purpose explains that the difference of fixed asset revaluation should be subjected to a tax of 3% to 6%. Therefore, this would encourage managers to prefer cost model to ascend the revaluation model to avoid the obligation to pay greater tax. This research result was supported by the studies conducted by Firmansyah and Sherlita (2012), Nurjanah (2013), Yulistia, et al. (2015), Latifa and Haridhi (2016), and Ramadhani (2016). Those studies found that company size (firm size) did not influence fixed asset revaluation.

Based on Table 10, in terms of fixed asset intensity variable, it was found that Indonesia had a sig value of  $0.007 < \alpha 0.05$  and positive coefficient direction of 3.057. From the result of the test for fixed asset intensity variable, it was found that Singapore had a sig value of  $0.005 < \alpha 0.05$  and positive coefficient direction of 3.035, meaning that fixed

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

asset intensity (FAI) variable had a positive and significant influence on fixed asset revaluation policy (REV). Therefore,  $H_{2a}$  and  $H_{2b}$  which stated that fixed asset intensity had a positive influence on fixed asset revaluation policy in Indonesia and Singapore **are accepted**. This was because fixed assets were a company's long-term operating capital. Thus the high fixed asset intensity would have a significant impact on the company's financial statements.

A high fixed asset intensity would make the obtained cash increasingly greater if the fixed assets were sold. Thus, the higher the fixed asset intensity, the more likely for managers to prefer the revaluation model. This is because revaluation model can reflect the asset's actual value better (Manihuruk and Farahmita, 2015) This test result confirmed the research conducted Tay (2009) who found that fixed assets could increase a company's value and hence had greater potential to increase the asset base by improving its loan capacity, making the revaluation model of fixed assets more suitable to be applied, because fixed asset revaluation could increase the values of fixed assets.

Based on Table 10, it could be seen that in terms of liquidity variable Indonesia had a sig value of 0.543 > $\alpha$ 0.05 and a positive coefficient direction of 0.752. Also, from this result of the test for liquidity variable, it was found that Singapore had a sig value of 0.346 > $\alpha$ 0.05 and a positive coefficient direction of 0.027, meaning that variable liquidity (LIQ) did not influence fixed asset revaluation policy (REV). Thus H<sub>3a</sub> and H<sub>3b</sub> which stated that liquidity had a negative influence on fixed asset revaluation policy in Indonesia and Singapore **are rejected**. A company with low liquidity would focus more on the attempt of increasing their liquidity to prevent themselves from breaching debt agreements, even though a company with high liquidity had greater freedom to make another policy since they were not troubled by liquidity issue. This result confirmed the research conducted by Manihuruk and Farahmita (2015), Andison (2015), and Tay (2009) who failed to prove that liquidity had a negative influence on the decision to valuate fixed assets.

Based on Table 10, it was found that in terms of leverage variable, Indonesia had a sig value of 0.033 <  $\alpha$  0.05 and a positive coefficient direction of 0.979. And from this result of the test for leverage variable, it was found that Singapore had a sig value of 0.041 <  $\alpha$  0.05 and a positive coefficient direction of 2.231, meaning that leverage (LEV) variable had a positive and significant influence on fixed asset revaluation policy (REV). Thus, H<sub>4a</sub> and H<sub>4b</sub> which stated that leverage had a positive influence on fixed asset revaluation policy in Indonesia and Singapore **are accepted**. This was because the high leverage ratio would lead to equally high loss risk to the company thus from the creditors' perspective it would result in the company's feasibility level. This result of testing confirmed the previously made hypotheses as well as the study conducted by Missonier-Piera (2007) who stated that if a company's leverage level were high, then it would encourage the company even further to apply revaluation method for its assets.

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

Based on Table 10, it was found that in terms of declining cash flow from operation variable Indonesia had a sig value of 0.594 >  $\alpha$  0.05 and a negative coefficient direction of -0.049. Also, it was found that in terms of declining cash flow from operation variable, Singapore had a sig value of 0.808 > $\alpha$ 0.05 and a positive coefficient direction of 0.024, meaning that the declining cash flow from operation (DCFFO) variable did not influence fixed asset revaluation policy (REV). Thus,  $H_{5a}$  and  $H_{5b}$  which stated that declining cash flow from operation had a positive influence on fixed asset revaluation policy in Indonesia and Singapore are rejected. This was because cash flow from operation was a part of a company's overall cash flow, hence declining cash flow from operation might be compensated by the cash flow from other activities. Therefore, the creditors not focused solely on the declining cash flow from the operation, rather they focused more on the cash flow from all activities of the company (Missonier, 2007). Another reason why creditors not focused only on declining cash flow from the operation was the leverage. So, as long as the leverage of a company was low, then the declining cash flow from the operation would not cause too significant impact on creditor's appraisal. This was because if the company had high fixed assets, then the company would be still capable of repaying its debts despite liquidation. This research result was supported by the studies conducted by Seng and Su (2010), Yulistia, et al. (2015) and Ramadhani (2016). These studies proved that declining cash flow from operation did not influence fixed asset revaluation decision.

Based on Table 11, it was found that in term of variable, fixed asset revaluation Indonesia had a sig value of  $0.016 < \alpha 0.05$  and a positive coefficient direction of 1.480. Also based on Table 11, it was found that in term of fixed asset revaluation variable Singapore had a sig value of  $0.048 < \alpha 0.05$  and a positive coefficient direction 2.646, meaning that variable, fixed asset revaluation (REV) had a positive and significant influence on market reaction (CAR). Therefore, H<sub>6a</sub> and H<sub>6b</sub> which stated that fixed asset revaluation had a positive influence on the market reaction in Indonesia and Singapore **are accepted**. This was because revaluation policy could give a signal in the form of either return or abnormal return that Investors had the chance of gaining profit from what they invested in, and market reaction could be seen from the investment return expected by the investors from their investment. Thanks to fixed asset revaluation policy, the company would be enabled to generate high profit, and this served as an indicator that the company had a good performance and resulted in a positive market reaction from the investors. This research result confirmed Andison (2015) who proved that fixed asset revaluation had a positive influence on share return.

Tuble 11 Simple Linear Regression rest Result for machesia and singapore (hypothesis of						
	Indoi	Indonesia		Singapore		
	β	Sig.	β	Sig.		
(Constant)	-1.142	0.000	-0.469	0.483		
REV	1.480	0.016	2.646	0.048		

 Table 11 Simple Linear Regression Test Result for Indonesia and Singapore (Hypothesis 6)

The t-test variance test was used to determine the difference in fixed asset revaluation application as measured using the dependent variable fixed asset revaluation policy in manufacturing companies in Indonesia and Singapore.

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

Table 12 Result of Mean Group Test					
	Country	Ν	Mean		
	Indonesia	228	0.1272		
KEV	Singapore	255	0.2558		

Based on Table 12, it was found that Indonesia and Singapore had different mean values of fixed asset revaluation policy application. Indonesia had a mean value of fixed asset revaluation policy of 0.1272, less than the mean value of fixed asset revaluation policy in Singapore whose value was 0.2558. As can be seen in 13, the sig levene test value was 0.000 <  $\alpha$ 0.05, meaning that the variances of Indonesia and Singapore were different. Therefore, the t-test variance test used the equal variance not assumed. The significance value of (2-tailed) equal variance assumed was 0.003 <  $\alpha$ 0.05.

#### Table 13 Result of Independent Sample t-Test

		Levene's Test for Equality of Variances			t-test fo	or Equalit	y of Means	5
		F	Sig.	t	df	Sig. (2- tailed)	Mean Difference	Std. Error Difference
REV	Equal variances assumed	57.23	0.000	-3.608	484	0.003	-0.12862	0.03564
	Equal variances not assumed			-3.668	474.307	0.003	-0.12862	0.03507

This meant that there is a different application of fixed asset revaluation policy in manufacturing companies in Indonesia and Singapore. Based on Tables 14 and 15, it could then be concluded that H<sub>7</sub> which stated that there was a different fixed asset revaluation policy in Indonesia and Singapore **are accepted**. This was because of the different legal systems followed by Indonesia and Singapore, in which Singapore which followed the common law legal system were more likely to prefer the revaluation model than Indonesia. In common law legal system, investors' interests were protected better (Manihuruk & Farahmita, 2015).

# Conclusion

This research aimed at testing the empirical evidence on the factors which influenced fixed asset revaluation policy and its impact on market reaction. The independent variables tested in this research were company size, fixed asset intensity, liquidity, leverage and declining cash flow from operation and fixed asset revaluation. The dependent variables tested in this research were fixed asset revaluation and market reaction. Based on the result of analysis performed to manufacturing companies registered in Indonesia Stock Exchange and Singapore Exchange Stock for the 2015-2016 period, it could then be concluded that company size had a positive and significant

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

influence on fixed asset revaluation decision in Indonesia, yet it had no influence on fixed asset revaluation decision in Singapore. Fixed asset intensity had a positive and significant influence on fixed asset revaluation decision in both Indonesia and Singapore. Liquidity did not influence fixed asset revaluation decision in Indonesia and Singapore. Leverage had a positive and significant influence on fixed asset revaluation decision in Indonesia and Singapore. Declining cash flow from operation had no positive influence on fixed asset revaluation decision in Indonesia and Singapore. There was different fixed asset revaluation policy in manufacturing companies in Indonesia and Singapore.

Based on the results in this research, some suggestions the researcher could recommend and could be considered for further studies are: to increase the number of samples to make it more extensive so that the conclusion withdrawn would have wider scope either by increasing the research year period or adding the company sector. Adding other independent variable which might affect fixed asset revaluation decision is also recommended, such as profitability, bonus, guarantee debt level, ownership control, company age, and other independent variables to make the obtained prediction value more extensive. Further studies could also use a sample from other ASEAN countries which adopt IAS 16 such as the Philippines and Malaysia. Adding the number of *window event* of the research and replacing the declining cash flow from operation variable with declining cash flow from all activities of the company are also suggested.

In this research, we had highlighted some limitations which could be fixed by the next research. Among these limitations was the variables used to test the factors which influenced the asset revaluation decision being limited to only five variables, namely company size, fixed asset intensity, liquidity, declining cash flow from the operation, and leverage. The research period used in this research was relatively short, i.e., two research year from 2015 to 2016. Furthermore, it used a relatively short window event, i.e., from t-7 to t+7.

# References

- Aljinović Barać, Ž., & Šodan, S. (2011). Motives for asset revaluation policy choice in Croatia. Croatian Operational Research Review, 2(1), 60-70. https://doi.org/10.18332/tpc/105270
- Andison. (2015). Fixed Asset Revaluation : Market Reactions. Paper was Presented at Simposium Nasional Akuntansi, 18 Proceedings, Indonesia.
- Azouzi, M. A., & Jarboui, A. (2011). The Evidence of Management motivation to revalue property plant and Equipment in Tunisia. *Journal of Accounting and Taxation*, 4(2), 19-28. <u>https://doi.org/10.5897/JAT11.017</u>
- Black, E. L., Sellers, K. F., & Manly, T. S. (1998). Earnings management using asset sales: An international study of countries allowing noncurrent asset revaluation. *Journal of Business Finance & Accounting*, 25(9-10), 1287-1317. <u>https://doi.org/10.1111/1468-5957.00238</u>

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

- Brown, P., Izan, H. Y., & Loh, A. L. (1992). Fixed asset revaluations and managerial incentives. *Abacus*, 28(1), 36-57. <u>https://doi.org/10.1111/j.1467-6281.1992.tb00268.x</u>
- Cahan, S. F., Courtenay, S. M., Gronnewoller, P. L., & Upton, D. R. (2000). Value relevance of mandated comprehensive income disclosures. *Journal of Business Finance & Accounting*, 27(9-10), 1233-1265. <u>https://doi.org/10.1111/1468-5957.00356</u>
- Cotter, J., & Zimmer, I. (1995). Asset revaluations and assessment of borrowing capacity. *Abacus*, *31*(2), 136-151. <u>https://doi.org/10.1111/j.1467-6281.1995.tb00359.x</u>
- Firmansyah, Egi, Sherlita, Erly. (2012). Pengaruh Negosiasi Debt Contracts Dan Political Cost Terhadap Perusahaan Untuk Melakukan Revaluasi Aset Tetap (Studi Empiris Pada Perusahaan Yang Terdaftar Di Bursa Efek Indonesia Tahun 2010). Thesis, Universitas Widyatama, Indonesia.
- Ghozali, I. (2016). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 19.* edisi 5. Semarang: Badan Penerbit Universitas Diponegoro.
- Hartono, J. 2014. Teori Portofolio dan Analisis Investasi. Yogyakarta: BPFE.
- Kurniawati, H. (2013). Analisis Dan Tren Penggunaan Accounting Choice Yang Dilakukan Perusahaan Di Indonesia Pasca Adopsi IFRS. *Binus Business Review*, 4(2), 765-775. <u>https://doi.org/10.21512/bbr.v4i2.1392</u>
- Latifa, C. A., & Haridhi, M. (2016). Pengaruh Negosiasi Debt Contracts, Political Cost, Fixed Asset Intensity, dan Market To Book Ratio terhadap Perusahaan Melakukan Revaluasi Aset Tetap (Studi pada Perusahaan Manufaktur yang Terdaftar di Bursa Efek Indonesia Tahun 2010-2014). Jurnal Ilmiah Mahasiswa Ekonomi Akuntansi, 1(2), 166-176. Retrieved from

http://www.jim.unsyiah.ac.id/EKA/article/viewFile/1065/659

- Lin, Y. C., & Peasnell, K. V. (2000). Fixed asset revaluation and equity depletion in the UK. Journal of Business Finance & Accounting, 27(3-4), 359-394. <u>https://doi.org/10.1111/1468-5957.00317</u>
- Manihuruk, T. N. H., & Farahmita, A. (2015). Analisis Faktor-Faktor yang Mempengaruhi Pemilihan Metode Revaluasi Aset Tetap pada Perusahaan yang Terdaftar di Bursa Saham Beberapa Negara ASEAN. Paper was Presented at Simposium Nasional Akuntansi Proceeding, 18, Indonesia.
- Missonier-Piera, F. (2007). Motives for fixed-asset revaluation: An empirical analysis with Swiss data. *The International Journal of Accounting*, 42(2), 186-205. <u>https://doi.org/10.1016/j.intacc.2007.04.006</u>
- Nazaruddin, I., & Basuki, A. T. (2016). Analisis statistik dengan SPSS. Yogyakarta: Danisa Media.
- Nurjanah, A. (2013). Faktor-faktor yang Berpengaruh Terhadap Keputusan Revaluati Aset Tetap Pada Perusahaan yang Listing di Bursa Efek Indonesia Tahun 2011. Thesis, Universitas Pendidikan Indonesia, Indonesia.
- Ramadhani, N. E. (2016). Analisis Determinasi Keputusan Revaluasi Aset Tetap (Studi Perbandingan Perusahaan Manufaktur di Indonesia dan Singapura Tahun 2013-2015). Thesis, Universitas Muhammadiyah Yogyakarta, Indonesia.
- Santosa, Y. (2009). Analisis Pengaruh Faktor Leverage, Deviden Payout Ratio, Earning Growth, Size, dan Arus Kas Operasi terhadap Price Earning Ratio (PER) di Bursa Efek Indonesia. Thesis. Universitas Diponegoro, Indonesia.
- Scott, W. R., & O'Brien, P. C. (1997). Financial accounting theory (Vol. 343). Upper Saddle River, NJ: Prentice Hall. Retrieved from <u>http://www.academia.edu/download/7538884/badm4250hleamanw09.pdf</u>

Determinants of Fixed Asset Revaluation Decision and Its Impacts on Market Reaction

- Seng, D., & Su, J. (2009). Managerial incentives behind fixed asset revaluations: evidence from New Zealand Firms. Working Paper Series, (3). Retrieved from <u>https://ourarchive.otago.ac.nz/bitstream/handle/10523/1606/seng\_fixed\_asset\_re-valuations\_-\_submit\_to\_illinoi.pdf?sequence=3</u>
- Suwardjono. (2010). Teori Akuntansi: Perekayasaan Laporan Keuangan. Edisi ketiga. Yogyakarta: BPFE.
- Tay, I. C. (2009). Fixed asset revaluation: management incentives and market reactions. Doctoral dissertation, Lincoln University, USA. Retrieved from <u>http://dspace.lincoln.ac.nz/bitstream/handle/10182/1555/Tay\_MCM.pdf?sequenc\_e=3</u>
- Watts, R. L., & Zimmerman, J. L. (1986). Positive Accounting Theory. New Jersey: PrenticeHall.
- Yulistia M, R., Fauziati, P., Frinola M, A., & Khairati, A. (2015). Pengaruh Leverage, Arus Kas Operasi, Ukuran Perusahaan dan Fixed Asset Intensity Terhadap Revaluasi Aset Tetap. Paper was Presented at Simposium Nasional Akuntansi Proceeding, 18, Indonesia.