

Why Companies Choose the Cost Model over Fair Value for Investment Property? Exploratory Study to Indonesian Listed Companies

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Abstract

Despite of the favourable impact to the profit figure from the fair value model under IAS 40, most of Indonesian listed companies reported investment property using the cost model. This research aims to reveal the factors affecting the decision to apply cost model instead of fair value. Using logit model regression from 96 Indonesia listed companies, this research tested if leverage, company size, institutional ownership, and scope of business (real-estate or non real-estate) variables influence the accounting policy choice. Three business practitioners from listed real estate company were also interviewed. Results from regression analysis shows that all variables do not have significant influence except for the scope of business. Real Estate companies are significantly more favourable to choose cost model than non real-estate companies. The interviews revealed that the taxation complexity has been the main reason to avoid the fair value model. Respondents also mentioned the volatility risk and owner's conservatism as other reasons of avoiding fair value model.

Keywords: Accounting policy choice, accounting conservatism, cost model, investment property.

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1. Introduction

The sector of real estate shows signs of growth in Indonesia (Development Bank of Singapore [DBS], 2014). The market for real estate in Indonesia has experienced increase in recent years, marked with the increase in sales. Based on data provided by DBS, the level of 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. DBS analyzed that there are several indicators that best describe the level of market for real estate in Indonesia, they are the development of infrastructure in suburban areas, the increase in value of construction, the high level of cement consumption, the declining interest rate, and the high level of mortgage loans. The previously mentioned indicators have described the

phenomenon in real estate sector in Indonesia for the last few years. Although those indicators showed signs of increases, DBS believes that the real estate sector in Indonesia has not yet reached its peak, which leads to the possibility for further growth.

Generally, real estate, in this case, land and building are resources that are scarce in nature. In contrast, the demands for real estate will be steadily increasing. The diminishing value of supply and the increasing demand will make the price of real estate increased as well. This situation will draw many investors to invest in the real estate sector.

Based on *PSAK No. 13 (2011) Properti Investasi*, investment property is property (land or building or component of a building or all of the previously mentioned items) which is controlled (by owner or lessee through financial lease) for the purpose of generating rent or for capital gain or both, and is not utilized in production or provision of goods and service or for administrations purposes or for

sale in ordinary course of business activity. Ultimately, *PSAK 13* stated that a company is allowed to choose whether to use cost or fair value valuation method to account its investment property according to management's consideration.

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 the 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 opted to use fair value method, and the others opted to use cost method.

If a company chooses to apply the fair value method, then the company is obliged to determine the value of investment property in each financial reporting date. The value to be disclosed in the financial statement is the fair value at the reporting date. Should any difference arise between the fair value at the reporting date and the acquisition cost of investment property, the difference will be recognized as a gain or loss due to fair value adjustment in the comprehensive income statement. If a company chooses to apply the cost method, then the company is obliged to disclose the depreciation on investment property owned. The value to be presented in the financial statement is the carrying amount generated by subtracting the accumulated depreciation from acquisition cost. Thus, based on *PSAK 13*, the company is recommended, but not obliged to disclose its fair value should reliable estimation can be made regarding the investment property.

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

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 researches provide insights that are preferable on the choice of fair value accounting. Cairns et al. (2011) stated that International Accounting Standard 40 – Investment Property, from which *PSAK 13* is adopted, 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 reviews above, we concluded that fair value model is superior compared to cost model. Intrigued by this topic, we had developed an interest to explore about the decision made by companies in choosing the accounting policy to account for their respective investment property. In order to answer this, we first conducted a preliminary research on the accounting policy applied by listed companies which reported investment property back in 2014. The preliminary research is initiated by establishing the sample criteria that would satisfy this preliminary research. The scope of this research is limited only for companies listed in Indonesia Stock Exchange back in the year 2014. From 525 companies listed in Indonesia Stock Exchange, 96 of which reported investment property, either under fair value method or cost method. Those companies further divided into two major groups, which are the Cost Model Group (i.e. those which reported investment property under cost model) and the Fair Value Model Group (i.e. those which reported investment property under fair value model). Surprisingly, out of those 96 companies, 86% belongs to the Cost Model Group, while the remainder belongs to the Fair Value Model Group. The striking difference in numbers found in this quantitative comparison suggests that most listed companies in Indonesia preferred

more in using cost model to report their investment property.

We divided the listed companies that report under the Cost Model Group into three smaller groups. The first group consists of listed companies that do not disclose the fair value of investment property. The first group alone accounts to 26% from all listed companies which used cost model for investment property. The second group consists of those which did not fully disclose the fair value amount of investment property (17%). And the third group consists of those which fully disclosed the fair value amount of investment property (57%). From the third group, we further found 36% out of the Cost Model Group that fully disclosed the fair value amount of investment property that is based on appraisal report made by independent appraiser. Strangely enough, those companies that report the appraised fair value of investment property had eschewed the opportunity to report higher value of investment property in the balance sheet, as well as unrealized gain arising from changes in the fair value of investment property, owing to the increasing value of the real estate in Indonesia (DBS, 2014). In addition, the appraisal report made in the appraisal process comes at a cost, which triggers our interest on the deliberation.

2. Literature Review Investment Property

Investment property is regulated in Indonesian Accounting Standard, specifically decanted in *PSAK No. 13 (2011) Properti Investasi*. *PSAK 13* itself is an adoption of IAS 40 - Investment Property issued by International Accounting Standards Board. According to *PSAK 13*, investment property is property (land or building or component of a building or all of the previously mentioned items) which is controlled (by owner or lessee through financial lease) for the purpose of generating rent or for capital gain or both, and is not utilized in production or provision of goods and service or for administrations purposes or for sale in daily business activity. One example of investment property is land i.e. held for long term in order to earn capital gain and not to be sold in the short term in daily business activities, and building held through financial lease and rented to third party through one or more operational lease. Investment property is recognized as an asset if and only if it is highly probable for future economic benefit embodying the investment property will flow to the entity and acquisition cost of investment property can be measured reliably. Investment property will be measured by acquisition cost initially. Transaction costs are included in the initial measurement. After initial recognition, the company will choose whether to use fair value

model or cost model as the accounting policy applied in measurement after initial recognition. In the fair value method, investment property will be recorded at the fair value of investment property at the reporting date. Meanwhile in the cost model, investment property will be recorded acquisition cost less accumulated depreciation.

PSAK No. 68 (2013) Pengukuran Nilai Wajar (through *PSAK 13*) states that fair value is the price that will be received to sell an asset or the price that will be paid to switch a liability in a regular transaction inside a main market (or the most profitable market) at the measurement date in the current market condition (i.e. exit price) regardless whether the price can be directly observed or be estimated using other valuation technique. The amount of gain or loss arise from changes in fair value of investment property is recognized in comprehensive income statement in the period it is incurred.

PSAK 13 recommends, but does not oblige, an entity to determine the fair value of investment property based on appraisal report issued by independent appraiser which is recognized and possess relevant professional qualification, and also possess sophisticated experience in the location and category of the appraised investment property. Based on fair value method, it is not necessary to account depreciation and impairment test since the recorded amount of asset will always adjusted with its fair value at reporting date. (Juan & Wahyuni, 2012).

Accounting Policy

PSAK 25 is an accounting standard that regulates Accounting Policies, Changes in Accounting Estimation, and Error. In *PSAK 25*, accounting policy is a set of principals, basis, convention, rules, and certain practices that is applied by an entity in the preparation and presentation of financial report. Meanwhile the general definition of accounting policy is policies formulated by a governmental institution, with *Ikatan Akuntan Indonesia* (Indonesian Institute of Accountants) providing the technique in terms of managing economic activities, especially regarding financial information. In choosing accounting policies, *PSAK 25* regulates that if there is any standard that specializes in regulating certain transaction, event, or other conditions, accounting policies must be determined by applying the standard and considers any related forms of application. But, should there is no standard that specializes in regulating certain transaction, event, or other conditions, management must use their own judgment in the establishment and application of accounting policy that generates information that is relevant with the needs of information users and reliable (Juan & Wahyuni, 2012). After an

accounting policy was chosen, *PSAK 25* requires that the accounting policy be applied consistently across periods.

Furthermore, *PSAK 1* also explains three considerations in choosing the appropriate accounting policy in preparation of financial report. First is the sound judgment where numerous uncertainties located in multiple transactions. The judgment must be recognized in preparation of financial report. Prudence does not justify establishment of classified reserve or to be concealed. Second is the substance over form in which transaction and other events must be taken into responsibility and presented according to real event. Third is the materiality in which financial report must disclose every material component that influences evaluations and decisions.

Accounting Conservatism

Accounting conservatism is defined as the degree to which the book value of net assets is persistently understated relative to their market value (Ahmed et al. 2000). The degree of conservatism is determined by the magnitude of the understatement introduced in the financial reporting. The greater the degree of understatement of net asset values means that the reporting company introduces greater accounting conservatism in its financial report (Watts, 2003).

In the agency theory, principals such as shareholders hire agents (i.e. managers) to manage the company, and the performance of the company is expected to benefit every party linked with the company (Dennis & McConnell, 2003). But the shareholders do not have the necessary information regarding how managers act in achieving the goals of the company. The separation of ownership and control creates a potential conflict of interest between managers and shareholders. A company's performance is directly linked with manager's own welfare. This situation would motivate managers to introduce bias in financial reporting to investors in forms of asymmetric information, and limited liability (Watts, 2003). This is driven by manager's motivation to improve their own welfare, regardless of stakeholder's interest to the company.

The practice of accounting conservatism serves to address several issues. Managers play the key role in achieving the goals of a company by utilizing resources provided by shareholders. However, shareholders often do not have the necessary information regarding how managers act in attaining goals. This circumstance allows managers to introduce bias in financial reporting, in favor of their own interest to maximize their wealth. To contain manager's opportunistic behavior, a company should introduce accounting

conservatism in order to reduce the overstatement of net asset.

Hypothesis Development

Based on debt covenant hypothesis (Watts & Zimmerman, 1990), the higher the debt to equity ratio of a company, the nearer the company to interruptions loan agreement, and the higher the probability for violation of agreement, as well as the occurrence of technical stagnancy cost. Given the 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 possess, 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). Thus, in accordance to the effort to mitigate the lenders-shareholders conflict caused by leverage, the following hypothesis is 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 reduces the size of the company. The reduction of the company size is a measure to reduce exposure from regulators and related parties (Brown et al. 1992; 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 is established:

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

Share ownership is a proportion of shares owned by an investor on an entity or a company. There are many variables that can be used to measure share ownership. This research employs institutional ownership. Institutional ownership is a condition where institution(s) own a share of ownership of a company (Brigham, 2005).

Institutional investor is often the controlling shareholder demand responsibility and control from managers of the company in order to make the proper decision (Madura, 2007). Conflicting interest may arise in between corporate managers and corporate shareholders due to separation of control of the 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 ownership, which does not responsible for daily issues of the corporate, is more likely to monitor the managers' behaviors 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 behavior that manipulates financial figure (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). Based on the literature review above, the following hypothesis is developed:

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

3. Research Methodology

This particular research is designed as a mixed method research. Mixed method research is an

approach to inquiry involving collecting both quantitative and qualitative data, integrating the two forms of data, and using distinct designs that involve philosophical assumptions and theoretical frameworks. The quantitative data will be processed in a quantitative research, and the qualitative data will be processed in the qualitative research.

3.1 Sample and Research Design

Population for this research is all companies listed in Indonesia Stock Exchange for the year 2014 that report investment property account. In order to supplement the relatively few samples, our research does not only cover companies belonging to the real estate industry, but we also include companies excluded from the real estate business that report investment property. This research design employs a dummy variable, scope of business, to control the differing characteristics between companies in the real estate business to those excluded from the real estate business.

The sample 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 cost model to report their investment property.

The process in choosing the samples that satisfy the aforementioned criteria exhibited in the Table 1 below:

Table 1: Sample Selection Process

Criteria	Total
Companies listed in Indonesia Stock Exchange and which financial report has been published in IDX in 2014	525
Companies which did not reported investment property in 2014	(431)
Companies which reported investment property in 2014	96
- Companies which recorded investment property under fair value method	(13)
- Companies which recorded investment property under cost method	83

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:

$$\ln\left(\frac{P_{HC}}{1 - P_{HC}}\right) = \beta_0 + \beta_1 LEV_i + \beta_2 LNTA_i + \beta_3 OWN_i + \beta_4 BUSS_i + \varepsilon_i$$

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 cost model, value = 0.
- β_0 = The intercept, the value of P_{HC} when all X_i are zero.
- β_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.
- $LNTA$ = Company size, measured by total assets converted to natural logarithm.

OWN = Institutional ownership, measured by dividing shares owned by institutional investors by total issued shares.

BUSS = Scope of business, a control variable, which indicates companies that are included in the real estate industry. Companies which are in the real estate business are given the value of 1, are given the value of 1. Otherwise, companies which are not in the real estate business are given the value of 1, are given the value of 0.

Dependent Variable

The dependent variable of this research is the probability that the cost model is used for investment property. If the company chooses the cost model, the dependent variable will be given the value of 1. Conversely, if the company chooses the fair value model, then the dependent variable will be given the value of 0.

Independent Variables

a. Leverage

There are many variables that represent leverage. But total liabilities to total assets ratio is the most suitable. The reason to choose liabilities to total assets ratio among other variables is that the amount of debt utilized by a company to invest in its asset in order to earn profit can be effectively observed (Syamsuddin, 2009). Total liabilities to total assets ratio is a ratio that measures part of asset used to secure a company's liability. This research utilizes total liability to total asset ratio which shows the comparison between total liabilities and total assets of a company. Farahmita and Siregar (2012) used the same ratio to measure a company's leverage. The measurement of total liabilities to total assets is shown in the following formula:

$$\text{Leverage} = \frac{\text{Total Liabilities}}{\text{Total Assets}}$$

b. Company Size

In the measurement of company size, the variables that can be used are total asset, log size, and market capitalization.

This research utilizes log size, where total asset converted to natural logarithm as measurement tool for a company.

The conversion is necessary to simplify the astronomical numbers of the total assets into ratio (Ghozali, 2006). The following formula exhibits the measurement of company size:

$$\text{LNTA} = \text{Ln}(\text{Total Asset})$$

c. Institutional Ownership

Institutional ownership is measured by the percentage of shares owned by institutional owners of a company.

Institutional ownership is expressed by the following equation:

$$\text{Institutional ownership} = \frac{\text{Total shares owned by institutional investor}}{\text{Total issued shares}}$$

Scope of business is all activities related to production and distribution of goods and services from the place productions to the final consumers with an aim to earn profit (SAGE Publication, 2015). Finding in Farahmita and Siregar (2012) suggest that companies in the real estate industry are less likely to choose the fair value method, in other words, those companies use cost model instead. In this research, companies are distinguished into two groups based on their scope of business. One group consists of companies in the real estate businesses, which are given the value of 1. Another group which consists of companies which does not operate in the real estate business, thus given the value of 0.

3.3 Qualitative Research

In collaboration with the quantitative research, the qualitative research adds information that describes the actual reason made by companies with regards to the accounting policy used for investment property. Qualitative research utilize interview to obtain the qualitative data. Interview in this research will provide answers to the research question in a qualitative form. The interview is conducted by conducting oral discussion with interviewee.

The interview provides insights to what actually affects companies 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 company's name) :

Table 2: Information Regarding Respondents

No	Name	Company	Position in the Real Estate Company	Place	Interview Date	Interview Duration
1	Mr. Toni	X-Ray Co.	Member of Board of Directors	JW Marriott Hotel, Kuningan District, South Jakarta	5/26/2016	14:34
2	Mr. Fritz	Yankee Co.	Member of Audit Committee	The Goods Café, Pacific Place, South Jakarta	6/23/2016	15:35
3	Mr. Sam	Zulu Co.	Member of Board of Directors	QQ Kopitiam, Plaza Indonesia, Central Jakarta	8/4/2016	8:01

4. Result and Discussions

4.1 Quantitative research

4.1.1 Descriptive Statistics

Descriptive statistics aims to explain the data used in the research, including the minimum value,

maximum value, mean, and standard deviation of each variable in the quantitative research. Table 2 below exhibits the descriptive statistics of each variable

Table 3: Descriptive Statistics

	Cost Model					Fair Value Model				
	N	Minimum	Maximum	Mean	Std. Dev.	N	Minimum	Maximum	Mean	Std. Dev.
LEV	82	.0394	.8375	.4259	.1897	13	.1990	.8557	.5123	.2401
LNTA	82	25.54	31.62	28.73	1.5130	13	26.45	31.73	29.07	1.6223
OWN	82	.1997	.9885	.6465	.1996	13	.4100	.8811	.7028	.1485
BUSS	82	0	1	.55	.501	13	0	1	.0800	.2770

5.1.2 Regression Result

Table 4: Logit Regression Result

Variable	Coefficient	Std. Error	z-Statistic	Prob.
LEV	-0.849013	0.892162	-0.951636	0.3413
LNTA	-0.184695	0.125096	-1.476423	0.1398
OWN	-1.727617	1.208439	-1.429627	0.1528
BUSS	1.462191	0.486341	3.006514	0.0026
C	7.526199	3.893997	1.932770	0.0533
McFadden R-squared	0.221487			
LR statistic	16.79886			
Prob(LR statistic)	0.002115			
Obs with Dep=0	13	Total obs	95	
Obs with Dep=1	82			

5.1.2.1 Simultaneous test (Likelihood Ratio Test)

We can observe from Table 3 above that the p-value of LR-stat is 0.0021, which is significantly lower compared to α (0.05). Based on the rule of thumb, we reject the null hypothesis (H_0), or, in other words, the independent variables in the model (i.e. LEV, LNTA, OWN, BUSS) significantly affect the dependent variable (i.e. P_HC) simultaneously.

5.1.2.2 Partial significance test

Based on Table 3 above, we can conclude that P_HC will have the value of 7.5262 assuming the absence of effects coming from independent variables mentioned above.

Table 3 further illustrate that the p-value of LEV is 0.3413, which is significantly higher than α , which is 0.05. Thus, at a significance level of 95%, the null hypothesis (H_0) is accepted. This evidence shows that leverage does not significantly affect

the increase in probability for companies to report investment property under the cost model.

The p-value for the second independent variable, LNTA, is 0.1398. The p-value of LNTA is significantly higher than α . Thus, the null hypothesis (H_0) is accepted. This means that company size does not significantly affect the increase the probability for companies to report investment property under the cost model.

The p-value for the third independent variable, OWN, is 0.1528, which is significantly higher than α . Thus, the null hypothesis (H_0) is accepted. This means that institutional ownership does not significantly affect the increase the probability for companies to report investment property under the cost model.

The p-value for the control variable, BUSS, is 0.0026. The p-value of BUSS is significantly lower than α . This means that scope of business significantly affects the increase of probability for companies to report investment property under the cost model.

4.2 Result from the Interviews

4.2.1 Companies prefer the cost model over the fair value model for investment property due to tax consideration All respondents mentioned the tax potential unfavorable consequences is the main reason to avoid fair value model. The tax rules does not have a specific rules for investment property, thus all land and buildings are treated as property, plant and equipment (PPE). The tax rules requires the 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, a member of X-Ray Co.'s Board of Directors, 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 mode was only for accounting purpose and not for the taxation purpose, nevertheless the tax audit created stress and unnecessary burden to the company. Due to this dispute, Mr. Toni stated that X-Ray Co. is discouraged to use fair value model.

4.2.2 Companies avoid using the fair value model due to earnings volatility Mr. Sam pointed out that even if the tax regulation is favorable for the company to use the fair value model, he stated that Zulu Co. 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). To report 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.

4.2.3 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. Yankee 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, as met in the fair value model.

4.3 Discussion

The main focus of the authors were the use of fair value accounting, specifically on investment property. *PSAK No. 13 (2011) Properti Investasi*, which is adopted from International Accounting Standard 40 – Investment Property, stated that a company is allowed to report its investment property either under the cost or fair value valuation method.

The choice on whether to use one over the other is based on management's consideration (Ishak et al. 2012).

DBS (2014) and Colliers International (2014) stated that the value of real estate is significantly increasing in current time. Given the increasing value of real estate, a company could report larger net income if it chooses to report their investment property under the fair value model. On the other hand, the use of the cost model for assets will lead to undervaluation when inflation took place (Diana, 2009). This is true since the cost model does not reflect the current situation in the market, and is merely based on the past (Jaijairam, 2013). Further, the performance of a company cannot be correctly assessed, which is attributed to the overvaluation of profit (Diana, 2009).

Based on the literature review, the authors predicted that more companies in the real estate

business will be more preferable to report their investment property using the fair value model. However the data suggested otherwise. From the total of 46 real estate companies, 45 companies reported their investment property under the cost model. Moreover, there are 20 of the real estate companies uses certified appraiser to determine the fair value of investment property, in order to fulfill disclosure requirement under *PSAK 13* (although the fair value numbers are not used in the balance sheet). The fact intrigues the authors, as real estate companies are more likely to produce higher gains from revaluation compare to those excluded from the real estate business (Fields et al. 2001). The phenomena raised a question as to what are the motivating factors affecting the use of the cost model for investment property.

The authors considered to discover motivating factors affecting companies to choose the preferable accounting policy for investment property. As a continuation to the preliminary research, the authors designed a combined step to provide explanation to the phenomena. The first step is through a quantitative research. The quantitative research revealed four factors affecting companies in choosing the preferable use of the cost model for investment property, which are leverage, company size, institutional ownership, and scope of business. To broaden the horizon of this research, the authors incorporates qualitative step to obtain information first-hand. The qualitative research is conducted through discussions with three business practitioners, who at the time this research is conducted, operates in three Indonesian real estate companies. The discussion will provide insights to what actually affect the decision to use the cost model over the fair value method for investment property. Therefore, the results from quantitative research and qualitative research are combined to provide explanations in this discussion.

In the quantitative research, the authors used the logit regression to analyze the factors affecting the use of the cost model. Findings in the quantitative research proved that all of the independent variables are in the negative direction, which means that any increase occurring in any of the independent variable shall lead to decrease to the probability that the company will use the cost model to report investment property. Further, all of the independent variables are found to be not significant in affecting the increase in the probability for the use of the cost model for investment property. But the control variable, the scope of business, is found to be in a positive direction as well as significant, which means that companies in the real estate business prefer to use the cost model over the fair value.

The quantitative research revealed that leverage, company size, and institutional ownership do not significantly affect the probability to report investment property under the cost model. But scope of business is found to significantly affect the probability for companies to report under the cost model. This means that the use of cost model to report investment property prevails in the real estate business.

Through the qualitative research, the authors managed to find evidence supporting the finding in the quantitative research. Companies in the real estate industry are reluctant to use the fair value model, since it will require the companies to report any gains during the reporting period. This would impose additional tax burden coming from the tax authority, increasing the burden a company has to bear (Muller et al. 2008). This finding implies that the political cost in the context of this research is more related to the scope of business, which is whether the company operates in the real estate business or not, rather than to the company size.

The discussion with Mr. Sam provides an explanation that the cyclical nature of the real estate industry introduce volatility in financial reporting, should the company choose to report investment property under the fair value model. Given the alternative, companies will use 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).

5. Conclusion

The statistical results of the study finds that leverage and company size are not significant factors for the company's preference in choosing the cost model over 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 to the preference of cost model for the investment property. Real estate companies are significantly more likely to choose cost model compared to non-real estate companies which also have investment property. This finding echoed the study of Farahmita and Siregar (2012) which also finds real estate companies are more reluctant to apply fair value than non-real estate companies.

The interview to business practitioners provides arguments for such accounting choice decision. First, companies avoid reporting investment property under the fair value due to tax consideration. An example shows that a company experienced a dispute with the tax authority when it applied the fair value model. Thus under *PSAK 13*, companies will alternatively use the cost model to report investment property instead. 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 thirdly, ownership characteristic affects the use of cost model for investment property. Conservative owner, such in the 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 avoid using the fair value due to the negative consequences that follows. The use of fair value would lead to overstatement of the company's reported profit, increasing the dividend payout ratio which is unrealistic to the company's current cash profit. Further consequence is the potential conflict with shareholders following the underpayment of dividend.

References

1. Kargarfard M, Rouzbahani R, Rizvandi A, Dahghani M, Poursafa P. Hemodynamic physiological response to acute exposure to air pollution in young adults according to the fitness level. *ARYA Atherosclerosis*. 2009;5(3).
2. Aye Rizvandi sAZ, Mehdi Namazi zadeh. The relationship between emotional Intelligence And Entrepreneurial Rate among sport clubs Mangers in Esfahan City: from Islamic Azad University, Khorasgan Branch(Isfahan); 2012.
3. Aye R, editor The Relationship between Entrepreneurial and Five major personality traits Among sport management graduate students in Esfahan. *International Sport Science Student Conference 2013 (ISSSC 2013) -UNIVERSITY OF MALAYA -Kuala Lumpur- Malaysia*; 2013.
4. Aye Rizvandi EM, Mohammad Soltan Hosseini, Gholam Reza Sharifi, editor Relationship of Emotional Intelligence and the Level of Swim Skills in Women in Isfahan City. *International Sport Science Student Conference(2013) ISSSC 2013 -UNIVERSITY OF MALAYA -Kuala Lumpur- Malaysia*; 2013.
5. Nasser Bai AD. The relationship between coaching behaviors and athletes' burnout in Golestan province futsal super league players. *European Journal of Experimental Biology*. 2013;3(6):111-4.
6. Mohammad Sayadfar HPZ, Hamid Reza Ahmadi Bazdi, Aye Rizvandi. The relationship between emotional intelligence and mental health of Iranian football referees(in Persian). *Applied research in sports physiology*. 2015;6(1):107-17.
7. Rizvandi A, editor "Emotional Intelligence of Isfahan's Sport Club Managers Regarding Demographic Characteristics, Isfahan, Iran". *International Sport Science Student Conference 2015 (ISSSC 2015), at the University of Malaya, Kuala Lumpur, Malaysia*; 2015.
8. Rizvandi Aye Ma, Hossein aghaee Nia, editor Study of Knowledge Level of Soccer Players of Premier League in Sports Rights in Iran. *International Sport Science Student Conference 2015 (ISSSC 2015), at the University of Malaya, Kuala Lumpur, Malaysia*; 2015.
9. Eskandarnejad M, Mobayen F, Dana A. The effect of basketball training on ADHD children's learning skills. *Research Journal of Sport Sciences*. 2015;3(6):163-7.
10. Aye Rizvandi FT, Mohammad Reza Esmaeeli. The Structure Model Test Of Sport ClubManager's Performance based on Entrepreneurial Marketing": Islamic Azad University, Tehran Central Branch; 2016.
11. Mohammad Reza Niknezhad SGGZZ, Amir Dana. Sociologic Explanation of Sport Participation and National Confidence. *The Social Sciences*. 2016;11(9):2123-8.
12. Rizvandi Aye TF, Esmaili Mohammad Reza. Testing a conceptual model of entrepreneurial marketing club managers of Tehran. *Quarterly Journal of Sport Development and Management (Persian)*. 2017;7(3):15-31.
13. Dana A, Hamzeh Sabzi A, Gozalzadeh A. The Structural Relationships of Coaching Efficacy, Players' Self-Efficacy, and Collective Efficacy in Female Professional Basketball Teams. *Journal of Sport Psychology Studies*. 2017;18(5):111-28.
14. Roghani, A., Nyarko, S., & Sparks, C. (2021). The first family formation among young Americans: the role of family process. *SN Social Sciences*, 1(2). doi: 10.1007/s43545-020-00045-x
15. Roghani, A., & Panahi, S. (2021). Does Telemedicine Reduce health disparities? Longitudinal Evidence during the COVID-19 Pandemic in the US. *Medrxiv*. doi: 10.1101/2021.03.01.21252330
16. Roghani, A., & Panahi, S. (2021). The global distribution of COVID-19 vaccine: The role of macro-socioeconomics measures. *Medrxiv*. doi: 10.1101/2021.02.09.21251436
17. Roghani, A. (2021). The Influence of Covid-19 Vaccine on Daily Cases, Hospitalization, and Death Rate in Tennessee: A Case Study in the United States. *Medrxiv*. doi: 10.1101/2021.03.16.21253767
18. Ali Roghani, "The Role of Family Process on Academic Educational Achievements in the United States: Evidence from a longitudinal study" *International Journal of Research and Innovation in Social Science (IJRISS) volume-5-issue-2, pp.502-506 February 2021 DOI: https://dx.doi.org/10.47772/IJRISS.2021.5.227*
19. Ali Roghani, Samin Panahi, Higher COVID-19 Vaccination Rates among Unemployed in the United States: State Level Study in the First 100 days of Vaccine Initiation, *medRxiv, 2021*
20. Ali Roghani, ATTITUDE OF FACULTY MEMBERS TO MIGRATION OUT OF COUNTRY: A CASE STUDY OF ISFAHAN UNIVERSITIES, *Indian Journal of Fundamental and Applied Life Sciences*, 2014, Vol. 4, Issue 4
21. Aye Rizvandi MF, Erfan Arzhang. Investigating Effect of Students' and Coaches' emotional intelligence on academic achievement with mediation of sport success. *Apuntes Universitarios*. 2020;3(10):79-94.
22. Aye Rizvandi MSk. Investigating the impact of the media on international sporting events and the extent of tourist attraction at that event. *Journal of Humanities Insights*. 2020;4(2):45-51.
23. Aye Rizvandi MF, Mohammad Mehdi Pahlevani. Testing A Model of The Relationship between Emotional Intelligence - Emotional Labor With Job Burnout (Case Study: Physical Education Teachers of Kermanshah City, Iran). *International Journal of Applied Exercise Physiology*. 2020.
24. Rizvandi A, Afrozeh M S, M J. Examining the challenges of sport business in COVID-19 virus period and outlining solutions. sport management study (DOI): 1022089/SMR|202088723026 (Persian). 2020.
25. Rizvandi A, Farzadfar, Mona, Author) AM. Supply Chain Management for Sporting Goods Retailing. https://www.amazon.com/dp/0648495949?ref=myi_title_dp; 2020.
26. Rizvandi A, Farzadfar M, Arzhang E. Análisis del efecto de la inteligencia emocional de estudiantes y entrenadores en el rendimiento académico con mediación del éxito deportivo. *Apuntes Universitarios*. 2020;10(3):79-94.
27. Ghasemian MB, Zavabeti A, Abbasi R, Kumar P, Syed N, Yao Y, et al. Ultra-thin lead oxide piezoelectric layers for reduced environmental contamination using a liquid metal-based process. *Journal of Materials Chemistry A*. 2020.