

The Value Relevance of Earnings and Book Values: A Case from Financial Institutions in Indonesia

Sofyan Hadinata

*¹Department of Islamic Accounting, Faculty of Islamic Economics and Business,
UIN Sunan Kalijaga Yogyakarta*

Corresponding author: sofyan.hadinata@uin-suka.ac.id

Abstract

Purpose: This study aims to assess the field of the accounting value relevance of earnings and book value on stock prices of banks and financial institutions listed in the Indonesia Stock Exchange.

Methodology: Using a sample of available banks and financial institutions listed in the Indonesia Stock Exchange from 2014 to 2021, this paper accommodates the documented accounting information in an emerging market context by using stock price of four months after year-end as a dependent variable. This study used the panel data regression technique on 31 banks and 36 others financial institution during the study period.

Findings: This research find that earnings and book value are statistically significant associated with firm stock price. Also, using these variables together is positively related to the firm stock price. Comparatively between banks and financial institutions, these obtain evidence that earnings per share is statistically more value-relevant than book value.

Novelty: This research used the financial sector, both banking and other financial institutions, because both types of institutions are intermediary institutions that greatly influence a country's economy.

Keywords: Earnings, Banks, Stock Price, Financial Institutions, Value Relevance, Book Value.

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Introduction

The concept of relevance is related to the content of accounting information and its timeliness, both of which can have a major impact on decision making (Ahmadi & Bouri, 2018). Several researchers define value relevance as referring to the ability of components in financial reports to summarize information that significantly influences investors' decision-making processes as reflected in stock prices or stock returns (Francis & Schipper, 1999; Barth et al., 2001; Hung, 2001; Beisland, 2009; Ebaid, 2012).

The greater the relevance of the value of information in financial reports, the more information that can be used to make investment decisions, the closer the relationship between financial reports and stock prices or company returns (Francis & Schipper, 1999; Sami & Zhou, 2004; Pervan & Bartulovic, 2014). If statistically there is no significant relationship between accounting information and the value of the company's shares, it can be concluded that the accounting information is not relevant. This means that financial reports do not fulfill one of the fundamental objectives of financial reporting (Pervan & Bartulovic, 2014). Accounting numbers to be relevant if the numbers describe information that is relevant for investors in assessing the company as reflected in share prices (Ebaid, 2012). Mostafa (2016) states that examining the relationship between accounting information and company share prices can show that accounting information can provide new information about the timing, amount, and/or

risk of future cash flows. Additionally, Barth et al. (1998) suggests that the relevance of the relative value of earnings and book value reflects a function of the company's financial health.

Holthausen & Watts (2001) suggest that research that examines the relationship between stock prices or returns and accounting information (such as earnings, book value and dividends), specifically to assess the level of relationship, is referred to as value relevance literature. Value relevance research usually combines contextual accounting arguments in predicting the relationship between accounting variables and market value (Beaver, 2002). Value relevance research is one aspect of capital markets research, and is based on the premise that, if accounting information is useful, investors will adjust their behavior and the market will respond quickly through changes in share prices (Alfraih, 2017).

Outa et al. (2017) highlight the importance of value relevance research by explaining that the financial reports prepared by companies provide valuable information to investors and other decision makers to enable them to make informed decisions. Bhatia & Mulenga (2019) state that there are two main approaches to the value relevance of accounting information, namely the information and measurement approaches. In the information approach, accounting information will be considered relevant if stock prices react due to the release of accounting information. Meanwhile, the measurement approach measures the explicit relationship between the company's value from its market indicators and accounting information, usually measured using the explanatory power of regression analysis. Valuation models based on accounting information suggest that equity value is related to accounting earnings (e.g. Ball & Brown, 1968; Anandarajan & Hasan, 2010; Filip & Raffournier, 2010) and balance sheet measurements or both book value and earnings (e.g. El Shamy & Kayed, 2005; Ahmadi & Bouri, 2018; Kumari & Mishra, 2018; Almujaed & Alfraih, 2019; Bhatia & Mulenga, 2019; Chen et al., 2020).

Previous research has succeeded in proving the relevance of the value of accounting information in various countries. Papadatos & Makri (2013) examine the value relevance of earnings and cash flows in Greece. The results prove that earnings and cash flows based on IFRS have a positive effect on stock prices. Elshandidy (2014) found that accounting information was value relevant for Chinese companies during the 1999-2012 period. Kwon (2018) study compared the value relevance of accounting information between Korea, Japan and China during the 2006-2015 period. He found that in all three countries accounting information has value relevance. However, Japan has the highest level of value relevance compared to others. Research by Pervan and Bartulovic (2014) on the Belgrade Stock Exchange, Ljubljana Stock Exchange, Zagreb Stock Exchange, Sarajevo Stock Exchange, and Banja Luka Stock Exchange during the period 2005-2010, found evidence of value relevance in all respective capital markets. Likewise, Kargin (2013) found evidence of the value relevance of accounting information in Turkish companies in the period 1998-2011.

Chalmers et al. (2010) argue that although the value relevance of accounting information in developed country capital markets has been well documented since Ball & Brown (1968), there are practical problems with the role of accounting information in determining stock prices in developing capital markets. This condition provides opportunities for research on developing stock markets because the reliability of accounting information and enforcement of accounting standards is believed to be lower than in developed countries. Under this condition, it is believed that share prices do not reflect all of the company's accounting information (Almujaed & Alfraih, 2019).

In emerging markets and transition economies, the value relevance of accounting information is investigated by several researchers. For example, research in Czech by Hellström, 2006; in China by Chen et al., 2001; Haw et al., 2001; in Malaysia by Pirie & Smith, 2003; Pirie & Smith, 2008; Mirza et al., 2019; in Greece by Papadaki & Siougle, 2007, Dimitropoulos et al., 2010; in Egypt by Mostafa, 2016; in Qatar by Almujaed & Alfraih, 2019; in India by Bhatia & Mulenga, 2019; in Romania by Filip & Raffournier, 2010; in the Middle East and North Africa (MENA) Region by El-diftar & Elkalla, 2019; in Tunisia by Ahmadi & Bouri, 2018; in Ghana by Badu & Appiah (2018).

Research on the relevance of accounting information in the banking sector was conducted by Dimitropoulos et al. (2010), documenting the results that cash flows provide incremental value relevance in addition to earnings at 11 banks in Greece. Furthermore, Burke & Wieland (2017) prove that book value per share and bank operating cash flow are positively related to share prices. Furthermore, research on private and public banking in India by Bhatia & Mulenga (2019) found that BVPS and EPS individually and collectively have a positive relationship with stock prices.

Different from previous research, this research uses research objects in the form of companies that enter the financial sector in the form of banking and other financial institutions, because both types of institutions are intermediary institutions that greatly influence a country's economy. The contribution of this research is that first, this research tries to link aspects of accounting information with stock prices, specifically developing the Ohlson (1995) model for banking and other financial institutions in Indonesia. Second, researchers try to compare the results by analyzing the explanatory power of each independent variable separately for banking and other financial institutions.

This research aims to examine the relevance of the value of accounting information in the form of earnings (EPS) and book value (BVPS) in banking and other financial institutions listed on the Indonesian capital market during the 2015-2019 period, based on the Ohlson (1995) valuation model. The panel data regression model is used as statistical analysis with the Generalized Least Squares (GLS) approach. As for the analysis of testing the relevance of the value of earnings and book value to stock prices, this research uses univariate and multivariate regression.

Literature Review

Investors will pay attention to financial reporting to ensure the company's fundamental value (Alfrah, 2017). According to the International Accounting Standards Board (IASB) Framework, the purpose of financial reporting is to provide information about the performance and financial position of an entity that is useful for its users (IASB, 2014). Relevance is one of the four main qualitative requirements of useful financial reporting. Information to be relevant when it influences users' economic decisions by:

- help to evaluate past, present, or future events related to an entity; and
- confirm or correct past evaluations (IASB, 2014).

Due to its important role in the functioning of capital markets, the value relevance of financial reporting is a major concern for investors, regulators and other users of financial reports which is also a popular topic for accounting researchers (Beaver, 2002).

As the initial work of Ball & Brown (1968), the value relevance of accounting information has become a broad area of study for most accounting researchers, especially in developed country capital markets (Omokhudu & Ibadin, 2015). Several researchers document that book value and earnings have information content for equity valuation (Ohlson, 1995; Feltham & Ohlson, 1995). Furthermore, Kothari (2001) obtained strong evidence regarding changes in stock prices that can be traced to changes in the value of a company when earnings change. However, research that has been carried out has obtained mixed results. Some researchers argue that the usefulness of accounting information has increased over time (Bepari, 2015; Filip & Raffournier, 2010; Landsman & Maydew, 2002; Collins et al., 1997), while others argue that the usefulness of accounting information has decreased (Kwon, 2009; Shamki & Rahman, 2013).

Bepari (2015) shows that book value and earnings are relevant values in the Australian market around the global financial crisis. The value relevance of earnings increases and the relevance of book value decreases during the global financial crisis compared to non-crisis periods. During the study period, the explanatory power of earnings is greater than that of book value. Filip & Raffournier (2010) examine the relevance of earning value in a transition economy, namely Romania. They document the existence of a relationship between accounting earnings and stock returns comparable to levels reported in more mature markets and that is higher for securities issued by small firms. They also find that the regression coefficient of changes in earnings is negative, due to the consequences of market inefficiency.

Kown (2018) analyzes the comparative value relevance of accounting information in developed stock markets such as Japan, Korea and developing stock markets such as China. The finding reveal that earnings is the most value-relevant variable in Korea, Japan, and China, followed by book value and operating cash flow. In addition, research by Pirie & Smith (2003) in Malaysia and El Shamy & Kayed (2005) in Kuwait documents that earnings and book value positively influence stock prices.

Previous research by Biddle et al. (1995) report that earnings is more value relevant than cash flow. Ahmadi & Bouri (2018) stated that the earnings variable has a positive relationship with the company's

share price. Bhatia & Mulenga (2019) used private and public banking research objects in India from 2002 to 2016 obtained that EPS and BVPS results individually and jointly had a positive and significant relationship to stock prices. They also find that the incremental information content of BVPS is greater than that of EPS in public sector banks. Meanwhile, in private sector banks, EPS provides greater explanatory power in the model than BVPS. From the previous explanation, it can be made:

H1. There is a positive relationship between earnings and share prices.

The decline in the value relevance of earnings is associated with earnings management practices (Marquardt & Wiedman, 2004). In fact, the problem of earnings management practices becomes a disturbing act (Feltham & Pae, 2000; Bartov et al., 2001). Research by Kown (2018) and Tahat & Alhadab (2017) succeeded in proving that book value and operating cash flow are more significant variables than earnings. Hung (2001) explains that in countries that have a low level of protection for shareholders, accruals can reduce the value relevance of earnings. Chandrapala (2013) finds evidence that book value is more relevant than earnings in Sri Lanka.

Pervan & Bartulovic (2014) analyzed the value relevance of accounting information based on a sample of European companies, showing that the model with book value as the independent variable has quite higher relevance than the model where earnings is the independent variable. In addition, Qu & Zhang (2015) analyzed changes in value relevance in Chinese companies. They show that the value relevance of earnings per share decreases slightly, but the value relevance of equity book value increases significantly. From the explanation above, it can be made:

H2. There is a positive relationship between book value and share price.

Bilgic & Ibis (2013) used Ohlson's (1995) model to test the value relevance of accounting information in the Turkish Stock Market covering the period 1997-2011. They found that the combination of book value and earnings is significantly relevant to firm value in explaining stock prices on the Turkish Stock Market. Book value and earnings individually have statistically significant relevant values, with book value providing greater explanatory power than earnings. Black & White (2003) compares the results of the value relevance of earnings and book value in Germany, Japan and the United States. They managed to prove that the relevance of the earnings and book value of German companies was more relevant, while the results were less strong for Japanese companies. The findings also show that the value relevance of earnings is higher than the value relevance of book value for a sample of American companies.

El Shamy & Kayed (2005) examined the relevance of earnings and book value based on the Kuwaiti accounting system which ensures full compliance with International Accounting Standards. They found that earnings and book value together and individually were positively and significantly related to stock prices. Kadri et al. (2009) analyzed the relevance of earnings and book value proves that the results of the market valuation approach from the sample pool show that book value and earnings are value relevant. Bepari (2015) conducted research in Australia and succeeded in showing that book value and earnings are relevant values. Furthermore, Almujaed & Alfraih (2019) provided empirical evidence that the book value of equity and accounting earnings, both individually and together, are significant in explaining stock prices in the emerging market of Qatar. From this explanation, it was created:

H3. There is a positive relationship between the combination of book value and earnings and share prices.

Most researchers still believe that in developed countries both earnings and book value contain value relevance, but the value relevance of earnings is relatively greater than book value. Kown (2018) examined the relevance of comparative value in developed stock markets such as Japan and Korea, as well as developing stock markets, namely China. The findings show that the variables most relevant to share value are accounting earnings, then book value and operating cash flow.

Brimble & Hodgson (2007) conducted research in Australia with a research period from 1973 to 2001 documenting that the value relevance of earnings has not decreased. Mostafa (2016) found that

individually, both earnings and book value significantly explained stock prices; However, earnings have additional explanatory power beyond book value for share prices whereas book value does not. These results indicate that in Egypt earnings and loss information is more important than balance sheets for valuation purposes. Badu & Appiah (2018) revealed that earnings and book value of equity show a positive and significant relationship with share prices. Furthermore, earnings explain a higher variation in the market value of shares on the Ghana Stock Exchange compared to the book value of equity. Further, research by Bhatia & Mulenga (2019) proved that EPS adds more to the overall explanatory power of the model than BVPS for private sector banks in India. From the previous explanation, it can be made:

H4. Earnings is more relevant than book value.

Methodology

This research used secondary data. Data regarding accounting information is obtained from annual reports via the websites of each company. The share price information was obtained from finance.yahoo.com. The purposive sampling method was used in sampling. The population of this research is financial institutions in the form of banking and other financial institutions listed on the Indonesian Stock Exchange. The sample obtained was 78 company consisting of 31 banks and 36 other financial institutions. The criteria used to determine the sample are:

Table 1 Sample Criteria

No.	Criteria	
1.	Banks and other financial institutions registered on the IDX	105
2.	Banks and other financial institutions registered on the IDX after 1 January 2014	(10)
3.	Incomplete or missing data regarding EPS, BVPS, total assets, and stock price	(28)
	Number of samples (company)	67
	Period (year)	8
	Total observation (company-year)	536

This research develops the Ohlson (1995) model where accounting information in the form of EPS (earnings per share) and BVPS (book value of equity per share) are independent variables and share price is the dependent variable. Kothari & Zimmerman (1995) and Liu & Thomas (2000) state that stock price is used as a dependent variable because it can describe the cumulative information content for the surprise component and expected earnings component and the price model does not experience the problem of specification bias. The share price data in this research is share prices four months after the end of the financial year. This is based on Peraturan Otoritas Jasa Keuangan Nomor 29/POJK.04/2016, according to which issuers or public companies are required to submit annual reports to the Financial Services Authority no later than the end of the fourth month after the financial year ends.

This study used panel data, because the data is superior to cross-sectional or time-series data with respect to the number of observations, and because of the lower possibility of multicollinearity between variables, reduced estimation bias (Gujarati & Porter, 2009). With a cross-section unit of 75 issuers and a research time period of 5 years, the number of observations is 375. The data analysis used is panel data regression using the generalized least squares (GLS) method to solve the problems of heteroscedasticity and autocorrelation (Musallam et al., 2019). There are four models used in this research. Models (1) - (3) to test the value relevance of accounting information without control variables. Meanwhile, model (4) is used for the same test, but by including control variables in the model. Models (1) - (4) are shown as follows.

$$P_{it} = \alpha + \beta_1 \text{EPS}_{it} + \varepsilon_{it} \dots\dots\dots (1)$$

$$P_{it} = \alpha + \beta_1 \text{BVPS}_{it} + \varepsilon_{it} \dots\dots\dots (2)$$

$$P_{it} = \alpha + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \varepsilon_{it} \dots\dots\dots (3)$$

$$P_{it} = \alpha + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \beta_3 \text{SIZE}_{it} + \varepsilon_{it} \dots\dots (4)$$

where:

P_{it} = Share price per share of company i , four months after the end of financial year t ;

EPS_{it} = Earnings per share of company i in year t ;

$BVPS_{it}$ = Book value of equity per share of company i in year t ;

$SIZE_{it}$ = Company size is measured by the log of total assets of company i in year t ; and

ε_{it} = *error term*.

Results and Discussion

Table 2 presents descriptive statistics of the research sample which contains a general description of the sample data in the form of average, median, maximum, minimum and standard deviation.

Table 2. Descriptive statistics

	STOCKPRICE	EPS	BVPS	LOG_TA
Mean	1249.491	101.1884	1035.871	12.93097
Median	446.5000	29.50000	497.0000	13.00000
Maximum	12250.00	2109.000	8887.000	15.00000
Minimum	2.192000	-562.0000	-714.0000	10.00000
Std. Dev.	1890.881	208.0258	1331.987	1.010640
Skewness	2.810750	4.284681	2.413884	0.127486
Kurtosis	12.20131	32.90233	10.13906	2.564707
Jarque-Bera Probability	2596.595 0.000000	21609.36 0.000000	1658.777 0.000000	5.683608 0.058320
Sum	669727.2	54237.00	555227.0	6931.000
Sum Sq. Dev.	1.91E+09	23151992	9.49E+08	546.4459
Observations	536	536	536	536

The correlation matrix between independent variables is shown in table 3. These results show that there is no high correlation between independent variables (above 0.90), so it can be said to be free from multicollinearity (Tabachnick & Fidell, 2019).

Table 3 Correlation Matrix

	EPS	BVPS	LOG_TA
EPS	1.000000		
BVPS	0.824848	1.000000	
LOG_TA	0.295657	0.402721	1.000000

The empirical results of the GLS panel method are summarized in table 4. Models 1 and 2 test the univariate regression results for the two accounting variables separately. The results of the analysis of the two models show that earnings per share and book value are statistically significantly related to stock prices. Additionally, the results of both models show that earnings per share (EPS) is more relevant than book value. This can be seen from the Adjusted R^2 value for each model, namely 1 and 2. For model 1, using a univariate approach, the results show that earnings is positively related to the price of company securities. This can be seen from the EPS coefficient of 2.155802 with a significance level of less than 1%. As for explanatory power (Adjusted R^2), a value of 6,08% was obtained and the Fisher statistic was 34,59. From these results, the results of this study are in line with previous research by Collins & Kothari (1989), Lev (1989), Easton & Harris (1991), Pirie & Smith (2003), El Shamy & Kayed (2005), Vijitha & Nimalathasan (2014), Bepari (2015), Ahmadi & Bouri (2018), Kown (2018), and Bhatia & Mulenga (2019). There is a positive influence of EPS on share prices, so it can be concluded that H1 from this research is supported.

Table 4 Regression Results

Variable	Model I	Model II	Model III	Model IV
C	1031.349***	675.8792***	663.9817***	-829.1462
EPS	2.155802***	-	1.350993***	1.360539***
BVPS	-	0.553748***	0.433263***	0.410694***
LOGTA	-	-	-	117.2024
N	536	536	536	536
R ²	0.060842	0.083687	0.104054	0.105549
Adjusted R ²	0.059083	0.081971	0.100692	0.100505
F-Statistic	34.59412	48.77040	30.95101	20.92607
p-value (F)	0.000000	0.000000	0.000000	0.000000

Note: * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Pervan & Bartulovic (2014), Outa et al., (2017), Ahmadi & Bouri (2018), Kwon (2018) and Bhatia & Mulenga (2019) document that book value has a positive influence on stock prices. The results of this study are in accordance with the predicted hypothesis and previous research with a t-statistics value of 0.553748 and a significance level of less than 1%, so it can be concluded that H2 of this study is supported. These results show that investors consider the net worth of each share, which can be used as a collateral indicator for the company's net asset claims.

This research examines the role of EPS and BVPS in determining the share price level of banks and other financial institutions in Indonesia. In model 3 it is shown that the coefficients for the EPS and BVPS variables are 1.350993 and 0.433263 with a significance level of less than 1%. From these results it can be said that together both EPS and BVPS have a positive effect on share prices. Likewise, the results in model 4 which include control variables also show the results and properties that EPS and BVPS also have an influence on stock prices. In models 3 and 4, the adjusted R² values obtained are 0.100692 and 0.100505. These results illustrate that the independent variables together explain around 10,07% and 10,05% of the total variation in the dependent variable. The overall model performance is satisfactory as indicated by the F-statistics (F= 30.95101 and p= 0.0000 for model 3 and F= 20.92607 and p= 0.0000 for model 4). As expected, these results provide evidence that supports H3 and are in line with previous research such as that conducted by El Shamy & Kayed (2005), Pervan & Bartulovic (2014), Bepari (2015), and Almujaed & Alfraih (2019) which documented the existence of a relationship between positive relationship between the combination of earnings and book value and stock prices. Overall, these results provide strong evidence that book value and EPS tend to evaluate stock prices.

From the comparison of model 1 with model 2, it shows that BVPS has a higher explanatory power than the EPS variable on stock prices. This can be seen from the Adjusted R² value of each model, namely model 1 is 0.059083, while model 2 is 0.081971. In despite of the results in model 3 and model 4, using multivariate analysis show that EPS has a coefficient value that is greater than other explanatory variables. From the results of this study it can be concluded that H4 is not supported. This result may be influenced by the Covid 19, so investors prefer used information on book value per share rather than earnings for decision making. The results of this study are in line with research Kown (2018), Tahat & Alhadab (2017), Chandrapala (2013), and Pervan & Bartulovic (2014). In addition, the results obtained show that the control variable in the form of the log of total assets has no influence on stock prices.

Table 5 shows the relevance of the combined value of earnings and book value by separating the total sample for banks and other financial institutions using a multivariate regression model. The findings of this research show that the coefficient of the independent variable is positive and statistically significant, so the results are consistent with previous research studies.

Table 5. Regression of Stock Prices, Earnings, Book Value with Separate Samples between Banks and Other Financial Institutions

Statistic	$P_{it} = \alpha + \beta_1 \text{EPS}_{it} + \beta_2 \text{BVPS}_{it} + \varepsilon_{it}$	
	Banks	Other Financial Institutions
α	603.3501 0.0062***	682.2877 0.0301***
β_1	2.481043 0.0006***	1.059250 0.0282***
β_2	0.433697 0.0002***	0.397510 0.0010**
R^2	0.164599	0.084709
Adjusted R^2	0.157780	0.078285
F-statistic	24.13624	13.18811
Prob(F-stat.)	0.000000	0.000003

Note: ***, **, and * statistically significant at 1%, 5%, and 10%

In accordance with the bank model, the EPS and BVPS coefficients are positively significant, respectively, at 1% levels. This result reflects that earnings show more relevance than book value. The coefficients of EPS and BVPS are around 2.481043 and 0.433697 with Adjusted R^2 around 0.157780. Meanwhile, in the financial institution model, the EPS and BVPS coefficients are positively significant, respectively, at the 1%. This result reflects that earnings show greater relevance than book value. The average coefficients of EPS and BVPS are around 1.059250 and 0.397510 with Adjusted R^2 around 0.078285. These results indicate that the combined assessment model of earnings and book value has significant value relevance, regardless of differences in value relevance for each independent entity. This has appeal to investors because book value of equity is a stock variable that represents a company's net worth to its owners in accounting terms at a point in time, while earnings summarize the accounting flows that contribute to changes in net worth over time. In addition, earnings incorporate operating cash flows from which dividends are ultimately paid (Pirie & Smith, 2003).

When observed by dividing the sample companies into groups of banks and other financial institutions, the results show that earnings have higher value relevance than book value in both models. These results illustrate that investors in banks and other financial institutions in Indonesia use earnings to correct their decisions. Investors believe that earnings provide relevant information related to their welfare, especially in dividends received.

Conclusions

Based on the analysis, it provides empirical evidence that earnings (EPS) and book value (BVPS) have a positive effect on the company's stock price. Accounting information, both earnings and book value, provides consistent evidence in the literature in general, that they have value relevance in the financial industry, both in banking and other financial institutions on the Indonesian Stock Exchange. Other findings from this research show that book value have a higher value relevance than earnings. This research has limitations in terms of determining the time for collecting share price data, due to limited information on the publication date of financial reports from each company and other sources. There is only information for the last two years on the publication date of each company's financial reports which is available via the idx.co.id page. Suggestions for further research, with information on the publication date of financial reports available, future researchers can follow the publication date so that the research results will be better. Moreover, it is interesting to examine the role of IFRS convergence on the relevance of accounting information in Indonesia and also other determinants of share prices, such as provisions for credit losses, cash flow, corporate governance mechanism, and intellectual capital. The implications of the results of this research are that accounting information in the

form of earnings per share (EPS) and book value per share (BVPS) is important for investors in making decisions, so that banks and other financial institutions must be able to maintain and even improve their operational performance, for example by suppressing the occurrence of credit losses, increasing business partners, and more. Regulators must of course supervise issuers for fraudulent financial reporting practices that could harm investors.

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