



# The Relevance of Fair Value Concept Compared to Historical Costs in Indonesia

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# ABSTRACT

The aims of this study were to examine the usefulness of fair value concept compared to historical cost. The population of this study was financial statements of all companies which were listed on the Indonesia Stock Exchange in 2014 or earlier. The sample selection method was not probability sampling with purposive sampling technique. There was 734 observation of panel data for 367 financial statements in 2014 and 2015. We analyzed the data using multiple regression in panel data. Our results found the relevance of fair value was significantly higher than the historical cost of Economic Value Added (EVA) (p < 0.05). The relevance of fair value was also proven in stock return, while historical cost had a negative correlation with stock return. Another finding of this research was that the size of the public accountant firm had in significantly negative with to the accuracy of fair value disclosure. This finding provided a signal that public accountant who verifies fair value disclosure was not acting in their capacity. Base on this result, Indonesian Institute of Accountants should reconsider the strategic role of the appraiser for fair value disclosure like a public accountant in audit services. In addition, financial statement need verification from appraiser was needed for all Levels of fair value measurement (Level 1, 2 and 3). These had not been regulated in Indonesia Financial Statement Standard (PSAK 68), which appraiser verification is needed in fair value measurement in Level 2 and 3. The role of the appraiser in fair value measurement at Level 2 and 3, indicated that the role of appraiser had not become a priority for fair value disclosure. Evaluation of this standard could balance the roles of the appraiser and public accountant. Particularly, because currently, all companies which listed on the Indonesia Stock Exchange have an obligation to use independent professionals such as a public accountant to audit their financial statements.

Keywords: fair value, historical cost, public accountant firm, economic value added, stock return, Indonesia accounting standard.

# 1. Introduction

This study has three objectives: firstly to look forward to the fair value concept compared with historical cost in accounting measurement toward corporate performance particularly in go public corporate at Indonesia. The second objectives are looking forward that whether or not there is a significant effect on adoption of Indonesia's Accounting Standard (PSAK) 68 from International Financial Reporting Standard (IFRS) 13 about fair value measurement toward corporate performance. Finally, this study is looking forward the role of the independent profession (Public Accountant) who provide verification fair measurement of the corporate financial asset on corporate performance. The first objectives of this study are based on inconsistencies the previous study implementation of fair value concept compare with historical cost, and also the usefulness of fair value measurement. Business activities in the world recognize accounting as a tool for recording and reporting in historical cost concept, but there is a big revolution that accounting began to introduce on fair value concept. Indonesia started to adopt this in 2015. The pros and cons of the resulting study are not only happening in Indonesia, but also at business activities abroad. In line with this statement above, there is a statement that advantages and disadvantages of the fair value concept still required scientific study whether the concept is really useful in different measurement (Majercakova & Skoda, 2015).

Result study at United Kingdom (UK) in corporate which is oriented in property and real estate industry concluded that fair value measurement had more value relevance than historical value measurement (Danbolt & Rees, 2008). The other research in the United Kingdom showed that earnings report based on IFRS was higher than the UK Generally Accepted Accounting Principles (GAAP) (Ali, Akbar, & Ormrod, 2016). Fair value was proven more appropriate to recognize a liability and to limit the risk of loss due to a historical measurement data that does not recognize the real

value (Laux, 2016). Fair Value at Level 1 was proved relevant to investment decisions, compared to Level 2 and Level 3 (Siekkinen, 2016). Proof of fair value relevance can also demonstrate from a finding in banking industry that fair value was more superior than historical cost for detecting risk based on bank capital adequacy ratio (Liao, 2013). Fair value measurement was proved relevant also in Industrial Banking at Brazil (Francisco, Javier, Francisco, & Javier, 2015). On the other hand, scientific study of fair value concept concluded at least three conclusions; 1) there was possibility manipulation on implementation of fair value; 2) ambiguity of Accounting Standard in fair value application and 3) reliability of measurement in fair value is doubtful than historical cost measurement (Siam & Abdullatif, 2015). Similar conclusion with the result above was finding that fair value concept cannot provide useful information for evaluating stewardship (Palea, 2014). Fair measurement based on International Accounting Standard 41 had potentially misleading information in corporate agriculture sector (Beattrice, 2013).

Research in Indonesia also showed different conclusion on fair value implementation on financial statements. The historical cost will reduce the quality aspect of relevance, so that fair value concept is required in Accounting Standard in Indonesia to overcome the historical cost shortage (Sonbay, 2010). This result was supported that there was more profitable for companies to apply fair value for increasing value of their owned asset than historical cost (Maria, 2011). Recognition and measurement on inventory by fair value accounting concept had strong correlation with stock price (Hidayat, 2012; Laili, 2013). There were also several studies in Indonesia that cannot prove fair value measurement had a value relevance. One of the results of this study in property corporate which explains that measurement of fair value had no value relevance on stock prices (Juwono & Feliana, 2013). Another finding an object of biological asset indicated that there was a negative significant influence fair value measurement toward value relevance (corporates performance) (Petrus & Farahmita, 2013). Two findings above was supported by another finding that fair value measurement had no significant effect on profit volatility (Zahro, 2014).

Base on the suggestion from research above, this study measured a relevance of fair value compare with historical cost by another measurement. This measurement is economic value added which was adopted from (Kaunang, 2013). Economic Value Added (EVA) is performance indicator that is free from distortion of various options of accounting method (Hansen & Mowen, 2009, p. 118). EVA is the economic value-added that creates from corporate activities and strategic planning during a specified period. Study about measure reliability of fair value above use asset instrument as a proxy for fair value. Meanwhile, this study estimates fair value disclosure by earning base on both fair value and historical cost which is adopted from (Widiastuti, 2015). This research is carried out on an important momentum object, that there was a time on adoption of fair value measurement in Indonesia start from January first, 2015. This momentum had not been conducted during the

observation period of (Widiastuti, 2015). Thus, this observation is used in this study will include periods before and after PSAK 68 authorize on 1 January 2015.

The enforcement of PSAK 68 in January first, 2015 provides a signal that Indonesia accounting standard board is directed toward the full IFRS adoption. However, empirical evidence in Indonesia still had pros and cons on the usefulness of fair value concept compares with historical cost. Therefore, this study was formulated based on another measuring instrument with relevant consideration. The usefulness of fair value in this study is measured by economic value added, which has not been done in almost research above. Meanwhile, the second usefulness of fair value was measured by stock return. Most of the previous research above uses stock prices to measures the usefulness of fair value. In fact, the stock price has not been able to explain whether the current stock position in rising or declining. Stock return which is measured by calculating the difference of stock price before and after in a particular time can provide a better explanation of corporate performance as measured by fluctuations in the regular stock market. Based on the determination of accounting standard board in Indonesia who has set PSAK 68, this study develops hypothesis by leading toward the usefulness of fair value implementation in Indonesia business activities. The hypothesis in this study are:

- H1: Fair value has significant effect on stock return
- H2: Fair value has a greater effect than historical cost on stock return
- H3: Fair value has significant effect on Economic Value Added (EVA)
- H4: Fair value has a greater effect than historical cost on Economic Value Added (EVA)
- H5: Enforcement of "PSAK 68" has a significant effect on stock return.
- H6: Enforcement of "PSAK 68" has significant effect on Economic Value Added (EVA)

A review of the role of the independent profession on fair value usefulness was done in this research. This variable is important to explain in this research base on the role of the independent profession on the fair value which was described by (Dechow, Myers, & Shakespeare, 2010). Independent profession was required to measure fair value of the corporate asset. This profession like an appraiser is able to measure and provide information on the value of assets that are free from excess value or lack of value (Dechow et al., 2010). This statement above was in line with the explanation that Indonesia requires a readiness of accountant and appraiser for fair value implementation on business activities and accounting practice (Wahyuni, 2013)(Wahyuni, 2013). However, the importance role of appraiser has not been priority in the disclosure of financial reporting based on fair value measurement. This is based on the implementation of financial reporting that no statement to explain who had given the value of corporate asset in fair value measurement, appraiser or another.

Meanwhile, PSAK 68 explains that main priority of fair value measurement in Level 1 did not require professional

judgment. Furthermore, professional judgment was required in Level 2 and Level 3 optionally. Related to this explanation above, one of the technical advisory boards of Indonesian Institute of Accountant explains that valuation is a complicated science that requires special education, and accountant did not get it in accounting education curriculum (Wahyuni, 2013). In fact, Indonesia as developing country has a high market volatility, so it is hard to get a valuation in Level 1 (Wahyuni, 2013). There is a possibility that fair value asset disclosure at Level 1, actually needs to be done with Level 2 or Level 3 by the appraiser. However, there is no explanation that provides information about who is conducting valuation in Level 2 or Level 3 corporate asset.

This study is looking forward the evidence of Independent profession role on corporate performance. The independent profession in this study is public accountant and not appraiser. This is based on the corporate financial statement disclosure which there is no explanation about special profession who valuate of asset in all Level. Thus, it can be assumed that public accountant has an important role in valuating or verifying asset valuation which is presented in fair value measurement. Audited or unaudited financial statement have different bargaining to attract an attention of financial statement users (investor), including of audit quality provider. Qualification indicator can be measured by Public accountant firm's (KAP) size. Quality of audit is all possibility that can occur when auditor does their job and find violation or error, and make an audit report of financial statement (Dewi & Jati, 2014). Measurement quality of public accountant firm size can be done from big four or non-big four categories. Big four accountant firm has a higher performance that non-big four accountant audit firm (Choi, Kim, Kim, & Zang, 2010). A Large accounting firm in Indonesia usually has affiliation with international accounting firm and has a higher quality audit (Nindita & Siregar, 2013). This quality is measured from international recognition and routine special training (Nindita & Siregar, 2013). Therefore, hypothesis is developed as follows:

H7: Size of public accountant firm has significant effect on stock return

H8: Size of public accountant firm has significant effect on economic value added

# 2. Method

Population in this research is a financial statement of all go public corporate in Indonesia. There was 537 go public corporate which was listed on Indonesia Stock Exchange (IDX) in March 2017. Observation on 2014 and 2015 annual financial statement is the limitation of population on this research. This limitation base on purpose of this research to use data before and after a year implementation of fair value measurement in Indonesia. Sampling method in this study used nonprobability sampling method, in purposive sampling technique. The first criteria are go-public corporate annual financial statement which was published

on web of Indonesia Capital Exchange and presented in rupiah currency. The second criterion for selecting this simple is requirement count economic value added and stock return. One of this requirement is calculated economic value added needs not zero earning per share. The second one, stock return needs no zero stock price in the specific time. Therefore, population member in first criteria is going to remove because cannot qualify as a second criteria sample member.

Fair value and historical concept were measured by earning which was adopted from (Widiastuti, 2015). Usefulness indicator was measured by EVA adopted from (Kaunang, 2013). Public Accountant firms size was measured by qualification of audit firm which was used by (Hidayat, 2012). This measurement was also used by research previous (Damayanti & Susanto, 2015; Zahro, 2014). Identification of big four and non-big four public accountant firm based on data from center of Accountant and Appraiser Services (*Pusat Pembinaan Akuntan dan Jasa Penilai*-PPAJ) 2015. For achieving the purposes and answer hypothesis, this research uses multiple regression of panel data in formula (1) and (2) which was adopted from (Gujarati, 2003, pp. 202–296).

$$SR = \alpha_0 + \alpha_1 FV + \alpha_2 HC + \alpha_3 D68 + \alpha_4 SAF + e \tag{1}$$

$$EVA = \beta_0 + \beta_1 FV + \beta_2 HC + \beta_3 D68 + \beta_4 SAF + e$$
 (2)

where,

SR: Stock Return,

EVA: Economic Value Added,

FV: Fair value measurement on earning,

HC: Historical cost measurement on earning,

D68: Dummy variable as a measurement of PSAK 68 determination in about,

*SAF*: Dummy variable as measurement of public accountant firm's size.

### 3. Results

The member of the population of this research is 501 financial statements of go-public corporate. This amount is different with previous information that there were 536 corporates listed in Indonesia Stock Exchange in March 2017. Reduction of this population member because of several corporate started listed in Indonesia Stock Exchange in 2016 or after. We got 367 financial statement which becomes to sample members on 2014 and 2015 (734 observation). Statistic descriptive summaries can show at Table 1 and Table 2. Historical cost measurement is higher than fair value measurement both on 2014 and 2015. However, a changing in earning rate of historical cost is higher than fair value, from 2014 to 2015. This data provides information that there is a possibility of fair value measurement more able to withstand the impact of corporate performance decline than historical cost.

Table 1. Statistic Descriptive summaries in 2014 (367 corporate financial)
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Information	FV	НС	EVA	SR	SAF
Total	258,674,624	307,569,094	89,917,293	31,082	130
Mean	704,835	1,671,571	245,006	84,69	-
Maximal	24,481	41,708,126	7.804.667	8,000	1
Minimal	-2,426,549	-2,813,408	-1,316,966	-3,875	0

Source: sample tabulation data from www.idx.co.id

Table 2. Statistic Descriptive summaries in 2015 (367 corporate financial statement)

Information	FV	НС	EVA	SR	SAF
Total	256,990,503	267,294,856	18,616,659	19,347	135
Mean	700,246	728,323	50,726	52.72	-
Maximal	24,872,130	46,789,435	6,288,240	5,925	1
Minimal	-1,749,381	-11,693,415	-14,783,263	-4,000	0

Source: sample tabulation data from www.idx.co.id

All of hypothesis test use random effect panel multiple regression. Summary of multiple regression tests to analyze fair value as measured by stock return is shown in Table 3, while Table 4 shows result of economic value added. Table 3 shows that fair value (FV) had significant effect on stock return (P-Value 0,021), and historical cost (HC) had no significant effect on stock return (P-Value 0.794). Variable determination of PSAK 68 and size of public accounting firm have no significant effect on stock return (0.545 and 0.607). The equation of this multiple regression results is shown in formula (1). Table 4 shows that fair value (FV) had significant effect on economic value added (P- Value 0.000), as well as historical cost (P-Value 0.001) and determination of PSAK 68 (P-Value 0,001). However, variable size of public accountant firm had no significant effect on economic value added (P-Value 974).

$$SR = 34.4692 + 0.0000585FV - 0.0000474HC - 32.72505D68 + 36.53453SAF$$
 (3)

$$EVA = 77134.53 + 0.1642096FV + 0.0612533HC - 86834.9D68 + 2249.652SAF$$
 (4)

Table 3. Summary of multiple regression formula 3

Independent	Coefficient	P – Value
Variable		
FV	0.0000585	0.021
HC	-0.0000474	0.794
D68	-32.72505	0.545
SAF	36.53453	0.607
Constanta	34.4692	0.485

Source: Data analysis from www.idx.co.id

Table 4. Summary of multiple regression formula 4

Independent Variable	Coefficient	P – Value
FV	0.1642096	0.000
HC	0.0612533	0.001
D68	-186834.9	0.001
SAF	2249.652	0.974
Constanta	77134.53	0.118

Source: Data analysis from www.idx.co.id

Based on summary of statistical analysis above, this research proved hypothesis 1 and 3 that fair value had significant effect on stock return and economic value added. Historical cost measurement had significant effect on economic value added but not on stock return. Coefficient regression of fair value was higher than historical cost on stock return and economic value added. This result shows that this research provides evidence in hypothesis 2 and 4. In another hand, determination of PSAK 68 as a standard about fair value measurement had a significant effect on economic value added but not on stock return. This result shows that this research proved hypothesis 6 but not in hypothesis 5. Hypothesis 7 and 8 was also cannot be proven by the result that size of public accountant firm had no significant effect on stock return even economic value added.

# 4. Discussion

This study indicated that measurement based on the fair value in Indonesia had higher utilization than historical cost. These results supported previous study which proved that fair value has superior effect than historical cost (Ali et al., 2016; Danbolt & Rees, 2008; Francisco et al., 2015; Hidayat, 2012; Laili, 2013; Laux, 2016; Liao, 2013; Maria, 2011; Siekkinen, 2016; Sonbay, 2010). Negative relationship of historical cost toward stock return gives a

signal that this measurement did not give a changing sentiment on stock market activities. Stock market activities are more responsive to the financial report that was presented at fair value rather than historical cost. Meanwhile, usefulness measurement by economic value added on fair value implementation which is compared with historical cost, had positive significant effect on both. This result gives a signal that historical cost and fair value have significant benefit on corporate calculation of economic value added, although fair value had more usefulness than historical cost. The option which was given by Indonesian accounting standards board that corporate can chooses the recording accounting method may be justified based on the results of this study. However, it should be noted that this choice can make accounting distortion issues and become to material for income smoothing actions. Particular attention should be paid to the rate of declining of earnings in historical cost is greater than earning in fair value. These data provide a signal that fair value measurement can give resilience on the financial performance even though the declining of corporate financial performance is happening.

The next discussion of this study is related to PSAK 68 determination as fair value measurement standard in Indonesia and how the role of public accountant on stock return and economic value added. The significant effect of PSAK 68 determination on economic value added gives an understanding that corporates give a significant response to this new regulation. However, attention is required on negative relationship this new standard setting to economic value added and stock returns. It is possible that technical valuations in asset measurement of fair value cannot implement entirely, including not all corporates have competent appraiser who has certification even go public corporate. In addition, demand of valuation services for financial statements still in small percentage than a demand valuation services for collateral, trading, and insurance. Negative relationship on this finding is not in line with the conclusions of previous research that it is more profitable for companies to apply fair value compared to historical cost (Maria, 2011). Therefore, there is a possibility that corporate and also public accountant have less readiness to measure fair value as described by (Wahyuni, 2013). Valuation is complicated science and requires special education which accountant did not get on their regular education (Wahyuni, 2013). This possibility is reinforced by the inability to prove that size of the public accountant had no significant effect on economic value added and stock returns. Meanwhile, the stock market sentiment is not paying attention to the existence of the new rule of accounting measurement.

# 5. Conclusion

This study found that fair value measurement which was compared to historical cost had significant positive effect on Economic Value Added (EVA). Fair value effect is higher than the historical cost on EVA. On the other hand, the concept of fair value is found significant positive effect on stock returns and gives sentiment fluctuation on stock market. Base on result that historical cost had negative

correlation with stock market activity, there is a possibility that market did not pay attention to net income in determining on investment before and after determination standard of fair value measurement. Significant effect determination of PSAK 68 on economic value added shows evidence that corporates had significant attention on that accounting standard. However, the negative relationship in this result gives a signal that it required more preparedness particularly for corporate implementation of fair value by preparing resources that have certification in appraisers or using the services of public appraisers. This suggestion is strengthened by the findings of this study that size of public accounting firms which not on valuation specifically and legally, has no effect toward economic value at transition period of fair value measurement standard implementation.

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