

# **WHY COMPANIES CHOOSE THE COST MODEL OVER FAIR VALUE FOR INVESTMENT PROPERTY? EXPLORATORY STUDY ON INDONESIAN LISTED COMPANIES**

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## **ABSTRACT**

Despite the favourable impact on the profit figure from the fair value model under IAS 40, most of the Indonesian listed companies reported investment property using the cost model. This research aims to reveal the factors affecting the decision to apply a cost model instead of fair value. Using logit model regression from 96 Indonesia listed companies during 2013-2015, this study tests if firm characteristics (i.e., size, profitability, leverage and growth), ownership (i.e., institutional ownership and family shareholders) and industry type (real-estate or non-real estate) influence firms' decision to use cost model or fair value for investment property. Three business practitioners from the listed real estate company were also interviewed to gain a deeper understanding on the accounting policy decision. Results from regression analysis have shown that profitable firms and firms in real estate industries are more likely to apply cost model than fair value model for investment property. On the other hand, firms with a high percentage of institutional investors and higher growth are less likely to use the cost model. Results from interviews have revealed that the taxation complexity has been the main reason to avoid the fair value model. Respondents also have mentioned the volatility risk and owner's conservatism as other reasons for avoiding fair value model.

**Keywords:** Accounting policy choice; Accounting conservatism; Cost model; Investment property

## **1. INTRODUCTION**

This research aims to reveal the factors affecting the decision to apply the cost model instead of fair value for companies reporting investment property in Indonesia. Indonesia's growing economy has encouraged the business of property to grow over the past few years. The sector of real estate shows signs of growth in Indonesia (Development Bank of Singapore [DBS], 2014). The level of

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real estate sales in Indonesia reached 10 trillion rupiahs in 2009, and then increased to 40 trillion rupiahs in 2013. The market price for land in the region of Greater Jakarta and Surabaya experienced an increase in Cumulative Annual Growth at a rate of 35% since 2009, along with the increasing level of sales.

On the other hand, the accounting for investment property is relatively new in Indonesia. The standard for investment property was first introduced only in 2008 when Indonesia adopted IAS 40 Investment Property for the first time into its local standard PSAK 13. Before 2008, all type of buildings and land in Indonesia were accounted as Property Plant and Equipment (PPE) and only historical cost model was available as accounting policy in the standards. Also, in 2008 Indonesia adopted the revaluation model for the first time when the country adopted IAS 16 which allows companies to use fair value for their PPE. Thus, the use of fair value for land and building which is available under revaluation model of IAS 16 or fair value model of IAS 13 is only available recently.

The impact generated when a company opt to use fair value method is that it may generate larger net income, due to the difference between fair value and book value to be recognized as part of gain or loss from the application of fair value. Meanwhile, by using the cost model, the amount of net income or loss is only affected by depreciation expense.

Unfortunately, the Indonesian taxation rule until this date is still very much using the cost model for all buildings and land. The Indonesian tax code does not have a special rule for investment property, thus all land and building under the IAS 40 are perceived as PPE with a maximum of twenty years straight line depreciation. Under the Indonesian tax code, if a company wants to revalue its property to its market value, a final tax of 10% is applied for the increased value. Arguably, the tax rule has made fair value and revaluation model unpopular in Indonesia due to extra cash outflow burden while the increased value of the asset does not attract new cash inflow. Our data collection shows that from 525 companies listed in Indonesia Stock Exchange, 96 of which reported investment property, about 86% companies chose the cost model and only 14% chose fair value model.

Research on the option to use accounting methods has always been an interesting topic to investigate since the lack of definite reason for a company to choose certain accounting method. Ishak et al. (2012) explained that the decision to choose an accounting method is based on management's consideration, and the reason embodying the decision is never to be known by users of financial report. Research on the choice of accounting method can only predict the factors that influence a company in picking one accounting method rather than the other. A similar circumstance arises on investment property, whereas some companies opt to use fair value method, and the others opt to use cost method.

Our sample consists of 288 firms analysed for the years 2013, 2014 and 2015 from all Indonesian listed companies which reported investment property on their financial position. We tested if some firm characteristics, business model of the companies (real estate and non-real estate companies) and capital structure may have significant influence over the decision to choose the cost model. We analysed if leverage, size, type of business (real estate and non-real estate companies), profitability, growth, institutional ownership and family ownership have significant influence over the companies' decision to choose the cost model over the fair value model. We also conducted

interviews with business practitioners in the real estate industry to gain a deeper understanding on accounting policy decision-making process.

Our findings both from the regression analysis and the interviews provided an interesting insight. Type of business and profitability have positive significant relationship with the decision of the cost model over fair value model while companies with high information asymmetry (proxied by growth) have negative association with the cost model decision. The interview with real estate practitioners revealed that the family conglomerates who own most of real estate companies in Indonesia are tend to be more conservative in their profit and perceived the increase of fair value as “unreal” profit. The interviewee also mentioned that companies prefer to use the cost model to avoid unnecessary attention from the tax authority.

This study contributes to the literature of accounting policy decision making in several ways. First it provides better understanding on why companies choose a more conservative accounting method when the standards provide alternatives. Second it concurred with the tradition of country’s law code where taxation rule dominates the accounting choice. Our interviewee revealed that unfavourable tax rule against fair value model has encouraged the companies to remain using the historical cost model. The cost model seems more efficient in a contractual perspective because it reduces agency costs generated by creditors’ protection, political visibility, taxation and litigation (Watts, 2003; Qiang, 2007). Third this study provides insights to the Indonesian accounting standard setters, the importance of harmonising the accounting standard with the tax rules to provide a level playing field between accounting policy choices.

The remaining of the paper is structured as follows. The literature review discusses previous literature which guides us in developing our hypothesis. We then explain our research methodology, followed by the result and the discussion from both statistical test and interviews. We finish with the conclusion, implication and recommendation for future research.

## **2. LITERATURE REVIEW**

Previous researchers have discussed factors that affect the decision made by companies to choose accounting policies for deeper insights. Muller et al. (2008) revealed that companies which choose fair value method for investment property are those with more dispersed ownership, those which exhibit greater commitment to reporting transparency, and those which report larger fair value gains as an opportunity to maximize reported net income. And according to Farahmita and Siregar (2012), factors that affect the option of fair value method are protection towards creditor, political cost, information asymmetry, and manager’s opportunistic motivation. Some other research provide insights regarding the reason why fair value accounting is preferable. Cairns et al. (2011) stated that IAS 40 expresses a clear preference for the fair value model, though companies have discretion to choose which accounting method to be applied on investment property. Diana (2009) stated that the use of cost model to account for assets shall lead to undervaluation in times of inflation and the performance of the company cannot be correctly assessed since profit is over-valuated. Fair value accounting is an improvement to the traditional form of accounting, which is the historical cost accounting (Jaijairam, 2013).

Under the historical cost accounting, the value that is reflected in the balance sheet is the purchase price reduced by obsolescence, depreciation or depletion (Nobes, 1997). In his research, Jaijairam (2013) further deemed that fair value accounting is superior when compared to historical accounting. Fair value reflects the current situation in the market whereas historical cost creates uncertainty in future periods about the true value of assets. In addition, fair value provides user with more current financial information and visibility compared to historical cost accounting (Meunier, 2012).

Based on the literature review above, we concluded that fair value model is superior compared to the cost model. However most of Indonesian companies that report investment property choose the cost model instead. We therefore became interested in investigating the reasons why companies choose an accounting policy rather than another for their investment property. We did not only conduct regression analysis to find out the possible explanation of which financial factors affect such decision, but we also conducted interviews with the preparers of financial statement of companies which choose the cost model for their investment property.

Based on debt covenant hypothesis (Watts & Zimmerman, 1990), the higher the debt to equity ratio of a company, the nearer the company to interrupt loan agreement, and the higher the probability for violation of agreement, as well as the occurrence of technical stagnancy cost. Given this circumstance, managers are more likely to use accounting methods that increase income, in this case fair value method. Conversely, according to Ahmed et al. (2000), creditors prefer a more conservative accounting policy since it serves as a measure to mitigate conflict arising due to the concern over excessive distribution of asset to lenders, reducing shareholders' claim on the company's assets. The larger the amount of debt a company possesses, the larger the demand from creditors to a more conservative financial report, because managers expect to alleviate the lenders-shareholders conflict. The use of cost model is aligned with a more conservative accounting choice, thus there is a higher probability that managers will use the cost model (Farahmita & Siregar, 2012). Therefore, in accordance with the effort to mitigate the lenders-shareholders conflict caused by leverage, the following hypothesis was developed:

*H1: Leverage significantly affects the increasing probability for the use of the cost model for investment property.*

Company size is a scale used to show how large a company is. Based on political cost hypothesis (Watts & Zimmerman, 1990), companies are more likely to use accounting method that are more comfortable regarding the size of the company. The reduction of a company size is a measure to reduce exposure from regulators and related parties (Lin & Peasnell, 2000). Companies avoid the use the fair value model to neglect the reporting of revaluation gain arising from asset valuation, increasing the company's size. Instead, companies will choose the cost model in order to reduce the political burden a company has to bear (Quagli & Avallone, 2010). So, in accordance with Quagli and Avallone (2012), the following hypothesis was established:

*H2: Company size significantly affects the increasing probability for the use of the cost model for investment property.*

Institutional investor often used reports from managers of a company in order to make the proper decision (Madura, 2007). Conflicting interest may arise between corporate managers and corporate

shareholders due to separation of control of a company in between them, better known as agency conflict (Dennis & McConnell, 2003). In an agency conflict, agents, which are managers of a company, may take actions that benefit themselves at the expense of the interest of shareholders. Institutional investors are expected to monitor a company better than individual investors, who would be more likely to monitor the managers' behaviours through using conservative accounting policies in financial reports (Ramalingegowda & Yu, 2012). Accounting conservatism acts as a mechanism to limit the incentives of managers to conduct opportunistic behaviours by manipulating financial figures (LaFond & Watts, 2008). Cost method is a more conservative accounting policy since it does not cause earnings to fluctuate, thus improving the reliability of the value presented in the financial statement with the application of fair value model (Beatty, Weber, and Yu, 2008; Hodder, Hopkins, & Khaterine, 2013). In the Indonesian context, institutional ownership constraints earnings management which mean more sophisticated investors encourage managers to be more conservative (Mitra 2002, Koh 2003, Midiastuty & Machfoeds 2003). However, Darmawati (2003) and Siregar and Utama (2008) found out that institutional investor in Indonesia does not have significant influence over earnings management. Based on the literature review above, the following hypothesis was developed:

*H3: Institutional ownership significantly affects the increasing probability for the use of the cost model for investment property.*

Most of Indonesian companies still have high proportion of family ownership and this affect the behaviour of the companies (Achmat et al, 2009; Claessens, 2000, Siregar and Utama, 2008, Prabowo and Simpson, 2011). Family Ownership is an individual, or group of family members that holds more than 20% of a firm's shares and is the largest controlling block in the company. La Porta, Lopez-de Silanes and Shleifer (1999) has adopted the use of the 20% of cut of point in their study of corporate ownership in 27 countries and Claessens et al (2000) investigated company ownership in nine East Asian countries including Indonesia. La Porta et al (1999), for example, argued that the idea behind using a 20% cut off is that "this is usually enough to have effective control of a firm" (p.477). Moreover, according to the Indonesian Capital Market Law (article (1) 1995 a person that directly or indirectly holds at least 20% of the voting rights of a company is called a 'substantial shareholder'. Family owned companies in Indonesia are more conservative by reporting a significant lower net profit than non-family owned companies (Achmad et al., 2009). Family owned companies in Indonesia also have fewer agency problem (Arifin, 2003) and are also more inclined toward effective earnings management than opportunistic earnings management (Siregar and Utama, 2008). Based on this prior research, the following hypothesis was developed

*H4: Family ownership significantly affects the increasing probability for the use of the cost model for investment property.*

In the situation of high information asymmetry, managers tend to choose accounting method that can inform about the true value of a company. A High value of the market to book ratio can be seen as a sign of information asymmetry because market value can capture the future potential growth while book value reflects the past value of the assets. Previous studies have used market to book ratio as a proxy for information asymmetry (Quagli and Avallone, 2010; Farahmita and Siregar, 2014). The research conducted by Quagli and Avallone (2010) in the European countries has shown that market to book value has negative association with the fair value model of Investment property. On the other hand, Farahmita and Siregar (2014) have found the opposite

result, for Indonesian setting the market to book value has positive association with the fair value model. As our study investigates why Indonesian companies choose the cost model over the fair value model, we developed a similar hypothesis with Farahmita and Siregar (2014) and also Quagli and Avallone (2010) which is as follow:

*H5: Information asymmetry negatively affects the increasing probability for the use of the cost model for investment property.*

In this research we also investigate if real estate companies are more likely to choose the fair value model than the cost model. The main business of real estate companies is in the investment property; thus, they should have more concerns over the accounting choice of their investment property. Since the IAS 40 was issued in 2003, many IFRS adoption jurisdictions adopted the standard which allows investment property to be measured by fair value. Previous research provided evidence that the fair value information of investment property indeed has value relevant (So and Smith, 2009). Thus, we expect that real estate companies should be more inclined to choose the fair value than the cost model. However, the research conducted by Farahmita and Siregar found otherwise, property companies have negative association with the fair value model. Which lead us to our sixth hypothesis

*H6: Real Estate Companies negatively affects the increasing probability for the use of the cost model for investment property.*

Previous research argued that managerial opportunistic accounting behaviour is demonstrated by income smoothing practices (Barth et al., 1999; Hefflin et al., 2002; Graham et al., 2005). Thus, we supposed that fair value model which create volatility in profit figure contrast the income smoothing policies. Especially with companies who are steadily making profits, choosing fair value model will create unnecessary volatility. We expected that the higher number of profitability will have positive association with the cost model, because it creates less volatility to the profit.

*H7: Profitability significantly affects the increasing probability for the use of the cost model for investment property.*

### **3. RESEARCH METHODOLOGY**

This research is a mixed method research. Although the statistical analysis can provide persuasive evidence of factors affecting the accounting choices of investment property, interviews with top managements of real estate companies can offer richer explanations of why they choose historical cost and whether they have considered to choose fair value model.

#### **3.1. Sample and Research Design**

Population for this research is all companies listed in Indonesia Stock Exchange for the years 2013,2014 and2015 which reported investment property in their financial position. The sampling criteria for this research are as follows: (1) Companies listed in Indonesia Stock Exchange and which financial report has been published in IDX in 2014, (2) Companies that reported investment

property account in 2014, (3) Companies which use the cost model to report their investment property.

The sampling process and result that satisfy the aforementioned criteria is exhibited in Table 1 below:

**Table 1:** Sample Selection Process and Result

Criteria	Total
Companies listed in Indonesia Stock Exchange and which financial report has been published in IDX from 2013 to 2015	1575
Companies that did not report investment property	(1293)
Companies that report investment property	<b>288</b>

### 3.2. Quantitative Research

The hypothesis will be tested under the quantitative research. The quantitative research employs the logit model, expressed under the following equation:

$$\ln\left(\frac{P_{HC}}{1 - P_{HC}}\right) = \beta_0 + \beta_1 LEV_i + \beta_2 LNNTA_i + \beta_3 INSTOWN_i + \beta_4 BUSS_i + \beta_5 PROFIT_i + \beta_6 FAMOWN_i + \beta_7 GROWTH_i + \varepsilon_i$$

Where:

- $P_{HC}$  = The probability a company chooses the cost model. If the company chooses the cost model, value = 1. Conversely, if the company chooses the fair value model, value = 0.
- $\beta_0$  = The intercept, the value of  $P_{HC}$  when all  $X_i$  is zero.
- $\beta_i$  = The amount by which  $P_{HC}$  changes when that particular  $X_i$  increases by one unit with the values of all other independent variables held constant.
- $LEV$  = Leverage, measured by the ratio of total liabilities to total assets at year end.
- $LNNTA$  = Company size, measured by total assets converted to natural logarithm.
- $INSTOWN$  = Institutional ownership, measured by dividing shares owned by institutional investors by total issued shares.
- $BUSS$  = Type of business, Companies with the main business is real estate are given the value of 1, companies which main business is not real estate, are given the value of 0.
- $PROFIT$  = Profitability, the company's ability to generate profit. Measured by using Return on Asset; dividing net income by total company's asset.
- $FAMOWN$  = Family ownership, Companies where a minimum 20% of shares is owned by individual or a family is given the value of 1, and zero otherwise.
- $GROWTH$  = Growth, measured by dividing market value of company shares by total company's equity.

### 3.3. *Qualitative Research*

In conjunction with the quantitative research, the qualitative approach adds information that describes the actual reason given by companies with regards to the accounting policy used for investment property. In the qualitative part of our research, we conducted interviews to collect data. The Interviews were expected to provide answers to the research question in a qualitative form. The interviews were conducted in an oral discussion based with our interviewee.

The interviews provided insights to what actually affects company's decision to use the cost model for investment property by gathering lucrative information from individuals who are actively involved in the decision making of the companies. We interviewed three business practitioners from three different listed Indonesian companies. Presented under Table 4 below are the profile of respondents and a few descriptions regarding the companies where they operate (we use pseudo names for respondents and the real company's name):

**Table 2: Informations Regarding Respondents**

No	Name	Company	Position in the Real Estate Company	Place	Interview Date	Interview Duration
1	Mr. Toni	Real Estate 1	CFO	JW Marriott Hotel, Kuningan District, South Jakarta	5/26/2016	14:34
2	Mr. Fritz	Real Estate 2	Member of Audit Committee and also public accountant who audit several real estate companies	The Goods Café, Pacific Place, South Jakarta	6/23/2016	15:35
3	Mr. Sam	Real Estate 3	CFO	QQ Kopitiam, Plaza Indonesia, Central Jakarta	8/4/2016	8:01

## 4. RESULTS AND DISCUSSIONS

### 4.1. *Quantitative research*

#### 4.1.1 *Descriptive Statistics*

Table 3 presents the descriptive statistics for the dependent variable ( $P_{HC}$ ) and the independent variables ( $LEV$ ,  $LNTA$ ,  $INSTOWN$ ,  $BUSS$ ,  $PROFIT$ ,  $FAMOWN$  and  $GROWTH$ ). From the table 3, it can be seen that on average, firms that use the cost model have the ratio of liabilities to total assets ( $LEV$ ) of 0.92. Focusing on the probability of firm opt for the cost model or the fair value model for its investment property ( $P_{HC}$ ), it can be seen from the table that, on average, 86 percent of the firms in our sample chooses the cost model. We found out that, on average (median), firms in our sample have a total liability of 0.87 (0.93) percent of their total assets ( $LEV$ ). The mean of  $LNTA$  as proxy of firm size is 28.26 (median=28.68). The average (median) institutional ownership



(*INSTOWN*) in our sample is 0.66 (0.66) percent, suggesting that the majority of firms in our sample are owned by institutional shareholders. Next, we found that, on average (median), 0.47 percent of firms in our sample are into the real estate industry. The sample firms, on average (median), have 11 (6) percent of operating income of their total assets (*PROFIT*). 80 percent of observations are owned by shareholders categorised as family. Finally, on average, market value of firms in our sample are 3.17 of the book value (*GROWTH*).

**Table 3:** Descriptive Statistics

	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Q1</b>	<b>Median</b>	<b>Q3</b>
<i>P_HC</i>	288	0.86	0.34	1	1	1
<i>LEV</i>	288	0.87	0.93	0.33	0.55	5.77
<i>LNTA</i>	288	28.26	2.56	27.42	28.68	29.83
<i>INSTOWN</i>	288	0.66	0.19	0.53	0.66	0.82
<i>BUSS</i>	288	0.47	0.50	0	0	1
<i>PROFIT</i>	288	0.11	0.24	0.02	0.06	0.11
<i>FAMOWN</i>	288	0.80	0.40	1	1	1
<i>GROWTH</i>	288	3.17	4.31	1	1.70	3.89

*Notes:* *P\_HC*= The probability a company chooses the cost model. If a company chooses the cost model, value = 1. Conversely, if a company chooses the fair value model, value = 0. *LEV*= Leverage, measured by the ratio of total liabilities to total assets at year-end. *LNTA*=firm size, measure as natural log of total assets. *INSTOWN*= Institutional ownership, measured by dividing shares owned by institutional investors by total issued shares. *BUSS*= type of business, coded as 1 if firms are in the real estate business and 0 otherwise). *PROFIT*= profitability, measured using return on assets (net income over total assets). *FAMOWN*= family ownership. Companies with ultimate owner (minimum 20%) is owned by individual or a family is given the value of 1, and zero otherwise. *GROWTH*= growth, measured by dividing market value of company shares by total company's book equity.

#### 4.1.2. Regression Results

Table 4 reports the results from the estimation of empirical model, which regresses the choice of using the cost model or the fair value model on independent variables (*LEV*, *LNTA*, *INSTOWN*, *BUSS*, *PROFIT*, *FAMOWN* and *GROWTH*). The results based on *LEV* as independent variable reveal that the coefficient is negative (-0.1451) but not significant at the conventional level (z-statistic=-1.40). This result suggests that the level of firm's leverage does not affect the choice of the cost model or the fair value model in investment property account. The result for *LNTA* as independent variable show that the coefficient is negative (-0.0134) but not significant at the conventional level (z-statistic=-0.18). It suggests that the size of the firms do not influence the decision whether to use the cost model or the fair value model in investment property account. The result for *INSTOWN*, however, shows different outcome. It can be seen from table 4 that the coefficients of *INSTOWN* is negative (-2.7770) and significant at 5 percent level (z-statistic=-2.13). This suggests that as the level of institutional ownership increases, the probability of a firm to use the cost model in investment property decreases.

On type of business, it shows that the coefficient of *BUSS* is positive (2.7419) and significant at 1 percent level (z-statistic=4.20). The result indicates that a firm in real estate industry is more likely to use the cost model approach in investment property, compare to a firm in non-real estate industry. For *PROFIT*, the results depict that the coefficient is positive (0.0506) and significant at

5 percent level (z-statistic=2.66). This suggests that as profitability increases, the chance of a firm to use the cost model in investment property increases. Concerning *FAMOWN*, it shows that the coefficient is positive (0.3440) but not significant (z-statistic=0.73). This suggests that the family ownership status of a firm does not influence the decision on whether to adopt cost model or revaluation model on property. In regard to *GROWTH*, the coefficient is negative (-0.0867) and significant at 1 percent level (z-statistic=-2.99). The result indicates that as a firm grows, it is less likely that the firm will use the cost model in its investment property. Finally, the pseudo R-squared values from the two regression specifications reported in Table 4 indicate that the explanatory variables collectively explain around 20.17 percent of the total variation in the choice of cost and fair value model in investment property.

**Table 4: Logit Regression Results**

Variable	Coefficient	Robust Std. Error	z-Statistic	Prob.
<i>LEV</i>	-0.1451	0.1039	-1.40	0.16
<i>LNTA</i>	-0.0134	0.0756	-0.18	0.86
<i>INSTOWN</i>	-2.7770	1.3055	-2.13**	0.03
<i>BUSS</i>	2.7419	0.6525	4.20*	0.00
<i>PROFIT</i>	0.0506	0.0190	2.66*	0.01
<i>FAMOWN</i>	0.3440	0.4687	0.73	0.46
<i>GROWTH</i>	-0.0867	0.0290	-2.99*	0.00
C	3.5712	2.3846	1.50	0.13
Pseudo R <sup>2</sup>	0.2017			
N	288			

This table presents results from the estimation of empirical model, which regresses the choice of using the cost model or the fair value (*P\_HC*) on independent variables (*LEV*, *LNTA*, *INSTOWN*, *BUSS*, *PROFIT*, *FAMOWN* and *GROWTH*)

\* significant at 1 percent level \*\* significant at 5 percent level

#### 4.1.3. *Robustness test*

We employed a propensity score matching approach to further alleviate the concern that the association between the choice of cost model versus fair value and the independent variables is due to self-selection bias. To implement this analysis, we used the propensity scores obtained from the estimation of the logistic regression in the main model and performed a one-to-one nearest neighbour match by selecting the best control match (i.e., firm uses fair value model) for each firm in the treatment group (i.e., firm uses the cost model). To ensure that the treatment and control sub-samples are matched as close as possible, we used the calliper matching method and match observations within a calliper of 10 percent, where calliper refers to the difference in the predicted probabilities between the treatment and control firm. Table 5 provides a summary of the statistics related to the variables that are used in the matching process for both treatment and control sub-samples, as well as tests of differences in mean values of matched variables across the treatment and control sub-samples. It can be seen from the table 5 that the descriptive statistics based on a propensity score matched sample are consistent with the main results that *INSTOWN*, *BUSS*, *PROFIT* and *GROWTH* are the important determinants for the choice between the cost model and the fair value model in investment property.

**Table 5:** Comparison Between Treatment Sample and Control Sample – Independent Variables

	Treatment sample (the Cost model)		Control sample (Fair Value)		Difference	t-statistics
	Obs.	Mean	Obs.	Mean		
<i>LEV</i>	15	0.71	15	1.18	-0.47	-0.83
<i>LNTA</i>	15	28.21	15	24.68	3.52	1.43
<i>INSTOWN</i>	15	0.66	15	0.80	-0.15	-1.97**
<i>BUSS</i>	15	0.43	15	0.11	0.32	2.01**
<i>PROFIT</i>	15	0.14	15	0.05	0.08	2.90*
<i>FAMOWN</i>	15	0.60	15	0.80	-0.20	-0.63
<i>GROWTH</i>	15	0.97	15	5.15	-4.19	-1.88***

\*, \*\*, \*\*\*, significant at 1, 5 and 10 percent level respectively

#### 4.2. *Result from the Interviews*

From the Interviews with our respondents we identified three arguments of why real estate companies are more inclined in using the cost model for investment property.

##### *Tax complexities have discouraged companies of using fair value model.*

All respondents have mentioned that an unfavourable tax rules is the main reason why they avoid fair value model. The tax rules do not have specific treatment for investment property, thus all land and buildings are treated as property, plant and equipment (PPE). The tax rules require a company to pay 10% final tax from the additional increase value of all PPE, if the new fair value want to be recognized by the tax authority and the future depreciation to be deductibles. However, companies may use fair value or revaluation model only for their accounting and not for their taxation purpose, which then the 10% final tax should not apply.

Mr. Toni, CFO of Real Estate 1, explained that one of the Company's subsidiary once used the fair value model for investment property. But the application of the fair value model led to asset revaluation, hence triggering a dispute with the tax authority. Although the company could avoid paying the 10% tax with the arguments that the fair value model was only for accounting purpose and not for the taxation purpose, nevertheless the tax audit mission created stress and unnecessary burden to the company. Due to this dispute, Mr. Toni stated that the company is discouraged to use fair value model. Mr. Toni also mentioned that if the tax rules accept the fair value model, he would apply fair value model to the investment property in the company.

##### *Companies avoid using the fair value model due to earnings volatility*

Mr. Sam pointed out that even if the tax regulation is favourable for the company to use the fair value model, he stated that Real Estate 2 Company would better off to consistently use the cost model. The cyclical nature of the real estate business causes increases and decreases in the value of real estate (Muller et al. 2008). Reporting the increasing and decreasing value of investment property would cause earnings to fluctuate, reducing the reliability of the reported amount in the financial statement. This circumstance adds the weight to the company as the determination of the fair value also requires more effort.

##### *Conservative owner prefers the cost model for investment property*

Mr. Fritz provided insights that the authors had not previously acquired through the quantitative research. Companies basically run their business to provide value to its stakeholders. The payment of dividend serves as a measure to add value to the company's stakeholders. Mr. Fritz stressed on the owner's role in controlling the company to satisfy its stakeholders, especially on the accounting policy it uses. It is important to note that the Real Estate 3 Co. is a family-owned enterprise. According to him a family-owned company focuses on generating profit, and the cash generated from which will be utilized for future dividend payment to shareholders. A family-owned enterprise is more conservative in the sense on the accounting policy it chooses, where they usually avoid reporting an excessive amount of profit that does not reflect the company's cash position.

### **4.3. Discussions**

Our quantitative analysis revealed that leverage, company size, and family ownership do not significantly affect the probability to report investment property under the cost model. Our findings on leverage are consistent with the findings of Quagli and Avallone (2010) but our results on company size are not as they found out that company size reduce the likelihood of using fair value. The result on family ownership was quite surprising for us as we expected that it will have significant association with the cost model as suggested by the respondent. However, the result could be insignificant due to the large numbers of family-owned companies in Indonesia overall.

On the other hand, companies with high percentage of institutional investors have negative association with the cost model. This is inconsistent with our hypothesis which expected to find a positive relationship of institutional investors and the cost model. Prior studies have shown that institutional investors tend to drive managers's behaviour into more conservative (Mitra 2002, Koh 2003, and Midiastuty and Mahfoedz 2003), however with this study's results institutional investors seems to be more confident in using fair value. One of the explanations is that institutional investors have more wealth and resources to gather information thus they can predict future earnings better than non-institutional investors. This is consistent with the view that fair value has more future value than the cost model and also more relevant value (Jaijairam, 2013; Francis et al, 2004). This finding confirmed the fact that institutional investors in Indonesia seem to be more sophisticated investors with monitoring role which then encourage managers to use more relevant information in the financial statement.

Our study also finds that the type of business (real estate and non-real estate) has positive association with the probability for companies to report under the cost model. Real estate companies are more inclined to use the cost model than nonreal estate companies. This is consistent with the research of Farahmita and Siregar (2014) who also had similar findings. This finding is consistent with the political cost hypothesis where companies tried to reduce the tax burden by choosing the cost model. Our respondents also confirmed this during the interviews mentioning that the unfavourable tax consequences have discouraged them to use fair value.

This study documents evidence that profitability also has positive association with the cost model. Our robustness test confirmed that the higher profitability figures the more likely companies will choose the cost model. The use of the cost model eliminates volatility-increasing component of income, improving the predictive value of future financial performance (Hodder, Hopkins, & Khaterine, 2013). Companies with strong profitability are less likely to feel pressure to boost their

profit from fair value. Without the real cash inflow coming to the companies from fair value adjustment, the increase of fair value is perceived as useless. Our respondents concurred with this observation, for example our interview with Mr. Sam is excerpted below:

*“if the profit (addition from fair value) is just for improving the book (without cashflow), I don't see the benefit of it. It is not real. Unless if our financial report is not very good, then we may need more profit figure. But now most of real estate companies in Indonesia has good profit because they bought the land 10-20 years ago when the price was still low”.* (Interview with Mr. Sam, real estate Co.3)

Further, we also found that companies with high information asymmetry has negative association with the cost model or companies with high market to book ratio are less likely to choose the cost model. Our findings confirm the one of the research of Farahmita and Siregar (2014) and Muller, Ridle and Sellhorn (2008). However, our findings are inconsistent with the one of the research of Quagli and Avallone (2010) who have found otherwise. The high value of market to book ratio reflect that the market value captures the present value of growth opportunities. Our study has shown that companies with high growth opportunities may perceived the cost model as irrelevant and the fair value will better communicate the value of the company and reduce the information asymmetry.

## 5. CONCLUSION

The aim of the study was to examine the factors behind Indonesian companies choice of the cost model versus the fair value model for the investment property. We investigated Indonesian companies which reported investment property between 2011-2014 and also interviewed three business practitioners who are working in the real estate industry.

The statistical results of the study have shown that leverage, company size, and family ownership are not significant factors for the company's preference in choosing the cost model over the fair value model. However, the business model of the company whether the company is a real estate company or not, have a positive significant impact on the preference of the cost model for the investment property. This finding echoed the study of Farahmita and Siregar (2012) who also have found that real estate companies are more reluctant to apply fair value than non-real estate companies. The study also found that companies with good profitability are more likely to choose the cost model as it will reduce the profit volatility of the company. However, companies with high information asymmetry and high institutional ownership will be less likely to choose the cost model as it will increase the information asymmetry.

Our interviews with business practitioners have revealed arguments for such accounting choice decision. First, companies avoid reporting investment property under the fair value due to tax complexities. As illustration we had a company who experienced disputes with the tax authority when it applied the fair value model. Second, companies avoid using the fair value model due to earnings volatility. The cyclical nature of the real estate industry will lead to increases and decreases in the value of real estate, which in turn will lead to volatile financial report. A volatile financial report will reduce its predictive value of future financial performance. And third, ownership characteristic affects the use of the cost model for investment property. Conservative

owner, in a case where a company's ownership that is dominated by family members, will tend to use the cost model as a measure to provide value to its stakeholders. Conservative owner avoids using the fair value due to the negative consequences that follows. The use of fair value would lead to overstatement of the company's profit report, increasing the dividend pay-out ratio which is unrealistic to the company's current cash profit. Further consequence is the potential conflict with shareholders following the underpayment of dividend.

Overall our study provides insights on how a company choose a specific accounting policy among the accounting standards. The impact of this study to the capital market regulator is to provide insight on how companies in Indonesia choose accounting policy for investment property. Another impact of the study is to inform the Indonesian tax authority that preparers of financial statement have big concerns over the tax rules which is not consistent with the accounting rules. This study may also assist accounting standard setter in Indonesia in understanding the factors of choosing one alternative over the other.

For future research, we recommend further investigation if the amount of fair value increase will have positive association with the use of fair value model or not. The rate of fair value is disclosed in the financial statement, even for those who choose the cost model. We also expect that international operation of a company may influence the decision to use fair value model as suggested also by Muller, Ridle and Sellhorn (2008). Some Indonesian companies may also develop property in Malaysia or Singapore, which may give them more pressure to provide more relevant value in their financial statements.

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