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The Effect of Investing in Modern Technology on Relationship Between Relevance of Financial Statement and Disclosure Quality on Firm Value

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Abstract
The purpose of this study is to examine the trend of value relevance of financial statements and to examine the effect of financial statement information and the quality of financial statement disclosure on firm value with modern technology investment as a moderator. The sample in this study were 76 manufacturing companies listed on the Indonesia Stock Exchange (IDX) for the period 2016-2019. The sample was tested using Multiple Regression analysis and moderated regression analysis. The results of this study indicate: first, there is an increasing trend in value relevance from 2016 to 2019, second, financial statement information and the quality of financial statement disclosure have a significant effect on firm value, third, modern technology investment strengthens the effect of financial statement information and the quality of financial statement disclosure. to company value. The results of the research empirically prove that the decline in the trend of value relevance of financial statements does not occur, especially manufacturing companies listed on the IDX for the 2016-2019 period.

1. Introduction

One of the company's goals is to increase company value by maximizing shareholder wealth, which is reflected in stock prices/returns. Firm value is the investor's perception of the company's success rate based on the signals given by the company. In theory, when the value of the company increases, the wealth for shareholders will also increase, and vice versa. Therefore, before making investment decisions, investors need to analyze the signals or information provided by the company. One of the information that needs to be analyzed in assessing the company is financial statement information (FSI). In the capital market, FSI must be a basis for investors in making their economic decisions. This is in line with the statement from the Financial Accounting Standard Board (FASB) which states that FSI must contain information that is of value to its users. In order for the FSI to have benefits for investors in terms of decision making, the FSI must be relevant and reliable.

Value relevance is the explanatory power of accounting information on market value (Beaver, 1968). In the accounting literature, FSI can be said to have value relevance if it can influence its users in terms of decision making that affect stock prices/returns (Amir et al, 1993; Beaver, 1998; Francis & Schipper, 1999; Barth et al, 2001). Value relevance research is intended to measure whether investors actually use FSI in fixing a stock price in the capital market. The main role in testing the value relevance of FSI is to show an increase or decrease in the use of accounting information by investors in determining firm value. Research on the value relevance of FSI continues to develop because in the 1990s there was a growing issue of decreasing the value relevance of FSI. The issue of decreasing the relevance of FSI due to a decrease in the quality of financial statement disclosures (QFSD) and developments in information technology are strong reasons for testing the value relevance of FSI. Lev and Gu (2016) reveal that FSI is increasingly less relevant, the use of FSI for investors is only around 5%. Investors prioritize political issues, market sentiment, and predictions of future trends, not on past information that is a reflection of FSI.

The incidence of financial scandals in several companies in various worlds such as Enron, Xerox, SK Group, Permalat Group, Royal Ahold, Kimia Farma, Bank Lippo, Indo Farma, Inovisi Infracom, Garuda Indonesia, Jiwasraya, etc., can explain that QFSD is decreasing, so that has an impact on investor confidence in accounting information which causes a decrease in the value relevance of FSI. The decline in the value relevance of FSI is also caused by the large number of alternative (non-accounting) information available and easy to obtain by investors in decision making (Francis & Schipper, 1999; Pinasti, 2004). This alternative information is very easy to obtain due to advancing technological developments from year to year. So that alternative information becomes the main source of information for investors for making decisions in determining company value.

Furthermore, in the capital market in Indonesia there are several manufacturing companies that do not show any change in company value, when these companies publish their FSI on the IDX. This shows that the relevance of FSI is decreasing. One example of a case occurred in a BRAM company which experienced an increase in the book value of equity by 5.42% from the previous year and a profit value of 42.40% from the previous year with changes in the value of stock returns at the time of FSI publication up to seven days after FSI publication of 0.00%. This shows that the accounting numbers do not have an impact on stock prices/returns, so it can be said that FSI in BRAM companies has no relevance for investors. The same thing also happened to companies ESTI, STTP, TRST, LION, SULI, CTBN, YPAS which had high book value of equity and earnings but had no impact on stock price/return.

Research on the relevance of FSI values has been carried out by many researchers, but they have different results. Results of value relevance studies such as Collins et al (1997); Francis & Schipper (1999); Brief & Zarowin (2000); Chuanzhou (2005); Surwadi (2005); Fung et al (2010); Puspitaningtyas (2012); Kargin (2013); Olugbenga & Atanda (2014); Wulandari & Adiwati (2015) revealed that the value relevance of FSI on stocks did not decrease and even tended to increase from time to time. But the results of studies from Amir & Lev (1996); Brown et al (1999); Lo & Lys (2001); Core et al (2003); Sami & Zhou (2004); Pinasti (2004); Negash (2008); Almujamed & Alfraih (2019); Lako & Hartono (2019) reveal that the value relevance of FSI on stocks has decreased in the last few decades.

The purpose of this study was to examine trends in the relevance of FSI values from year to year. This is to prove empirically the issue of decreasing the value relevance of FSI that has developed in society. Testing the trend of the relevance of FSI value in this study uses the book value of equity contained in the balance sheet, and the profit value contained in the income statement as an indicator of FSI on firm value. According to Ohlson (1995); Collins et al (1997); Francis & Schipper (1999); Barth et al (1999); Beaver (2002) states that the numbers in the balance sheet and income statement can be used in testing the relevance of the FSI value to determine changes in stock prices/returns. Furthermore, Beaver (2002) states that the theory underlying value relevance research is a combination of valuation coupled with contextual accounting arguments.

In addition to testing the trend of the value relevance of FSI, this study also examines the effect of FSI and QFSD on firm value with investment in modern technology (IMT) as a moderator. The indicators of the QFSD are the timeliness of the publication of financial reports and disclosure of corporate social responsibility. According to Buzby (1975); Barrett (1976); Whittred (1980); Alford et al (1993) in determining the QFSD is by looking at the level of complete disclosure, extent and timeliness of ILK delivery. Lako (2008) states that the timeliness of FSI publications is very important in measuring the quality of disclosures. Leuz & Verrecchia (1999); Grinning (2011) states that high quality disclosure can reduce information asymmetry, thereby increasing market liquidity which has a positive impact on the level of stock trading volume.

It can be concluded that the main objective in this study is to examine the trend of relevance of FSI values from 2016 to 2019, and also to examine the effect of FSI and QFSD on firm value with IMT as a moderator. This study is intended to provide empirical evidence regarding the issue of decreasing the relevance of FSI value in the era of information technology. Value relevance testing is an important thing to continue to do. So that companies, investors and accounting policy makers can find out whether the FSI still has benefits or is only a complement to administration in the capital market, especially in Indonesia.

2. Literature Review and Hypothesis Development

In the stock market, if the published FSI has value relevance, the stock market will react. This reaction occurred as a result of investors responding to the publication of these FSI. Value relevance is the explanatory power of accounting information on firm value (Beaver, 1968). In the literature, an accounting number can be said to have value relevance if the accounting numbers have a significant relationship with equity market value (Amir et al, 1993; Beaver, 1998; Francis & Schipper, 1999; Barth et al, 2001). According to Hung (2001) value relevance is the ability of accounting numbers to capture the information contained in stock prices. Barth et el

(2001) revealed that studies that test value relevance use various valuation modalities in compiling their tests and also use stock prices/returns as a measure of valuation. The study of value relevance aims to examine the dependent variable based on stock price/return with the independent variable based on fundamental accounting figures (Easton, 1999; Beaver, 2002). Value relevance studies have an important role as a basis for proving whether accounting numbers have a relationship with the predicted stock price/return (Barth et al, 2001). If the relation between stock price/return and accounting numbers (as measured by R^2) is greater than zero, then the accounting numbers have value relevance for the stock market.

According to Watts & Zimmerman (1986) accounting numbers contain information that affects stock prices/returns. Ohlson (1995) shows a value relevance perspective by analyzing the usefulness of accounting numbers to assess a company. Beaver (2002) states that the theory underlying the study of value relevance is a combination of valuation theory plus contextual accounting arguments. In testing the value relevance of FSI, Ohlson's valuation model is the most well-known model among researchers. The theoretical framework of Ohlson's model has a strong basis in testing the market based on accounting variables and other information that is considered relevant in predicting firm value. According to Lako (2008) the use of valuation theory and efficient market theory can explain the linear relationship between changes in stock prices/returns and changes in accounting numbers during the period of FSI publication events. The merger can also explain the effect of the timing of financial report publication and the rate of change in accounting numbers on the rate of change in share prices around the period of the financial report publication so that it can more accurately reflect the true value relevance of the FSI.

The model of Ohlson's (1995) valuation aims to formulate the relationship between accounting numbers and firm value as measured by stock prices or returns. Ohlson's valuation predicts that there is a linear relationship between stock price/return behavior and financial report numbers at a certain point in time (Ohlson, 1995). Ohlson's model assumes that stock prices can be written as a linear function of the earnings value and book value of equity, in this model, abnormal earnings are considered an attribute of investor value (Holthausen & Watts, 2001; Lako, 2008). In value relevance research, Ohlson's model is most widely used in research because it is considered to be able to take into account firm value that reflects future stock prices/returns using accounting and non-accounting data. Then this model can be developed with predictions and criteria in accordance with market conditions (Yuliarini, 2010). Meanwhile, the efficient market theory predicts that the price/return of shares traded in a capital market at any time fairly reflects all publicly known information relating to the prices of these securities, including information from accounting measures (Beaver, 1998). The use of efficient market theory in value relevance studies is also in line with the suggestion of Beaver (2002); Lako (2008).

In the capital market, companies that have good quality will deliberately provide signals or information to investors. By giving these signals, investors are expected to be able to differentiate between companies that give good news signals and companies that give bad news signals so that they can influence stock prices/returns at the time of the publication of information. According to Miller & Whiting (2005), signaling theory indicates that the company will try to provide a signal in the form of positive information to potential investors through disclosure in financial reports and stock returns. According to Leland & Pyle (1977), signaling theory is a company action that provides information to investors. According to Schweitzer (1989) the delivery of information that is not in full will lead to information asymmetry that can affect the market in responding to this information as a signal that is reflected in changes in stock prices/returns. Based on the signaling theory, it can be assumed that when there is a publication of FSI, investors will respond to the information based on their interpretation so that it can affect the price / return on the stock market.

2.1 Value Relevance of Financial Statement Information

One of the main objectives in FSI is to provide relevant information for investors in making investment decisions. According to Beaver (1998), FSI is said to have value relevance if accounting numbers can affect stock prices/returns. Barth et al (2001) stated that value relevance research has an important role as a basis in proving whether accounting numbers have a relationship with the market value of securities. This study aims to examine the trend of the relevance of FSI values in manufacturing companies listed on the Indonesia Stock Exchange for the period 2016-2019. There are several results from research in Indonesia that support the increasing relevance of FSI values. Like Syagata & Daljono (2014); Wulandari & Adiati (2015); Sukma & Yadnyana (2016); Romadhani & Purwanti (2017); Petra (2018); Yuniarso & Lako (2018). The results of their research revealed that the relevance of the FSI value had increased. So that this study formulates the following hypothesis:

H1 : *The value relevance of FSI has increased from 2016 to 2019.*

2.2 The Effect of Financial Statement Information on Firm Value

Ohlson (1995); Collins et al (1997); Francis & Schipper (1999); Barth et al (1999); Beaver (2002) states that in FSI there are two main components used by investors in determining the value of shares, namely profit and loss and balance sheet. Ball & Brown (1968); Beaver (1968) states that the value of profit and loss is the value of profit and the value of the balance sheet is the book value of equity. Both of these variables have an important role to play in helping investors in making decisions. So that in this study using the earnings value and book value of equity as indicators in testing the effect of FSI on firm value. There are several results from research in Indonesia that support FSI has an influence on firm value, such as Agusti & Rahman (2011); Kuswanto et al (2017); Pascayanti et al (2017). The results of their research reveal that FSI has an influence on changes in firm value. So that this study formulates the following hypothesis:

H2 : *FSI has a significant effect on firm value for the 2016-2019 period.*

2.3 Effect of Quality of Financial Statement Disclosure on Firm Value

Buzby (1975); Barrett (1976); Whittred (1980); Alfrod et al (1993) revealed that comprehensiveness, adequacy, timelines, and informativeness are concepts in QFSD that get the attention of investors in decision making. This is supported by Lako (2007) who stated that QFSD has a significant contingency effect that can increase the value relevance of FSI. So these results can explain that the QFSD has an influence on firm value. In testing whether the QFSD has an influence on firm value, this study uses disclosure of corporate social responsibility (DCSR) and timeliness of the publication of financial statement (TPFS) as indicators of QFSD. According to Epstein & Freedman, (1994); Frooman, (1997); Brammer et al, (2005) revealed that DCSR by companies can influence investors in making stock investment decisions. So that DCSR is considered to be able to contribute to influence investors in determining company value.

Meanwhile, Chambers & Penman (1984) stated that the delay in publishing the company's FSI is a bad signal, this indicates that the company is experiencing bad conditions. So this indicates that companies that publish FSI earlier can influence investors in making investment decisions. There are several research results in Indonesia that support the effect of QFSD on firm value. Like Wisadha (2008); Ayu (2013); Irma (2013). The results of their research indicate that the QFSD has an influence on firm value, meaning that investors make an assessment of the QFSD which causes reactions in the stock market. So that this study formulates the following hypothesis:

H3 : *QFSD has a significant effect on company value for the 2016-2019 period.*

2.4 Investment in Modern Technology Moderate the Influence of Financial Statement Information and the Quality of Financial Statement Disclosure on Firm Value

Santos et al (1993) revealed that the impact of IMT announcements made by companies can positively affect their firm value. Wiyani (2008) stated that IMT is a company competitive strategy that indicates competitive ability through changes in industrial structure. According to Kadir (2014), the role of IMT for companies can be the main facilitator for business activities, IMT also contributes greatly to fundamental changes in structure, operations and strategic management. So it can be concluded that companies that carry out IMT will be able to survive in global competition in the era of 4.0 and this is a positive signal for investors so that they can increase company value. There are several research results in Indonesia which reveal that IMT has a role in increasing the value and performance of companies, such as research conducted by Muharam & Widati (2006); Wiyani (2008). The results of their research indicate that there is an influence of IMT on the value and performance of the company. This indicates that IMT is information that can attract investors' attention in their decision making. So that this study formulates the following hypothesis:

H4 : *IMT can strengthen the influence of FSI on firm value for the 2016-2019 period.*

H5 : *IMT can strengthen the influence of the QFSD on company value for the 2016-2019 period.*

3. Method

3.1 Samples and Data

In determining the number of samples, this study used purposive sampling, in which samples were selected according to certain criteria to obtain a representative sample. Based on the criteria determined, this study collected 76 companies, so that there are 304 audited annual FSI that are ready to be observed. The research sample is presented in table 1 as follows.

Table 1 The number of samples and research observations

Year	Number of Samples	Business Sector		
		Basic & Chemical Industries	Various Industries	Consumer Goods Industry
2016	76	35	16	25
2017	76	35	16	25
2018	76	35	16	25
2019	76	35	16	25
Number of Observasitions	**304**	**140**	**64**	**100**

Source: Indonesia Stock Exchange, 2020 (www.idx.com)

This study uses secondary data obtained from www.idx.co.id and online-based information media. This study uses two types of data, namely, cross section and time series, so the type of data from this study is pooled data. The following data are used in this study, namely: data on manufacturing companies listed on the IDX and issuing FSI for 2016-2019; company audit annual FSI data for the period 2016-2019; annual report 2016-2019; publication date of FSI for the period 2016-2019; stock return data; and information regarding company IMT announcements.

3.2 Regression Model

In testing H1, H2, H3, H4 and H5, this study uses a multiple linear regression model with the ordinary least square (OLS) method. The OLS method is a method for estimating parameter values in the regression equation. In principle, the OLS method minimizes the number of squares of error on parameters partially. This study uses 3 models in regression analysis. In model I, this is to see an increasing or decreasing trend in the relevance of FSI from 2016-2019. Model II, to see the effect of FSI and QFSD on firm value. Model III, to see the contribution of IMT in moderating the influence of FSI and QFSD on firm value.

Model I

In testing H1, the value relevance of ILK has increased from 2016-2019, this study first investigates whether the ILK indicator has value relevance. In testing H1, this study used a short window event study approach with a period of three days before the publication of ILK (-3), at the time of publication of ILK (0), and three days after publication of ILK (3). So this research uses tiered linear regression with the following model:

$$RS\_t_{(-3)} = \alpha_1 + \alpha_2 BVE_{it} + \alpha_3 PV_{it} + \varepsilon_{it} \qquad (1)$$

$$RS\_t_{(0)} = \alpha_1 + \alpha_2 BVE_{it} + \alpha_3 PV_{it} + \varepsilon_{it} \qquad (2)$$

$$RS\_t_{(3)} = \alpha_1 + \alpha_2 NBEK_{it} + \alpha_3 NLK_{it} + \varepsilon_{it} \qquad (3)$$

Where:

RS_{it}	=	The return on stock securities i in the period ($t_{(-3)}$, $t_{(0)}$ and $t_{(3)}$)
α_1	=	Constant
α_2, and α_3	=	Estimated coefficients of BVE and PV
BVE_{it}	=	Book value of equity of company i in period t
PV_{it}	=	Profit value of company i in period t
ε_{it}	=	Residual value

To determine whether the indicators of FSI have relevance, the R^2 value is used as a parameter. Thus, if $R^2 > 0$, then FSI has value relevance, conversely, if $R^2 \leq 0$, then FSI has no value relevance. Furthermore, to test H1, the R^2 value from the test results of the equation above, is regressed with the time trend variable, with the following formula:

$$R^2 it = \alpha + \beta(time) + \varepsilon_t \quad (4)$$

Where:

$R^2 it$	= The R^2 value of an empirical model
β	= Coefficients
time	= 1, 2, 3, and 4 are related to the 2016-2019 study period

If the coefficient $\beta > 0$, then the relevance of the FSI value has increased so that this study accepts H1. Conversely, if $\beta < 0$, then the relevance of the FSI value has decreased so that this study rejects H1.

Model II

In testing H2, namely FSI has a significant effect on firm value for the 2016-2019 period, this study uses the following model:

$$RS_{it} = \alpha_1 + \alpha_2 BVE_{it} + \alpha_3 PV_{it} + \varepsilon_{it} \quad (5)$$

In determining whether the H2 test results are significant or insignificant, the p-value can be seen. If the p-value < 0.05, the FSI has a significant effect on firm value, so this study accepts H2. Conversely, if the p-value > 0.05, then FSI has no significant effect on firm value, so this study rejects H2. In testing H3, namely QFSD has a significant effect on firm value for the 2016-2019 period, this study uses the following model:

$$RS_{it} = \alpha_1 + \alpha_4 DTPFS_{it} + \alpha_5 DDCSR_{it} + \varepsilon_{it} \quad (6)$$

Where:
DTPFS = the dummy variable of the TPFS
DDCSR = the dummy variable of the DCSR

In determining whether the H3 test results are significant or insignificant, the p-value can be seen. If the p-value < 0.05, this study supports H3, on the other hand, if the p-value > 0.05, this study rejects H3.

Model III

In testing H4, namely IMT can strengthen the effect of FSI on firm value, this study divides the sample into two groups, namely companies that do IMT (D = 1) and companies that do not do IMT (D = 0). To test H4, this study uses the following model:

$$RS_{it} = \alpha_1 + \alpha_6 BVE_{it} * PV_{it} * DIMT_{it} + \varepsilon_{it} \quad (7)$$

Where:
DIMT = the dummy variable of the IMT

In determining whether the results of the H4 test can strengthen or weaken the influence of FSI on firm value, the p-value can be seen. If the p-value < 0.05, this study supports H4, on the contrary, if the p-value > 0.05, this study rejects H4. In testing H5, namely IMT can strengthen the effect of QFSD on firm value for the 2016-2019 period, this study uses the following model:

$$RS_{it} = \alpha_1 + \alpha_7 DTPFS_{it} * DDCSR_{it} * DIMT_{it} + \varepsilon_{it} \quad (8)$$

In determining whether the results of the H5 test can strengthen or weaken the effect of the QFSD on firm value, the p-value can be seen. If the p-value < 0.05, this study supports H5, on the contrary, if the p-value > 0.05, this study rejects H5.

4. Results and Discussion

4.2 Trends in Value Relevance in Model I

Before testing the H1 hypothesis, namely the relevance of the FSI value has increased from 2016-2019, this research first investigates whether FSI still has value relevance, then this study conducted three regression tests, namely the regression test for RS 3 days before the publication of the annual FSI ($t_{(-3)}$), regression test for RS at the time of publication of the annual FSI ($t_{(0)}$) and regression test at 3 days after publication of the annual FSI ($t_{(3)}$). The results of the multiple linear regression test are presented in the following table.

Table 2 Multiple linear regression test results for $t_{(-3)}$, $t_{(0)}$ and $t_{(3)}$

			$T_{(-3)}$			
Year	**N**	α_1	α_2	α_3	R^2	**Δ**
2016	76	0.0036	0.0014	0.0003	0.0481	0
2017	76	-0.0001	0.0014	0.0002	0.0046	-0.0435
2018	76	-0.0011	0.0199	0.0003	0.0306	0.026
2019	76	0.0019	-0.0341	-0.0007	0.0399	0.0093
Panel	304	0.0011	-0.0009	0.0003	0.0113	
			$T_{(0)}$			
2016	76	0.0029	0.0475	-0.0002	0.0937	0
2017	76	0.0014	0.0023	0.0099	0.0233	-0.0704
2018	76	0.0009	-0.0154	-0.0058	0.2297	0.2064

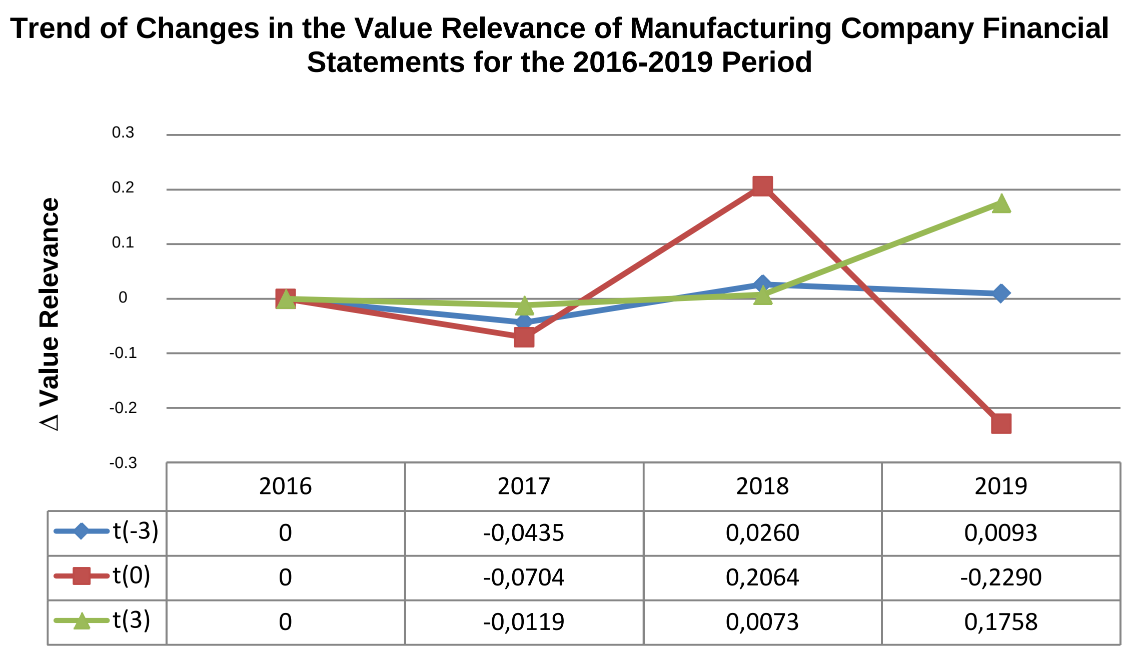
2019	76	0.0083	0.0060	-0.0016	0.0007	-0.229
Panel	304	0.0023	0.0101	-0.0005	0.0093	
			$T_{(3)}$			
2016	76	0.0021	0.0080	0.0000	0.0176	0
2017	76	0.0074	-0.0026	-0.0058	0.0057	-0.0119
2018	76	-0.0008	-0.0204	0.0001	0.0130	0.0073
2019	76	0.0044	0.0032	0.0182	0.1888	0.1758
Panel	304	0.0027	0.0021	-0.0000	0.0004	

Source: Secondary data processed, 2020

From the table above, it can be seen that three days before the publication of the annual FSI in the panel α_3 has a positive value while α_2 has a negative value. These results explain that PV has a positive effect on RS at the three days before the publication of annual FSI, while BVE has a negative effect on RS at the three days before the publication of annual FSI. At the time of publication of the annual FSI in the panel α_2 had a positive value while α_3 had a negative value. These results explain that BVE has a positive effect on RS at the day of publication of the annual FSI, while PV has a negative effect on RS at the day of publication of the annual FSI. At three days after the publication of FSI in the panel α_2 has a positive value while α_3 has a negative value. These results explain that BVE has a positive effect on RS after three days the publication of annual FSI, while PV has a negative effect on RS after three days the publication of annual FSI.

The results of the table above indicate that, three days before the publication of the annual FSI, BVE tended to have a negative effect on RS while PV tended to have a positive effect on RS. At the time of publication of the annual FSI and three days after the publication of the annual FSI, BVE tended to have a positive effect on RS while PV tended to have negative effects on RS. Furthermore, Δ of the three tables above describes the change in the relevance of FSI. The following is the value of Δ in graphical form.

Figure 1 Trend changes in the relevance of FSI



Source: Secondary data processed, 2020

The figure above indicates that at $t_{(-3)}$, the changes that occur from year to year experience small fluctuations. These results explain that three days before the publication of the annual FSI, accounting numbers are less relevant in having an impact on changes in firm value. Different results are shown in $t_{(0)}$, where changes that occur from year to year fluctuate with extreme increases and decreases. These results explain that at the time of the publication of the annual FSI, accounting numbers have relevance in providing positive and negative impacts on changes in firm value. Meanwhile, the results in $t_{(3)}$, changes that occur from year to year have increased. These results indicate that at the time of three days after the publication of the annual FSI, accounting numbers have relevance in providing a positive impact on changes in firm value.

Furthermore, the R^2 value from the regression test in model I becomes the benchmark in testing the H1. Testing the H1 is carried out on R^2 of $t_{(3)}$ with the time variable. Due to determining whether the relevance of annual FSI has increased or decreased, the accounting numbers in the annual FSI at $t_{(3)}$ have a major influence on changes in firm value when compared to $t_{(-3)}$ and $t_{(0)}$. The results of the value relevance test from year to year are presented in table 3 as follows.

Table 3 The results of the FSI value relevance trend test

Description	$t_{(3)}$			
	α	β	Std.Error	
	-0.0739	0.0521	1.6259	Increased
R^2 = 0.5773				
Adj.R^2 = 0.3660				
Prob. (F-statistics) = 0.0240				
*Significance at 0.05				

Source: Secondary data processed, 2020

The benchmark in testing the relevance of the FSI value is the coefficient of determination (R^2). Value relevance studies focus the R^2 value of the accounting numbers into valuations to measure the relevance of FSI in the capital market. Furthermore, to measure the trend of the relevance of the FSI value from year to year, the R^2 value was regressed with the time trend variable. The relevance of the FSI value is said to increase or not change if the results of the FSI relevance trend test show a value of $\beta > 0$, on the contrary it is said to decrease if the value of $\beta < 0$. From Table 3, it can be seen that the R^2 β value of the results of the value relevance trend test is $0.0521 > 0$, meaning that the relevance of annual FSI values for manufacturing companies has increased from 2016 to 2019. These results indicate that H1 is accepted. The statement from H1 can be interpreted that FSI for manufacturing companies from 2016 to 2019 on the stock market has not lost its relevance. Even after three days of publication of the annual FSI, the relevance of FSI increased. This shows that investors still use accounting numbers in determining firm value. The results of empirical H1 testing are in line with the theories on which this research is based. The results of H1 testing are also empirically consistent with research results from Chuanzhou (2005); Suwardi (2005); Puspitaningtyas (2012); Kargin (2013); Olugbenga & Atanda (2014); Syagata & Daljono (2014); Wulandari & Adiwati (2015); Sukma & Yadnyana (2016); Romadhani & Purwanti (2017); Petra (2018); Yuniarso & Lako (2018) who reveal that the relevance of FSI values has increased or did not change from year to year.

4.2 Multiple Linear Regression Analysis in Model II

In testing H2 and H3, this study uses multiple linear regression. The results of the regression test are presented in the following table.

Table 4 Multiple regression test results (FSI on firm value)

Variable	Coefficient	Std. Error	Prob.	
α_1	1.5164	0.3326	0.0000	
BVE	0.5291	0.0582	0.0000	Significant
PV	0.4461	0.0424	0.0000	Significant
R^2 = 0.5953				
Adj.R^2 = 0.5926				
Prob. (F-statistics) = 0.0000				
*Significance at 0.05				

Source: Secondary data processed, 2020

Table 5 Multiple regression test results (QFSD to firm value)

Variable	Coefficient	Std. Error	Prob.	
α_1	5.5606	0.8398	0.0000	
Dummy_TPFS	0.6599	0.1875	0.0005	Significant
Dummy_DCSR	0.9395	0.8449	0.2671	not significant
R^2 = 0.0457				
Adj.R^2 = 0.0394				
Prob. (F-statistics) = 0.0009				
* Significance at 0.05				

Source: Secondary data processed, 2020

The results for table 4 show that the R^2 value is 0.5953, so that it indicates that the annual FSI of numbers contributes to the RS effect by 59.53%. Partially the coefficients of BVE and PV have a positive value of 0.5291 for BVE and 0.4461 for PV. This indicates that for 2016 to 2019 the numbers from annual FSI have a positive effect on RS. Furthermore, the p-value of BVE and PV has a value of < 0.05, this indicates that BVE and PV have a significant effect on RS. The results from table 4 indicate that H2 is accepted. So that the statement that FSI has a significant effect on firm value for the 2016-2019 period has been empirically proven. The statement from H2 can be interpreted that accounting numbers, especially BVE and PV, are still the benchmarks for investors in determining firm value. Companies that have high BVE and PV values can empirically increase firm value. This can be seen from the results of H2 testing that the more the BVE and PV values increase, the firm value increases. The results of empirical H2 testing are in line with the theories on which this research is based. The results of empirical H2 testing are also in line with the research results of Agusti & Rahman (2011); Kuswanto et al (2017); Pascayanti et al (2017). The results of their research reveal that FSI has an influence on changes in firm value.

Furthermore, the results for table 5 show an R^2 value of 0.0457, thus indicating that the QFSD contributed 4.57% to the effect of RS. Partially the coefficients of TPFS and DCSR have a positive value of 0.6599 for TPFS and 0.9395 for DCSR. This indicates that for 2016 to 2019 the QFSD has a positive influence on RS. Furthermore, the p-value of TPFS has a value of < 0.05, this explains that TPFS has a significant effect on RS, while the p-value of DCSR has a value of > 0.05, this explains that DCSR has no significant effect on RS. However, simultaneously the p-value of the QFSD has a value of < 0.05, thus explaining that the QFSD has a significant effect on RS.

The results from table 5 indicate that H3 is accepted. So that the statement that QFSD has a significant effect on firm value for the 2016-2019 period has been empirically proven. The statement of H3 can be interpreted that the quality in disclosing the company's FSI becomes an assessment for investors in determining firm value. Companies that increase their QFSD, empirically, can increase firm value. This can be seen from the results of the H3 test that if the company has a good QFSD, then the company value will increase. The results of empirical H3 testing are in line with the theories on which this research is based. The results of empirical H3 testing are also in line with research results from Nagayama & Tekada (2006); Wisadha (2008); Ayu (2013); Irma (2013). The results of their research reveal that QFSD has a significant effect on firm value.

4.3 Moderated Regression Analysis in Model III

In testing H4 and H5, this study uses moderated regression. The results of the moderated regression test are presented in the following table.

Table 6 Moderated regression test results (IMT moderates the effect of FSI on firm value)

Variable	Coefficient	Std. Error	Prob.	
α_1	5.8562	0.1136	0.0000	
Dummy_IMT	0.4815	0.2067	0.0205	
BVE*PV*IMT	0.0476	0.0038	0.0000	Significant
R^2 = 0.3363				
Adj.R^2 = 0.3341				
Prob. (F-statistics) = 0.0000				
*Significance at 0.05				

Source: Secondary data processed, 2020

Table 7 Moderated regression test results (IMT moderates the effect of QFSD on firm value)

Variable	Coefficient	Std. Error	Prob.	
α_1	6.5636	0.1285	0.0000	
Dummy_IMT	0.4815	0.2067	0.0205	
DTPFS*DDCSR*DIMT	0.6952	0.1679	0.0000	Significant
R^2 = 0.0537				
Adj.R^2 = 0.0506				
Prob. (F-statistics) = 0.0000				
* Significance at 0.05				

Source: Secondary data processed, 2020

The results for table 6 show that the R^2 value is 0.3363, so it indicates that IMT in moderating the annual FSI on RS contributed 33.63% to the effect. The coefficient of BVE*PV*DIMT has a positive value of 0.0476, this indicates that for 2016 to 2019 IMT can strengthen the effect of annual FSI on RS. Furthermore, the p-value of BVE*PV*DIMT has a value of < 0.05, so this indicates that IMT in moderating annual FSI on RS has a significant effect. The results from table 6 show that H4 is accepted. So that the statement that IMT can strengthen the influence of FSI on firm value for the 2016-2019 period has been empirically proven.

The statement of H4 can be interpreted that investment in the form of modern technology has a positive contribution to the relationship between FSI and firm value. Companies that do IMT empirically have a high RS value, thus increasing the firm's value. This can be seen from the results of the H4 test that if the company does IMT, the FSI value will be better, so that the company value will increase. The results of empirical H4 testing are in line with the theories on which this research is based. The results of empirical H4 testing are also in line with the research results of Muharam & Widati (2006); Wiyani (2008) Gartner (2015). The results of their research explain that IMT becomes good news information that can change investors' interpretations to be positive in assessing the company.

The results for table 7 show that the R^2 value is 0.0537, thus indicating that IMT in moderating the QFSD on RS contributed an influence of 5.37%. The coefficient of DTPFS*DDCSR*DIMT has a positive value of 0.6952, this indicates that for 2016 to 2019 IMT can strengthen the influence of QFSD on RS. Furthermore, the p-value of DTPFS*DDCSR*DIMT has a value of < 0.05, this indicates that IMT in moderating QFSD on RS has a significant effect. The results from table 7 show that H5 is accepted. So that the statement that IMT can strengthen the influence of QFSD on company value for the 2016-2019 period has been empirically proven.

The statement of H5 can be interpreted that investment in the form of modern technology has a positive contribution to the relationship between the effect of the QFSD and firm value. Companies that do IMT empirically have a high RS, so that it will increase company value. This can be seen from the results of the H5 test that if the company carries out IMT, the QFSD will be better, so that the company's value will increase. The results of empirically testing H5 are in line with the theories on which this research is based. The results of empirical testing of H5 are also in line with the results of research by Muharam & Widati (2006); Wiyani (2008) Gartner (2015). The results of their research explain that IMT becomes good news information that can change investors' interpretations to be positive in assessing the company.

5. Conclusions and Suggestions

Based on the results of testing the discussion of the trend of the relevance of FSI value, the influence of FSI and QFSD on firm value with IMT as a moderating variable, it can be concluded that: first, empirically, the trend of the value relevance of FSI has increased from 2016-2019. These results indicate that investors still use accounting numbers in determining firm value. These results also prove that the issue of decreasing trend in the relevance of FSI value does not occur, especially in the capital market in Indonesia for manufacturing companies for the 2016-2019 period. Then, these results also provide evidence that the large amount of alternative information available cannot reduce the relevance of the FSI value.

Second, empirically FSI has a significant effect on changes in firm value. These results indicate that as BVE and PV increase, the firm value will increase. These results also prove that the ease of information in the 4.0 era as well as the many earnings management practices do not reduce the influence of FSI on firm value. So that FSI still has an existence for investors in determining company value, especially manufacturing companies for the 2016-2019 period. Likewise with QFSD which empirically has a significant effect on firm value. These results indicate that if the company has a good quality of disclosure, then the company value will increase. These results prove that the QFSD is the benchmark for investors in determining company value.

Third, empirically IMT can strengthen the influence of FSI on firm value. These results indicate that if the company implements IMT, the FSI value will be better, thus increasing the firm's value. These results indicate that IMT will be good news for investors, so that it can strengthen the influence of FSI on changes in firm value. Likewise, IMT can empirically strengthen the effect of QFSD on firm value. These results indicate that if the company implements IMT, the QFSD will get better, thus increasing the company value. These results indicate that IMT information will become good news information, thus strengthening the QFSD influence on firm value.

Furthermore, there are several suggestions for further research related to capital market-based accounting studies, namely, first, can do a comparative test of the value relevance of other countries that adopt IFRS and use samples from similar business sectors. Second, can extend the observation period in order to have maximum results, as well as develop other variables that can increase firm value, especially those related to accounting information. Third, expected to develop indicators to measure the quality of financial statement disclosures.

6. Implications and Limitations of the Study

The results of this study provide empirical evidence to researchers that the issue of decreasing the relevance of FSI value that has developed in the last few decades has not occurred in the capital market in Indonesia, especially manufacturing companies for the 2016-2019 period. The results of this study also provide empirical evidence to researchers that IMT information has become a benchmark for investors in making investment decisions. So that these results can become new references in value relevance studies and financial statement analysis. The results of this study also provide empirical evidence to practitioners that companies with good QFSD can increase firm value. These results can add insight for potential investors in making investment decisions. The results of the study provide empirical evidence for publicly traded companies that TPFS can increase firm value. So that companies can pay attention to the timeliness of the publication of financial reports.

The results of this study can also be taken into consideration for capital market policy makers in Indonesia, especially the Otoritas Jasa Keuangan (OJK), to further reinforce regulations in terms of completeness and accuracy of corporate information publication. Because from research observations there are several companies that publish incomplete information and not on time. These companies still exist in the capital market during the 2016-2019 period. So that this can be detrimental to investors, especially investors who have just entered the capital market.

This study has limitations in conducting research such as the relatively short observation period, namely 2016-2019. This study also uses manufacturing companies as research samples, so that the results of this study cannot be generalized to other company sectors. Then, the QFSD indicator only uses two variables, namely TPFS and DCSR.

References

[1] Agusti, R.R., & A.F. Rahman. (2011). Relevansi Informasi Akuntansi: Peran Pengungkapan Corporate Social Responsibility dan Dewan Komisaris Independen. *Jurnal Akuntansi dan Auditing Indonesia*, 15: 121-129.

[2] Alford, A., J. Jones, R. Leftwich, & M. Zmijewski. (1993) The Relative Informativeness of Accounting Disclosure in Different Countries. *Journal of Accounting Research*, 31: 183-223.

[3] Almujamed, H., & M. Alfraih. (2019). Value Relevance of Earnings and Book Value in the Qatari Stock Exchange. *EuroMed Journal of Business*, 14: 62-75.

[4] Amir, T.E., T.S. Harris, & E.K. Venuti. (1993). A Comparison of the Value-Relevance of U.S. versus Non-U.S. GAAP Accounting Measures Using Form 20-F Reconciliations. *Journal of Accounting Research*, 31: 230-264.

[5] Amir, T.E., & B. Lev. (1996). Value Relevance of Nonfinancial Information. *Journal of Accounting and Economics*, 22: 3-30.

[6] Anderson, J.C., & A.W. Frankle. (1980). Voluntary Social Reporting: An Iso-Beta Portfolio Analysis. *The Accounting Review*, 55: 467-479.

[7] Ariyani, V. (2017). Pengujian Efisiensi Pasar Setengah Kuat Terhadap Pengumuman Paket Kebijakan Ekonomi VII Pada Saham Indeks LQ 45. *Jurnal Ekonomi Universitas Kadiri*, 87-98.

[8] Arvanitis, S., & E.N. Loukis. (2009) Information and Communication Technologies, Human Capital, Workplace Organization and Labour Productivity: A Comparative Study Based on Firm-level Data for Greece and Switzerland. *Information Economics and Policy*, 21: 43-61.

[9] Ayu, M. (2013). Pengaruh Kualitas Pengungkapan Informasi Terhadap Volume Perdagangan Saham dan Return Saham Studi Empiris pada Perusahaan LQ-45 di BEI. *Jurnal Akuntansi dan Keuangan*, 4: 1-29.

[10] Ball, R., & P. Brown. (1968). An Empirical Evaluation of Accounting Income Numbers. *Journal of Accounting Research*. 6: 159-178.

[11] Barrett, M.E. (1976). Financial Reporting Practices: Disclosure and Comprehensiveness in an International Setting. *Journal of Accounting Research*, 14: 10-26.

[12] Barth, M.E., W.H. Beaver, & W.R. Landsman. (1996). Value Relevance of Banks Fair Value Disclosures Under SFAS No. 107. *The Accounting Review*, 71: 513-605.

[13] Barth, M.E., W.H. Beaver, & W.R. Landsman. (2001). The Relevance of Value Relevance Literature for Financial Accounting Standard Setting: Another Review. *Journal of Accounting and Economics*, 31: 77-104.

[14] Beaver, W.H. (1968). Information Content of Annual Earning Announcements. *Journal of Accounting Research*. 6: 67-92.

[15] Beaver, W.H., P. Kettler, & M. Scholes. (1970). The association between market determined and accounting determined risk measures. *Accounting Review*, 45: 654-682.

[16] Beaver, W.H., R., Clarke., & W. Wright. (1979). The Incremental Information Content of Historical Cost and Current Cost Income Numbers: Time Series Analysis for 1962-1980. *The Accounting Review*, 62: 707-722.

[17] Beaver, W.H. (1998). *Financial Reporting: An Accounting Revolution*. Third Edition. Prentice Hall International, Inc.

[18] Beaver, W.H. (2002). Perspectives on Recent Capital Market Research. *The Accounting Review*, 77: 453-474.

[19] Brammer, S., C. Brooks, & S. Pavelin. (2005). Corporate Social Performance and Stock Returns: UK Evidence from Disaggregate Measures. *SSRN*.

[20] Brief, R.P., & P. Zarowin. (2002). The Value Relevance of Dividend, Book Value and Earnings. *Working Paper*.

[21] Brown, S., K. Lo, & T. Lys. (1999). Use of R^2 in Accounting Research: Measuring Changes in Value Relevance over the Last Four Decades. *Journal of Accounting and Economics*, 28: 83-115.

[22] Brynjolfsson, E. (1993). The Productivity Paradox of Information Technology. *Commun ACM*, 36: 66-77.

[23] Buzby, S.L. (1975). Company Size, Listed Versus Unlisted Stock, and the Extent of Financial Disclosure. *Journal of Accounting Research*, 13: 16-37.

[24] Cahyono, N., & D. Ratmono. (2012). Adopsi IFRS dan Relevansi Nilai Informasi Akuntansi. *Jurnal Akuntansi dan Keuangan*, 14: 105-115.

[25] Chambers, A.E., & S.H. Penman. (1984). Timeliness of Reporting and the Stock Price Reaction to Earnings Announcements. *Journal of Accounting Research*, 22: 21-47.

[26] Cheng, C.S.A., & S.S.M. Yang. (2003). The Incremental Information Content of Earnings and Cash Flows from Operations Affected by their Extremity. *Journal of Business Finance & Auditing*, 30: 73-116.

[27] Chuanzhou, D. (2005). The Value Relevance of Fair Value Evidence from B-share Companies. *Accounting Research*, Issue 10.

[28] Collins, D.W., S.P. Kothari. (1989). An Analysis of Intertemporal and Cross-sectional Determinants of Earnings Response Coefficients. *Journal of Accounting and Economics*, 11: 143-181.

[29] Collins, D.W., E. Maydew, & L. Weis. (1997). Changes in the Value Relevance of Earnings and Book Values over the Past Forty Years. *Journal of Accounting and Economics*, 24: 39–67.

[30] Core, J.E., W.R. Guay, & A.V. Buskirk. (2003). Market Valuations in the New Economy: An Investigation of What has Changed. *Journal of Accounting and Economics*, 34: 43-67.

[31] Dhaliwal, D.S., & S.S. Reynold. (1994). The Effect of Default Risk of Debt on the Earnings Response Coefficient. *The Accounting Review*, 69: 412-419.

[32] Dwipayana, I.G.N.A.P., & I.G.B. Wiksuana. (2017). Pengujian Efisiensi Pasar di Bursa Efek Indonesia. *E-Jurnal Manajemen Universitas Udayana*, 6: 2105-2132.

[33] Easton, P.D. (1999). Security Returns and the Value Relevance of Accounting Data (Commentary). *Accounting Horizons*, 13: 399-412

[34] Elliot, R. (1995). The Future of Assurance Services: Implications for Academia. *Accounting Horizons*, 118-127.

[35] Epstein, M.J., & M. Freedman. (1994). Social Disclosure And The Individual Investor. *Accounting, Auditing and Accountability Journal*, 7: 94-109.

[36] Fama, E.F. (1970) Efficient Market: A Review of Theory and Empirical work. *Journal of Finance*, 25: 383-417.

[37] Fama, E.F. (1991). Efficient Capital Markets: II. *Journal of Finance*, 46: 1575-1617.

[38] Financial Accounting Standard Board. (1978). *Statement of Financial Accounting Standards, No. 1. Objective of Financial Reporting by Business Enterprises*. FASB. Stanford, Connecticut.

[39] Financial Accounting Standard Board. (1980). *Statement of Financial Accounting Standards, No. 2. Qualitative Characteristics of Accounting Information*. FASB. Stanford, Connecticut.

[40] Fung, S., L.N. Su, & X.K. Zhu. (2010). Price Divergence from Fundamental Value and the Value Relevance of Accounting Information. *Contemporary Accounting Research: Forthcoming, SSRN.*

[41] Francis, J., & K. Schipper. (1999). Have Financial Statements Lost Their Relevance?. *Journal of Accounting Research*, 37: 319 – 352.

[42] Frooman, J. (1997). Socially Irresponsible and Illegal Behavior and Shareholder Wealth: A Meta-Analysis of Event Studies. *Business & Society*, 36: 221-249.

[43] Gamerschlag, R. (2013). Value relevance of human capital information. *Journal of Intellectual Capital*, 325-345.

[44] Gartner. (2015). Forecast Alert: IT Spending, Worldwide, 3Q15 Update. http://www.gartner.com/technology/research/it-spending-forecast/ (accessed June 26 2020).

[45] Gonades, N.J., & N. Dopuch. (1974). Capital Market Equilibrium, Information Production, and Selecting Accounting Techniques: Theoretical Framework and Review of Empirical Work. *Journal of Accounting Research*, 12: 48-129.

[46] Grinning, M. (2011). Capital Market Implication of Corporate Disclosure: German Evidence. *Bult Business Research Official Open Access Journal of VHB*, 4: 48-72.

[47] Hartono, J.M. (1999). Bias Dari Penggunaan Model Di MBAR. *Jurnal Ekonomi dan Bisnis Indonesia*, 14: 1-14.

[48] Hartono, J.M. (2003). *Teori Portfolio dan Analisis Investasi*. Edisi Ketiga. Penerbit BPFE: Yogyakarta.

[49] Hayati, M. (2016). Value Relevance of Accounting Information Based on PSAK Convergence IFRS: manufacture firms in Indonesia. *Jurnal Praktik Bisnis*, 5: 67-78.

[50] Holthausen, R.W., & R.L Watts. (2001). The Relevance of Value Relevance Literature for Financial Accounting Standard Setting. *Journal of Accounting and Economics*. 31: 3-75.

[51] Hung, M. (2001). Accounting Standards and Value Relevance of Financial Statements: An International Analysis. *Journal of Accounting & Economics*, 30: 401-420.

[52] Irma, I. (2013). Analisis Pengaruh Tingkat Pengungkapan Terhadap Likuiditas Saham. *Jurnal Organisasi dan Manajemen*, 9: 54-72.

[53] Jenkins, E. (1994). An Information Highway in Need of Capital Improvements. *Journal of Accountancy*, 82: 82-83.

[54] Jones, C.P. (1995). *Investment: Analysis and Management.* Jhon Wiley & Sons: New York.

[55] Kadir, A. (2014). *Pengenalan Sistem Informasi*. Edisi Revisi. Andi: Yogyakarta.

[56] Kargin, S. (2013). The Impact of IFRS on the Value Relevance of Accounting Information: Evidence from Turkish Firms. *International Journal of Economics and Finance*, 5: 71-80.

[57] Kormendi, R., & R. Lipe. (1987). Earnings Innovation, Earnings Persistence, and Stock Return. *Journal of Business*, 60: 323-345.

[58] Kothari, S.P., & J. Shanken. (2003). Time-series Coefficient Variation in Value Relevance Regressions: A Discussion of Core, Guay, and Van Buskird and New Evidence. *Journal of Accounting and Economics*, 34: 69-87.

[59] Kurniawati, S.L., & W. Lestari. (2011). Pengujian Efisiensi Bentuk Setengah Kuat Di Indonesia. *Journal of Business and Banking*, 1: 143-154.

[60] Kuswanto, R., P.A. Rambe., & S. Ruwanti. (2017). Relevansi Nilai Informasi Akuntansi dengan Model Valuasi Ohlson. *Jurnal Ilmiah Akuntansi dan Finansial Indonesia*, 1: 45-58.

[61] Lako, A. (2005). Relevansi Nilai Informasi Laporan Keuangan Untuk Investor Pasar Saham Indonesia: Suatu Bukti Empiris Baru. *Working Paper*.

[62] Lako, A. (2007). Relevansi Nilai Informasi Laporan Keuangan Untuk Pasar Saham: Pengujian Berbasis Teori Valuasi dan Pasar Efisien. *Disertasi S3*. Program Pascasarjana Akuntansi Universitas Gadjah Mada: Yogyakarta.

[63] Lako, A. (2008). Pemanduan Teori Modal Pasar Efisien dan Teori Relevansi Nilai Untuk Mengukur Relevansi Nilai Informasi Laporan Keuangan Untuk Pasar Saham. *Working Paper*. Unika Soegjiapranata: Semarang.

[64] Lako, A., & J.M. Hartono. (2019). Relevansi Nilai Informasi Laporan Keuangan Untuk Pasar Saham: Pengujian Berbasis Return Model. *Working Paper*. Unika Soegijapranata: Semarang & Universitas Gadjah Mada: Yogyakarta.

[65] Leland, H.E., & D.H. Pyle. (1977). Informational Asymmetries, Financial Structure, and Financial Intermediation. *Journal of Finance*, 32: 371-387.

[66] Lendsman, W.R. (1986). An Empirical Investigation of Pension Fund Property Rights. *The Accounting Review*, 61: 662-691.

[67] Leuz, C., D. Nanda., & P.D. Wysocki. (2003). Earnings Management and Investor Protection: an International Comparison. *Journal of Financial Economics*, 69: 505-527.

[68] Lev, B., & J.A. Ohlson. (1982). Market Based Empirical Research in Accounting: A Review, Interpertation and Extensions. *Supplement to Journal Accounting Research*, 27: 249-322.

[69] Lo, K., & T.Z. Lys. (2001). Bridging the Gap between Value Relevance and Information Content. *Working Paper*. University of British Columbia & North-western University.

[70] Maharani, A., & S.V. Siregar. (2014). The Effect of IFRS Convergence on Value Relevance of Accounting Information: Cross-Country Analysis of Indonesia, Malaysia, and Singapore. *Conference: Simposium Nasional Akuntansi XVII*. Mataram.

[71] Marliana, R. (2017). Manajemen Laba di Indonesia dan Malaysia Dalam Era Masyarakat Ekonomi ASEAN. *Jurnal Akuntansi*, Vol. 12: 20-36.

[72] McWilliams, A., & D. Siegel. (1997). Event Studies Management Research: Theoritical and Empirical Issues. *Academy of Management Journal*, 40: 625-657.

[73] Muharam, H. & R.R. Widati. (2006). Analisis Reaksi Pasar Modal Terhadap Pengumuman Investasi Teknologi Informasi: Studi Kasus pada Perusahaan yang Listing di BEJ Periode 2002-2005. *Jurnal Studi Manajemen & Organisasi*, 3: 215-239.

[74] Nagayama, S., & F. Takeda. (2006). An Empirical Study on the Impact of Environmentally Friendly News on Stock Prices in Japan. *Working Paper*: University of Tokyo.

[75] Negash, M. (2008). Liberalisation and the Value Relevance of Accrual Accounting Information: Evidence From the Johannesburg Securities Exchange. *Asian Journal of Finance and Accounting*, Vol. 1, No. 1.

[76] Nelmida. (2018). Reaksi Pasar Modal Dengan Adanya Pengumuman Penerbitan Warrant Terhadap Harga Saham Perusahaan yang Terdaftar di BEI *Proseding Seminar Nasional Akuntansi*, 1: 1-13.

[77] Nelson, K. (1996). Fair Value Accounting for Commercial Banks: An Empirical Analysis of SFAS No. 107. *The Accounting Review*, 71: 161-182.

[78] Olhson, J.A. (1995). Earnings, Book Value, and devidend in Security Valuation. *Contemporary Accounting Research*,11: 661-687.

[79] Olhson, J.A. (2001). Earnings, Book Values, and Devidends in Equity Valuation: An Empirical Perspective. *Contemporary Accounting Research*, 18: 107-120.

[80] Ohlson, J.A., & P.K. Schroff. (1992). Changes Versus Levels in Earnings as Explanatory Variables for Returns: Some Theoritical Considerations. *Journal of Accounting Research*, 30: 210-226.

[81] Olugbenga, A.A., & O.A. Atanda. (2014) Value Relevance of Financial Accounting Information of Quoted Companies in Nigeria: A Trend Analysis. *Research Journal of Finance and Accounting*, Vol. 5, No. 8.

[82] Pascayanti, Y., A.F. Rahman., & W. Andayani. (2017). Relevansi Nilai Atas Nilai Wajar Aset dan Liabilitas dengan Mekanisme Good Corporate Governance Sebagai Variabel Pemoderasi. *Jurnal Bisnis dan Akuntansi*, 13: 227-242.

[83] Petra, B.A. (2018). Analisis Perbedaan Relevansi Nilai Informasi Akuntansi Sebelum dan Sesudah PSAK Konvergensi IFRS (Studi pada perusahaan sektor perbankan yang terdaftar di Bursa Efek Indonesia periode 2009-2014). *Jurnal Ekonomi Bisnis dan Teknologi*, 7: 19-25.

[84] Pinasti, M. (2004). Faktor-faktor Yang Menjelaskan Variasi Relevansi Nilai Informasi Akuntansi: Pengujian Hipotesis Informasi Alternatif. *Conference: Simposium Nasional Akuntansi VII*, 738-753.

[85] Puspitaningtyas, Z. (2012). Relevansi Nilai Informasi Akuntansi Dan Manfaatnya Bagi Investor. *Ekuitas: Jurnal Ekonomi dan Keuangan*, 16: 164-183.

[86] Romadhoni, R., & D. Purwanti. (2017). Pengaruh Adopsi IAS Dan IFRS Terhadap Relevansi Nilai Laporan Keuangan: studi empiris pada perusahaan jasa keuangan yang tercatat di BEI 2008-2013. *Jurnal Substansi*, 1: 25-60.

[87] Santos, D., K. Peffers., & D.C. Maurer. (1993). The Impact of Information Technology Invesment Announcements on the Market Value of the Firm. *Information System Research*, 13: 201-217.

[88] Sami, H., & H. Zhou. (2004). A Comparison of Value Relevance of Accounting Information in Different Segments of the Chinese Stock Market. *The International Journal of Accounting*, 39: 403-427.

[89] Scott, W.R. (2003). *Financial Accounting Theory*. Third Edition. Prentice–Hall, Inc.

[90] Shane, P.B., & B.H. Spincer. (1983). Market Response to Environmental Information Produced Outside the Firm. *The Accounting Review*. 58: 521-538.

[91] Shevlin, T. (1991). The Valuation of R&D Firms with R&D Limited Partnerships. *The Accounting Review*, 66: 1-21.

[92] Subramanyam, K.R., & Venkatchalam. (1998). The Role of Book Value in Equity Valuation: Does the Stock Variable Merely Proxy for Relevant Past Flows? *Working Paper*. Stanford University.

[93] Sukma, M.A.P., & I.K. Yadnyana. (2016). Komparasi Relevansi Nilai Informasi Akuntansi dan Manajemen Laba Sebelum dan Sesudah Adopsi IFRS. *E-Jurnal Ekonomi dan Bisnis*, 5: 659-688.

[94] Suprihatin, S., & E. Tresnaningsih. (2013). Dampak Konvergensi International Financial Reporting Standards Terhadap Nilai Relevan Informasi Akuntansi. *Jurnal Akuntansi dan Keuangan Indonesia*, 10: 171-183.

[95] Suryatmi, M. (2014). Analisis Perbedaan Relevansi Nilai Informasi Akuntansi Sebelum dan Sesudah Konvergensi Internasional Financial Reporting Standards (IFRS): studi empiris pada perusahaan manufaktur yang terdaftar di BEI. *Jurnal Akuntansi*, 2: 1-31.
[96] Suwardi, E. (2005). Value relevance of accounting numbers: Evidence from the Jakarta Stock Exchange (JSX). *Jurnal Akuntansi dan Auditing Indonesia*, 9: 29-37.
[97] Syagata, G.S., & Daljono. (2014). Analisis Komparasi Relevansi Nilai Informasi Akuntansi Sebelum dan Sesudahh Konvergensi IFRS di Indonesia: studi empiris pada perusahaan manufaktur yang terdaftar di BEI periode 2011-2012). *Diponegoro Journal of Accounting*, 3: 1-11.
[98] Teoh, S.H., & T.J. Wong. (1993). Perceived Auditor Quality and the Earnings Response Coefficient. *The Accounting Review*, 68:346-366.
[99] Tjandra, R. (2006). Pengujian Efisiensi Pasar Setengah Kuat Secara Informasi terhadap Pengumuman Insiasi Dividen (studi empiris pada perusahaan-perusahaan yang terdaftar di Bursa Efek Jakarta Periode Tahun 2000-2003). *Jurnal Akuntansi dan Investasi*, 7: 175-194.
[100] Watts, R.L., & J.L. Zimmerman. (1986). *Positive Accounting Theory*. Prentice Hall. Englewood: New Jersey.
[101] Whittred, G.P. (1980). The Timeliness of the Australian Annual Report: 1972-1977. *Journal of Accounting Research*, 18: 623-628.
[102] Wisadha, I.G.S. (2008). Dampak Strategi Pengungkapan Informasi Emiten Terhadap Perubahan Harga Saham. *Jurnal Ilmiah Akuntansi dan Bisnis*, 3: 1-20.
[103] Wiyani, W. (2008). Meningkatkan Nilai Perusahaan Melalui Investasi Teknologi Informasi. *Jurnal Keuangan dan Perbankan*, 12: 240-252.
[104] Wulandari, T.R., & A.K Adiati. (2015). Perubahan Relevansi Nilai Informasi Akuntansi Setelah Adopsi IFRS. *Jurnal Akuntansi Multiparadigma*, 6: 341-511.
[105] Yuliarini, s. (2010). Prediksi Harga Saham Mengunakan Model Valuasi Teori Surplus Bersih Berdasarkan Pendekatan Ohlson. *Jurnal Akuntansi*. 1: 171-189.
[106] Yuniarso, A.F., & A. Lako. (2018). Analisis Relevansi Nilai Informasi Akuntansi Sebelum dan Sesudah Konversi SAK-IFRS: studi empiris pada emiten perbankan yang tercatat di Bursa Efek Indonesia. *Jurnal Akuntansi Bisnis*. 16: 213-229.
[107] Zhang, X.J. (2000). Conservative Accounting and Equity Valuation. *Journal of Accounting and Economics*, 29: 125-149.