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The Value Relevance of Fair Value on Non-Financial Asset

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ABSTRACT

Accounting information is presented in financial statements as one of the information that investors need to make the best judgment. The reaction of investors to the release of accounting information indicates the degree of value relevance of accounting information. This study aimed to examine the value relevance of accounting information through earnings, book value of equity, and fair value on non-financial assets. This study used 21 LQ45 Index companies listed on the Indonesia Stock Exchange (IDX) from 2018-2021. Multiple linear regression was used as an analytical tool to test the relationship between research variables. The results showed that earnings and book value of equity had positive effect on stock price and thus had value relevance. The fair value on non-financial assets was found to have a negative effect on stock price and thus had no value relevance. This study provides empirical evidence that earnings and book value of equity are useful information for investors in decision making.

Keywords: Book Value of Equity; Earnings; Fair Value; Non-financial Assets; Value Relevance

INTRODUCTION

Investors need a variety of information available in the capital markets to make an investment decision. One crucial piece of information that investors need to make judgments is accounting information (Ball and Brown, 1968). Any information that is useful to investors has value relevance. Barth *et al*. (2001) stated value relevance is a gauge of how informative accounting information is and how investors respond to its release.

An important factor regarding value relevance is the adoption of the IFRS standard as of 2012 in Indonesia. The common law tradition and institutional setting are where IFRS is oriented (Barth et al., 2008). Therefore, the benefits of IFRS in code-law traditions countries are important to be studied. Countries with a code law typically have a financial structure that is more stakeholder-oriented (Karampinis and Hevas, 2011). In contrast, common law countries typically have shareholder-oriented financial structures. Indonesia is included in the cluster of code law countries which means differently from IFRS orientation. The study of Karampinis and Hevas (2011) found that the existence of discrepancies between institutional environments can cause the improvement in the quality of accounting information to be insignificant after the adoption is implemented. This becomes an important concern because the compilers of Indonesian standards strive to continue to improve the usefulness of accounting information for information users in decision-making. Research on the relevance of the value of accounting information needs to be carried out to be able to assess the benefits of IFRS adoption in Indonesia.

The value relevance was analyzed based on the Ohlson Model where earnings and book value of equity are two of the main elements of accounting information that are often used by investors in assessing firm performance. The Ohlson model became the basis for developing the model in this study by adding new accounting information, namely fair value information on non-financial assets. Barth *et al*. (1995) found that fair value is considered to reflect economic value better than the historical value that has been used in assessing assets. Fair value can provide an overview of the actual market value of assets so as to present more relevant information (IAI, 2014).

Previous studies on fair value focused more on financial assets. Fair value studies on non-financial assets are still limited. Non-financial assets are assets that derive value from their physical properties. The classification of property as a non-financial asset is important for business because these goods appear on the balance sheet of the enterprise and determine many factors, one of which is the market value of the enterprise. Disclosure of the fair value of non-financial assets by companies in Indonesia is regulated in PSAK 68 concerning Fair Value Measurement. Some of the non-financial assets that are the focus of this study are buildings, property, equipment, and investment properties. The adoption of IFRS for fair value through PSAK 68 encourages research on the usefulness of this information. It is worth testing whether fair value information can influence investors in making their best decisions.

LITERATURE REVIEW

Signaling theory describes the actions of company management that give investors guidance on how management perceives the company's prospects. This theory provides an explanation of the reasons why the company has the impetus to provide information related to the company's financial statements to external parties. The encouragement to provide information related to financial statements for external parties is based on the existence of information asymmetry between company management and external parties (Bergh *et al*., 2014).

FASB Concept Statement No. 2 stated accounting information on financial statements has informative value if they cause market reactions and are able to change the confidence of investors. Value relevance measures how informative accounting information that reflected through stock prices (Gu *et al*., 2002). Ohlson (1995) explained that value relevance is measured based on the mutual relationship between accounting information, namely the rate of return of shares and market value.

Based on the clean surplus theory, the stock market price can be shown on the income statement and balance sheet. The market value of a company can be reflected in the expected earnings of aggregation and the book value equity of the company in the future. Investors use a future value calculation approach to calculate the present value. Ohlson (1995) states that information regarding future profits can be the basis for investors to assess the present value of the company. The Ohlson model, therefore, makes earnings and book value equity to determine the degree of value relevance of accounting information.

Stock price movements may indicate the relevance of the value of accounting information. Research on the relationship between stock price movements and earnings information has been carried out. Beaver *et al.* (1979) and Watts and Zimmerman (1986) found that the announcement of earnings affects the movement of stock price. The earnings announcement contains relevant and useful information on the valuation of securities. Sharif *et al.* (2015) found that stock prices are one of the reasons for investors to make their economic decisions based on earnings per share which is the strength of a company's earnings if calculated per share. The movement in stock prices caused by earnings announcements indicates that earnings are important information for investors' decision-making, so the first hypothesis in this study is that earnings have a positive effect on stock prices.

Based on the Ohlson model, the second element of accounting information is the book value of equity. The book value of equity is the value of shares according to the books of the company issuing shares outstanding. Book value per share shows the net assets per share owned by shareholders. This information can determine the share price because the position of the investor's wealth is reflected in the book value of the equity. The announcement of the book value of equity becomes the basis for investors to sell or buy shares, causing a movement in the stock price (Sharif *et al.*, 2015; Hayati, 2016; Heniwati, 2022). The ability of the book value of equity in influencing stock prices shows the relevance of its value, therefore the second hypothesis of this study is that the book value of equity has a positive effect on stock prices.

This research develops the Ohlson Model by adding fair value information as information that has value relevance so that it can affect changes in stock prices. According to PSAK 68 of Fair Value Measurement, fair value is the price that would be required to be paid or accepted in a typical transaction between market participants on the day of measurement to transfer a liability or sell an asset. In situations where there is enough data available to estimate fair value, entities utilize appropriate assessment approaches that optimize the use of pertinent observable inputs and minimize the use of non-observable inputs. Valuation methods can be widely used, namely market approach, cost proximity, and income proximity.

Tama-Sweet and Zhang (2015) examined the fair value and used financial assets and two comparative periods (2008–2009 and 2012–2013). Their findings showed that the disclosure of fair value provides investors with information that is helpful in making decisions. Wang *et al*. (2017) found that investors react more favorably to the fair value in the non-financial sector than in the financial sector. The results of this study are in line with the findings of Tetteroo (2016) that fair value information is beneficial for investor decision-making because it finds value relevance. The presentation of fair value information in the financial statements may affect the investor reflected through changes in the share price, so the third hypothesis of this study is that the fair value of non-financial assets has a positive effect on stock prices.

RESEARCH METHOD

This study used the population of all companies indexed by LQ45, excluding financial sector, on the Indonesia Stock Exchange which consistently issued financial statements from 2018-2021. Based on the *purposive sampling* method that has been carried out, 21 samples of companies that meet the criteria are obtained.

This study used three independent variables. The first independent variable is earnings (EPS). Based on the return model, the earnings used in this study are earnings per share (Sharif *et al*., 2015). The EPS formula is as follows:

$$Earning\ per\ share = \frac{Net\ income - Dividen}{Outstanding\ shares}$$

The second independent variable is the book value of equity (BVE) measured by the book value of equity per share (Sharif *et al*., 2015). The formula for calculating BVE is as follows:

$$Book\ value\ of\ equity\ = \frac{Total\ equity}{Outstanding\ shares}$$

The third independent variable is the fair value on non-financial assets (FVA). A dummy variable is used to calculate FVA; it has a value of 1 if the company *i* decides to calculate FVA for non-financial assets such as plants, property, equipment, or investment properties in year t, and a value of 0 otherwise (Yao, 2015).

The dependent variable in this study is the value relevance (VR). VR used a stock price proxy taken three months after the financial year ends because companies issue financial statements three months after the financial year (Adhani and Subroto, 2013).

Hypothesis testing in this study used multiple linear regression. Data were processed by SPSS 27.0. The following is the multiple linear regression equation used in this study:

$$\mathbf{VR} = \boldsymbol{\alpha} + \boldsymbol{\beta_1 EPS} + \boldsymbol{\beta_2 BVE} + \boldsymbol{\beta_3 FVA} + \boldsymbol{\varepsilon}$$

Note:
VR: value relevance
a: constanta
β_1 - β_3: regression coefficient
EPS: earnings
BVE: book value of equity
FVA: fair value on non-financial assets

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The earnings, book value of equity, and fair value on non-financial assets are all described by the coefficients β1, β2, and β3. Sequentially, hypothesis 1-3 states that earnings, book value of equity, and fair value on non-financial assets have a positive effect on the stock price. If, the *probability* < significant level of 5% then hypothesis is accepted, meaning that there is an effect of the three variables on the stock price and indicates the value relevance.

RESULTS

The classical assumption test has been fulfilled for this study so that it can be continued for hypothesis testing. Descriptive statistics show an overview of the sample data processed according to the research variables used. The data is processed using the *SPSS 27.0* application.

Tabel 1. Descriptive Statistics (*N*=84)

Construct	Min.	Max.	*M*	*SD*
VR	480	82,950	8,298.2262	11,999.39753
EPS	8	6,055	762.2262	1,205.33552
BVE	113	30,815	5,299.3214	6,787.73037
FVA	0	1	.3095	.46507

Table 1 shows the minimum, maximum, mean, and standard deviation values from variables in this study. The average VR value of the sample company during 2018-2021 was 8,298,2262 with a standard deviation of RN of 11,999,39753. The highest value of VR is 82,950 on Gudang Garam, Tbk. and the lowest value of VR is 480 on PT AKR Corporindo, Tbk.

The average EPS value of the sample company during 2018-2021 was 762.2262 with a standard deviation of NL of 1.205.33552. The highest value of EPS is 6.055 on Indo Tambangraya Megah, Tbk. and the lowest value of EPS is 8 on Aneka Tambang, Tbk.

The average BVE value of the sample company during 2018-2021 was 5,299.3214 with a standard deviation of BVE of 6,787,73037. The highest value of BVE is 30,815 on Gudang Garam, Tbk and the lowest value of BVE is 113 on Unilever Indonesia, Tbk.

Fair value (FVA) is measured using the ratio of non-financial assets accrued through fair value to total assets. The average FVA value of the sample company during 2018-2021 was 0.3095 and the standard deviation was 0.46507.

An *adjusted R-squared* value of 0.707 is displayed in Table 2. This indicates that 70.7% percent of the dependent variables are explained by the independent variables in this study, while the rest is explained by other variables not included in this study. Hypothesis testing is carried out by looking at the *output* of the t-test. If the *p-value is* less than 0.05 then the hypothesis is accepted. Here are the hypothesis testing results:

Tabel 2. Regression Results

Construct	Coefficient	t-Stat	*Sig.*
Constant	1,199.469	1.311	.193
EPS	.486	4.109	.000
BE	.508	4.327	.000
FVM	-.169	-2.035	.045

Note: Adjusted $R^2 = .707$

Based on Table 2, it can be concluded that the effect of EPS on VR showed *p-value* of 0.000 and a regression coefficient of 0.486. Such results show that EPS have a positive effect on stock prices and it can be concluded that hypothesis 1 is accepted. BVE had *p-value* of 0.000 and a regression coefficient of 0.508. The results show that the book value of equity has a positive effect on the stock price and it can be concluded that hypothesis 2 is accepted. FVA had *p-value* of 0.045 and a regression coefficient of -0.169. The results showed that fair value on non-financial assets negatively affected the stock price and hypothesis 3 was rejected.

DISCUSSION

The Value Relevance of Earnings

The test results show that earnings have an effect on the stock price. Earning announcements contain information relevant to investor decision-making. These findings are in line with Sharif et al. (2015), Hayati (2016), and Heniwati (2022) that one accounting factor that impacts stock prices is earnings. Based on the signal theory, the earnings announcement gives a signal for investors to have a positive reaction. If many investors are interested, then investors will buy company shares and cause stock price movements. Earnings have the highest coefficients among other variables. This demonstrates that earnings measured by earning per share earnings are the primary source of information for investors because it enables them to determine the rate of return on each share they own. This lends credence to the signaling theory of how investors responded to the company's information. Investors believe that companies with high earnings are likely to be lucrative, and the findings of this test show that this is actually the case. High earnings will raise the stock price.

The positive effect of earnings on stock prices shows that earnings have a value relevance which can affect investors' decision-making. These findings support the clean surplus theory that earnings are an important information element that can affect stock prices. Accounting earnings can be a reliable source for forecasting future profits and economic improvements of the company (Sharif *et al*., 2015). Investors can use this earning information to estimate the future value of the company (Ohlson, 1995). Earnings information has the relevance of value and corresponds to the Ohlson model of value relevance.

The Value Relevance of The Book Value of Equity

The test results show that the book value of equity has a positive effect on stock price. The book value of equity is still considered crucial information by investors. The net assets that shareholders own when they own one share are described by the book value of equity, which is determined using the book value of equity per share. As a result, if the book value of the company rises, so will the share price of the company.

The findings of this study are consistent with the clean surplus theory, according to which one of the fundamental factors in evaluating a company's worth is its book value of equity. Because of its power to affect stock prices, the book value of equity has value relevance. The findings of this study are in line with Shamki & Rahman (2012) that studied the capital markets of several developing nations. The study found that the book value of equity has a significant positive effect on stock prices. This concurs with studies by Adhani and Subroto (2013), Sharif et al. (2015), and Hayati (2016) that found value relevance in the book value of equity.

The Value Relevance of Fair Value on Non-Financial Assets
According to the third hypothesis, the stock price is adversely impacted by the fair value on non-financial assets. The third hypothesis was rejected. Investors are less interested in information about non-financial assets valued at fair value. These findings conflict with empirical research that was done to determine the applicability of fair value assessment values in the financial sector. The measurement of the fair value of financial assets has been found by Song (2014) and Tama-Sweet and Zhang (2015) to have value relevance.

Information on the fair value of non-financial assets negatively affects the stock price, meaning that there is a factor that makes investors withdraw so that it affects the stock price. According to Landsman (2007), the amount of measurement mistakes and the source of the estimate have an impact on how informative fair value measures are. Investors run the risk of receiving inaccurate information about how non-financial asset values are measured. Investors may not trust that the assets have been valued using suitable procedures and by subject-matter experts, hence the information supplied may not be accurate. Investor view information on the estimation of the fair value of non-financial assets as not relevant as a result.

CONCLUSION

A wide variety of information is needed for investors to make the best investment decisions. Financial statements present the accounting information needed by investors. The usefulness of accounting information is evaluated by its ability to influence investor decisions. When the company announces accounting information and there is a movement of stock prices, it can be assessed the value relevance. The purpose of this study is to evaluate the value relevance of earnings, book value of equity, and the fair value on non-financial assets.

Study of 21 LQ45 Index companies listed on the Indonesia Stock Exchange (IDX) from 2018-2021 showed that earnings and book value of equity has value relevance. This is in accordance with the Ohlson Model that profit information and the book value of equity are information expected by investors. Investors consider that both information is useful for their decision-making and thus can increase the share price. Meanwhile, the fair value on non-financial assets was found to be less relevant. Investors face risks over information regarding the fair value on non-financial assets. The information presented may not be appropriate because investors do not have confidence that the assets have been measured by appropriate methods and by experts who are experts in their fields.

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DECLARATION OF CONFLICTING INTERESTS

The authors declare that they have no affiliations with any organization or entity with any financial or non-financial interest in the subject matter or materials discussed in this manuscript.

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