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Value Relevance of Accounting Information in the Presence of Earnings Management

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ABSTRACT

This study examines whether the presence of earnings management has an impact on the value relevance of accounting information. In particular, it examines whether earnings management moderates the value relevance of earnings, book value, and cash flows. The earnings management in this study is proxied by discretionary accruals measured using the performance-adjusted modified Jones model. The sample of this study consists of 98 publicly listed manufacturing companies in 2014. The results show that earnings, the book value of equity, and cash flows contemporaneously affect the share prices. Those results mean that accounting information is value relevant to the market, although there is evidence that partially, only cash flows have an impact on share prices. Utilizing a two-step hierarchical regression analysis, this study also found that earnings management practices moderate the value relevance of earnings information, and it acts as a pure moderator. Particularly, the presence of earnings management weakens the value relevance of earnings.

KEYWORDS: Accounting Information; Book Value of Equity; Cash Flows; Earnings; Earnings Management; Share Prices; Value Relevance

INTRODUCTION

The availability of information should be a concern for listed corporations regarding the objective of obtaining capital from investors. Financial statements are part of the information that needs to be provided to the market. Arifah (2010) states that financial statements also play an essential role as a form of management accountability over the resources they managed. Specifically, information from the financial statements is essential to investors in order for them to make investment decisions.

To be useful to decision-makers, one characteristic that should be embedded in financial statements is the relevance of the information to the users. Kargin (2013) and Rosari (2014) stated that relevance is the ability of financial statements to disclose or to summarize the value of a corporation. More specifically, Francis and Schipper (1999) affirm that the value relevance of financial information is the ability of accounting numbers to summarize the financial performance of a corporation, which determines its share prices. Therefore, whenever the financial performance of the corporation, as disclosed in the financial statements, has the ability to affect the changes in share prices, that information would be deemed value relevant (Puspitaningtyas, 2012).

Problems would occur whenever the value relevance of accounting information used to measure corporate financial performance is compromised by the presence of earnings management practices. In fact, according to Ifonie (2012), earnings management practices might take place whenever the discretions of corporate management influence the preparation of financial statements. Consequently, the information provided could mislead the financial statement users regarding the financial performance of the corporation.

Several studies have been conducted regarding the value relevance of accounting information. However, only a small portion of them studied the effect of earnings management practices on accounting information value relevance. Previously, Kusuma (2006) examined the value relevance of earnings and book value, and the effect of earnings management on it using short-term and long-term discretionary accruals model to proxy for earnings management. Using the same earnings management model, Paluruan and Siregar (2009) extended the study by adding cash flows to the accounting information. Subekti (2010) studied the value relevance of earnings and book value and the impact of earnings management on the value relevance using real and accruals earnings management model.

Although Rahman (2011) had been used the performance-adjusted modified Jones model to examine the impact of earnings management on the value relevance of accounting information, the study only focused on earnings and book value. Arguably, cash flow also plays a vital role in the valuation process of a firm; hence it is deemed essential information to the market (Gitman & Zutter, 2015). Therefore, besides earnings and book value, this current study extends that of Rahman (2011) by adding cash flows to the accounting information under investigation and utilizing more recent data.

Accounting Information Value Relevance

Financial statements are one of the sources of information used in the decision-making process because they portray the financial condition and performance of a company in one period of time. Indeed, the objective of financial statements is to provide information regarding the financial position, performance, and changes in the financial position of a company, which is useful to the majority of the users in making economic decisions (Ikatan Akuntan Indonesia, 2014). Therefore, financial statements often become tools on a

fundamental analysis performed by investors to make economic decisions. Furthermore, financial statements are prepared to be used to evaluate management's performance in achieving corporate targets during a particular period (Sutarti, 2012).

Aside from being reliable, understandable, comparable, and consistent, financial statements are deemed beneficial if they provide relevant information (Scott, 2015). Relevant information is information that is useful in the context of decision making, in assisting users to evaluate past and future performance, and in enabling users to evaluate and revise previous opinions.

The literature on accounting information value relevance asserts that accounting information should have an impact on the market value of a company (Barth et al., 2001; Francis & Schipper, 1999; Subekti, 2010). It is because accounting information is used by market participants to examine corporate financial performance; thus, the usefulness of the information would be reflected in the changes in share prices (Azhmi & Subekti, 2014). Indeed, according to Francis and Schipper (1999), there are four possibilities for information to be considered as value relevant. These are, the information should affect the share prices, the information should contain variables that are useful in the valuation model, the information instigates investors to revise their expectations, and the information has the ability to capture or summarize other information that can affect the share prices. In conclusion, accounting information is considered as value relevant if it has positive impacts on the share prices (Rahman, 2011).

Earnings. Accounting earnings are usually used as one consideration in investment decision making since earnings portray the financial performance of a corporation in one period. Besides, Yocelyn and Christiawan (2012) state that accounting earnings can be used to predict the ability of the earnings in examining investment and credit risks, as well as in measuring the efficiency of a corporation in utilizing economic resources. Therefore, a corporation might be in a good economic condition and has performed well financially, when earnings increase. It could result in higher share prices since investors might be more willing to invest in a profitable company.

Cash flows. Cash flows are indicators of how well a company can generate sufficient cash to meet its obligation, run its operation, pay dividends, and make new investments without relying on external financing (Sutarti, 2012). According to Weygandt, Kimmel, and Kieso (2013), the cash flow statement has the objectives to report inflow, outflow, and changes in cash from operating, investing, and financing activities. Additionally, Suastawan (2014) asserts that a cash flow statement is used by investors to distinguish the ability of a corporation to set strategic policies in making capital investments. PSAK No. 2, 2009 also states that the cash flow statement has a role in providing information regarding the corporate ability to generate and utilize cash and cash equivalents (Ikatan Akuntan Indonesia, 2014). Thus, the cash flow statement becomes more important whenever investors need to study the fundamental condition of a corporation (Fachruddin, 2013). Finally, cash flow information might be considered by investors in share investment; therefore, every decision they make would probably affect the changes in share prices.

Book Value of Equity. The book value of equity is the value of shares according to the corporate recording. According to Subramanyam (2017), the book value of equity is a conventional term that refers to the difference between total assets and total liabilities, which is also named as net assets. Moreover, the book value of equity has a significant role in the process of evaluating the economic prospect and corporate risks, within which includes analysis of the corporate business environment, strategy, financial position, as well

as performance. In particular, Widiastuti and Meiden (2013) state that the book value of equity is used in performance evaluation by investors. Therefore, a higher book value of equity might be an indicator of better performance, which in turn might be responded positively by the investors.

Share Prices

The share price is one indicator of corporate performance because share price might be influenced by factors that affect the performance of a corporation. Those factors come from inside the corporation, such as financial performance, management quality and performance, corporate actions, dividend policy, and future prospects. They can also be external factors such as economic, political, or market conditions (Al Hamsah, 2015; Bangun & Yuniana, 2009).

Since share price could be affected by the internal factors of a corporation, and earnings, the book value of equity and cash flows are internal information regarding corporate financial performance, the first hypothesis is,

H_{a1}: Earnings, the book value of equity, and cash flows are value relevant to the market.

Earnings Management

Agency theory indicates that there is information asymmetry between agent and principal (Jensen & Meckling, 1976). Additionally, the agent and principal typically have different interests that need to be aligned. However, in many cases, the agent possesses information unavailable to the principal, thus motivating him to act according to his interests, which then results in agency conflict. Likewise, according to Makhdalena (2012), an agent is a self-interested individual who strives to meet and maximize his welfare at the expense of the principal. Consequently, there could be some kind of contractual agreements to ensure that the agent will perform according to the expectation of the principal, thus avoiding opportunistic behavior.

Agency conflict might arise in a corporation where the manager, as the agent, does not act according to the expectations of the shareholders as the principal. It can be examined in the practice of earnings management. According to Scott (2015), earnings management occurs when management has discretions in choosing to implement particular accounting standards with the intention to manage earnings in meeting certain objectives. In particular, Handayani and Rachadi (2009) assert that earnings management is the result of management discretions in managing accounting earnings to gain positive market response on their performance and on the information they provided. Likewise, according to Halim, Meiden, and Tobing (2005) and Suhendah and Imelda (2012), information asymmetry motivates the management to disclose misleading information to the extent that the information will be used in performance evaluation. As a consequence, the judgment taken in choosing certain actions or standards might cause the shareholders to make faulty investment decisions.

According to Subramanyam (2017), financial statements are prepared according to the accrual concept as required by the accounting standards. He asserts that accrual accounting has an objective to provide users with timely and reliable information regarding the consequences of business activities that will result in the changes of future expected cash flows. Subsequently, accrual accounting requires estimation and valuation, which, to some extent, gives management the position to influence the accounting numbers, thus creating earnings management.

Several studies have been conducted to investigate the value relevance of accounting information. Yendrawati and Pratiwi (2014), in particular, examined whether earnings and cash flows in different life stages (i.e., start-up, growth, mature, and decline) have an influence on the share prices of listed manufacturing companies in 2010 to 2012. They found that earnings and cash flows are value relevant. Another study by Linda and Syam (2005) examined the value relevance of earnings, book value of equity, and cash flows using both price model and return model. From these two models, they found that earnings, the book value of equity, and cash flows are value relevant. Puspitaningtyas (2012) also investigated the value relevance of accounting information of corporations in the real estate and property sector. The results show that accounting information is value relevant to the market in making investment decisions. However, a study by Sulia (2012) whose object is LQ45 corporations from 2007 to 2011, found that earnings have no impact on share prices.

Another study examined the value relevance of earnings and book value of equity and the impact of earnings management on the value relevance (Subekti, 2010). The study is conducted on companies listed on the Jakarta Stock Exchange from 1995 to 2006. He found that earnings and book value of equity are value relevant information to the market. However, he also found that earnings management diminished the value relevance of both earnings and book value of equity. A similar study by Rahman (2011) on listed manufacturing companies from 2006 to 2008 found the same results.

Another study conducted by Kusuma (2006) investigated the impact of earnings management on the value relevance of accounting information on listed companies in the period of 2003 to 2005. Kusuma (2006) used discretionary accruals that are divided into short-term and long-term discretionary accruals. He found that earnings management using short-term discretionary accruals does not have an impact on the value relevance of earnings and book value of equity. On the other hand, earnings management proxy by long-term discretionary accruals has an impact on both of the accounting information, while total discretionary accruals only have an impact on earnings information.

Paluruan and Siregar (2009) studied the value relevance of earnings, book value of equity, and cash flows, as well as the impact of earnings management on the value relevance of the mentioned accounting information. Using the same earnings management proxy as Kusuma (2006), they found that earnings management in the form of short-term and total discretionary accruals does not affect the value relevance of accounting information. Nevertheless, the long-term form of discretionary accruals has an impact on the value relevance of cash flows. Sholihah (2013), on the other hand, measured earnings management using a performance adjusted model. The study only examines the value relevance of earnings and book value of equity and found that the accounting information is value relevant, but earnings management lessens the value relevance.

Given that earnings management can be affected by the opportunistic behavior of the management, the quality of accounting information would be consequently compromised by such practices, hence affecting its value relevance. Therefore, this study hypothesized that,

H_{a2}: Earnings management moderates the value relevance of earnings.

H_{a3}: Earnings management moderates the value relevance of book value of equity.

H_{a4}: Earnings management moderates the value relevance of cash flows.

METHOD

Sample Selection

The population of this study consists of 140 listed manufacturing corporations from the period of 2014. The sampling criteria used in this study are corporations with complete financial data whose fiscal year ended on 31 December; corporations with published financial statements in Indonesian Rupiah (IDR); and corporations that have positive earnings and book value. These criteria reduced the observations to 98 corporations, which comprised the final sample.

Table 1.
Sampling
Criteria

Items	Number of Corporations
Population	140
Less:	
Non-IDR financial statements	27
Incomplete data	5
Negative earnings and book value	10
Final Sample	98

Data Collection

This study uses financial data based on audited financial reports published on the Indonesia Stock Exchange website (www.idx.co.id). On the other hand, share prices are taken from Yahoo Finance (www.financeyahoo.com). Following a previous study by Subekti (2010), the share price used in this study is the closing price at the end of March 2015, three months after the end of the fiscal year. This study assumes that the financial statements have been audited and published; therefore, the information has been fully available to the market.

Research Model

The value relevance of accounting information in this study is examined by using the modified value relevance model that had been developed by Ohlson (1995), as shown in equation 1.

$$P_{it} = \alpha_0 + \alpha_1 EPS_{it} + \alpha_2 BVS_{it} + \alpha_3 CFS_{it} + \epsilon_{it} \dots\dots\dots (1)$$

where,

- P_{it} = share prices of company i at the end of the third month of year t+1
- EPS_{it} = earnings before extraordinary item divided by the number of shares outstanding of company i at the end of year t.
- BVS_{it} = total equity divided by the number of shares outstanding of company i at the end of year t.
- CFS_{it} = total cash flows divided by the number of shares outstanding of company i at the end of year t.
- ϵ_{it} = the residual of company i at the end of year t.

There are two components in accrual, and those are discretionary and non-discretionary accruals. Suhendah and Imelda (2012) state that discretionary accruals are accruals that are affected by the management’s discretions. On the other hand, non-discretionary accruals are accruals that are directed by the accounting standards and will result in unqualified

financial statements whenever violated. Earnings management, in particular, is related to management behavior that influenced the preparation of financial statements through discretionary accruals in order to meet certain objectives.

To investigate whether the value relevance of accounting information is affected by the presence of earnings management practices, this study uses discretionary accruals measured using the performance adjusted modified Jones model developed by Kothari, Leone, and Wasley (2005). The steps needed to calculate the discretionary accruals are presented as follows:

Step 1. Calculate the total accruals.

$$TACC_{it} = EBX_{it} - OCF_{it} \dots\dots\dots (2)$$

where,

$TACC_{it}$ = total accruals of company i at the end of year t

EBX_{it} = earnings before extraordinary items of company i at the end of year t

OCF_{it} = cash flows from operating activities of company i at the end of year t

Step 2. Calculate the non-discretionary accruals. Total accruals are the sum of non-discretionary accruals and discretionary accruals (equation 3). Therefore, the following regression model using the performance adjusted modified Jones model needs to be performed to determine the non-discretionary accruals.

$$TACC_{it} = NDACC_{it} + DACC_{it} \dots\dots\dots (3)$$

$$\frac{TACC_{it}}{TA_{it-1}} = \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \alpha_4 ROA_{it-1} + \varepsilon_{it} \dots (4)$$

$$NDACC_{it} = \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \alpha_4 ROA_{it-1} \dots\dots (5)$$

where,

$TACC_{it}$ = total accruals of company i at the end of year t (from equation 1)

TA_{it-1} = total assets of company i at the end of year t-1

ΔREV_{it} = changes in revenue of company i at the end of year t

ΔREC_{it} = changes in receivables of company i at the end of year t

PPE_{it} = property, plant and equipment of company i at the end of year t

ROA_{it-1} = return on assets of company i at the end of year t-1

ε_{it} = the residual of company i at the end of year t which is the proxy of DACC

Step 3. Calculate the discretionary accruals. Discretionary accruals are the difference between total accruals and non-discretionary accruals (equation 6). Regression in Step 2 obtains coefficients for every variable that used to determine discretionary accruals (DACC).

$$DACC_{it} = TACC_{it}/TA_{it-1} - NDACC_{it} \dots\dots\dots (6)$$

$$DACC_{it} = \frac{TACC_{it}}{TA_{it-1}} - \alpha_1 \left(\frac{1}{TA_{it-1}} \right) + \alpha_2 \left(\frac{\Delta REV_{it} - \Delta REC_{it}}{TA_{it-1}} \right) + \alpha_3 \left(\frac{PPE_{it}}{TA_{it-1}} \right) + \alpha_4 ROA_{it-1} \dots\dots\dots (7)$$

Step 4. Perform the regressions. After the discretionary accruals, which are the proxy of earnings management, have been obtained from the previous step, the next step is to test the hypotheses whether each of the accounting information value relevance is affected by the presence of earnings management through the regression models below. Two-step hierarchical regressions were performed for each of the accounting information (e.g., EPS, BVS, and CFS). In the first step, each of the accounting information, together with the discretionary accruals, was introduced into the regression equation. In the second step, the multiplicative interaction terms between each of the accounting information and the discretionary accruals were entered. If the regression coefficients of both the moderator and the multiplicative interaction terms are significant, then there is a quasi moderation. However, if the multiplicative interaction terms are significant, but the moderator is not, then it is a pure moderation. The following are the two-step, hierarchical regression models:

First step:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 DACC_{it} + \epsilon \dots\dots\dots (8)$$

$$P_{it} = \beta_0 + \beta_1 BVS_{it} + \beta_2 DACC_{it} + \epsilon \dots\dots\dots (9)$$

$$P_{it} = \beta_0 + \beta_1 CFS_{it} + \beta_2 DACC_{it} + \epsilon \dots\dots\dots (10)$$

Second step:

$$P_{it} = \beta_0 + \beta_1 EPS_{it} + \beta_2 DACC_{it} + \beta_3 EPS * DACC_{it} + \epsilon \dots\dots\dots (11)$$

$$P_{it} = \beta_0 + \beta_1 BVS_{it} + \beta_2 DACC_{it} + \beta_3 BVS * DACC_{it} + \epsilon \dots\dots\dots (12)$$

$$P_{it} = \beta_0 + \beta_1 CFS_{it} + \beta_2 DACC_{it} + \beta_3 CFS * DACC_{it} + \epsilon \dots\dots\dots (13)$$

Classical Assumptions

The normality test is not conducted since the sample of this study is enough to be considered the normal distribution. Tiro (2010) asserts that if the sample size is equal to or more than 30, the normal distribution of the sample might be assumed. However, the previous test found that there is multicollinearity in the variables. Therefore, the variable DACC is transformed by calculating the difference from the mean and then squared. The transformation alleviates the multicollinearity problem. Also, the heteroscedasticity test is conducted using the Glejser test. From the test, it is found that there is no heteroscedasticity problem among the variables because the *p*-values are larger than 0.05.

RESULTS AND DISCUSSION

Accounting Information Value Relevance

The first hypothesis is to test whether accounting information is value relevant to the market. The results are presented in Table 2.

Table 2 shows that the model is significant (*p*-value = 0.022), indicating that the accounting information, which consists of earnings, book value, and cash flows, can be used to explain the changes in share prices; thus, this accounting information is value relevant to the market. This result supports the first hypothesis. Nevertheless, the results partially show that only cash flows affect share prices (*p*-value < 0.05).

	Coefficients	Standard Errors
EPS	1.744	(1.330)
BVS	-0.169	(0.177)
CFS	18.906*	(7.919)
Constant	7,655.286*	(3374.585)
Dependent Variable		Share Prices
Observations		98
Adjusted R-squared		0.068
F		3.349
p-value		0.022

Notes: *** p<0.001, ** p<0.01, * p<0.05

Table 2.
The Value
Relevance of
Accounting
Information

The result is consistent with Paluruan and Siregar (2009), who found that contemporaneously earnings, book value, and cash flows significantly affect the share prices. It shows that investors still use fundamental analysis in making an investment decision and utilize accounting information as consideration. On the other hand, this also shows that share prices are affected by internal factors of corporations. However, it is evident that investors prefer cash flows as a consideration in making an investment decision, when compared to earnings and book value. It might be because cash flows information portrays the ability of the corporation to collect cash in the future, to pay dividends, and also to settle long-term liabilities.

The Value Relevance of Accounting Information in the Presence of Earnings Management

Table 3 presents the results of the regression analyses on whether the presence of earnings management affects the value relevance of accounting information.

VARIABLES	EPS		BVS		CFS	
	(1)	(2)	(1)	(2)	(1)	(2)
EPS	2.546 (1.289)	16.058*** (3.906)				
DACC	3048.185 (8418.259)	8929.187 (8086.313)	5206.716 (8513.589)	-1103.52 (10286.859)	-2021.551 (8642.873)	8208.949 (10842.957)
EPS*DACC		-41.685*** (11.455)				
BVS			0.073 (0.165)	0.226 (0.217)		
BVS*DACC				1.676 (1.537)		
CFS					19.388** (7.250)	22.638** (7.500)
CFS*DACC						12.839 (8.319)
Constant	6608.83 (3385.892)	4156.93 (3257.215)	7784.048* (3433.613)	7392.865* (3448.903)	7967.861* (3250.105)	7207.008* (3264.165)
Dependent Variable	Share Prices	Share Prices	Share Prices	Share Prices	Share Prices	Share Prices
Observations	98	98	98	98	98	98
R-squared	0.043	0.161	0.006	0.018	0.074	0.096
Adj. R-squared	0.023	0.134	-0.015	-0.013	0.054	0.068
F	2.139	6.024	0.279	0.583	3.771	3.344
p-value	0.123	0.001	0.757	0.628	0.027	0.023
R2 Change		0.118		0.012		0.023
F Change		13.243***		1.189		2.382

Notes: Standard errors in parentheses, *** p<0.001, ** p<0.01, * p<0.05

Table 3.
The Value
Relevance of
Accounting
Information
in the
Presence of
Earnings
Management

The results of the second step regression show that earnings is positive and significant (p -value < 0.001), meaning that earnings information is value relevant to the market. The interaction between earnings information and discretionary accruals is also significant (p -value < 0.001), and the regression coefficient is negative. The adjusted R-Squared is increased from 2.3% to 13.4%, and there is a significant change in the model (F Change = 13.243; p -value < 0.001). Hence, the second hypothesis is supported, which means that earnings management practices moderate the value relevance of earnings. The negative coefficient shows that earnings management lessens the effect of earnings information to the share prices. The results support the findings of Sholihah (2013). Given that the significant result is only found on the multiplicative interaction term between earnings and discretionary accruals, but not on discretionary accruals as the moderator, this moderation is considered as pure moderation.

The results indicate that investors use earnings information as one consideration in making an investment decision. However, the presence of earnings management practices reduces the trustworthiness of earnings information available to the market. It means that although corporations performed well financially, investors might still be skeptical about corporations practicing earnings management. Consequently, investors might give up their shareholdings on corporations deemed to be practicing earnings management, thus reducing the share prices. Earnings management practices accordingly reduce the relevance of earnings information to the market. To some extent, this will make investors forgo earnings information as a consideration in making an investment decision.

Next, the results in Table 3 show that book value information is not value relevant to the market. The interaction term between book value and discretionary accruals is also not significant, which means that there is no evidence that the presence of earnings management influences the value relevance of book value of equity. Therefore, the third hypothesis is rejected. The result is consistent with the study of Sholihah (2013), which found that earnings management does not affect the value relevance of book value. In contrast, the result is not consistent with Kusuma (2006) and Paluruan and Siregar (2009), in which both of the studies found that earnings management moderates the value relevance of book value. The difference could be a result of different measures of earnings management practices.

The results indicate that investors do not utilize information regarding book value; therefore, the presence of earnings management would not have any impact on the decision-making process. Book value is one of the information provided by the statement of financial position. This information might not have a direct impact on the decision-making process, since information regarding book value does not directly affect the future expected cash flows of the corporation.

Lastly, Table 3 shows that cash flows information is positive and significant (p -value < 0.01), meaning that this information is value relevant to the market. However, the interaction between cash flows information and earnings management does not show a significant result. It rejects the fourth hypothesis, which means that earnings management practices do not moderate the value relevance of cash flows information.

The value relevance of cash flows information is consistent with the result of the first hypothesis testing, which indicates that investors still regard cash flows as essential information in the valuation process and in making investment decisions. Cash flows information is vital in determining the financial health of a company; thus, investors are commonly interested in whether the company is able to generate excess cash. Moreover,

the cash position reflects the real condition of the corporation; therefore, the information presented might not be easily manipulated. It also supports the findings of Kusuma (2006), Paluruan and Siregar (2009), and Sholihah (2013). The non-significant result of the interaction variable between cash flows and earnings management suggests that the value relevance of cash flows information still holds, and it is not affected by the presence of earnings management practices.

CONCLUSION

Accounting information is one consideration that is used by investors in making investment decisions. It requires a corporation to provide value relevant financial information to the investors. When manipulated, financial information might be no longer trustworthy, thus losing its value relevant to the market. It could potentially happen when there are earnings management practices in the process of financial reporting.

This study is conducted to examine the value relevance of accounting information, which consists of earnings, book value, and cash flows. Furthermore, it is to examine whether the value relevance of accounting information is affected by the presence of earnings management practices. The earnings management model used in this study is the performance-adjusted modified Jones model, and the research object consists of the publicly listed manufacturing companies in 2014.

The results show that the accounting information, which consists of earnings, book value, and cash flows, affects the share prices when tested simultaneously; thus, the accounting information is value relevant to the market. It indicates that investors still consider the fundamental aspect of a company when making investment decisions.

Furthermore, in the presence of earnings management practices, the results show that the value relevance of accounting information is diminished. It particularly exists when earnings were examined. At first, earnings are value relevant to the market. However, when earnings management is present, the value relevance of earnings is reduced, which means that earnings management moderates the value relevance of earnings. When the book value is examined, there is no indication that this particular information is value relevant; therefore, the presence of earnings management does not have any effect on it. When examining cash flows, in particular, it is found that cash flows are value relevant to the market. However, there is no indication that the presence of earnings management has any impact on it. It can be concluded that the presence of earnings management could only affect the value relevance of certain accounting information.

This study limits the accounting information on earnings, book value, and cash flows only. There could be more information that can be utilized to examine the value relevance of accounting information. Additionally, the value relevance model that is used in this study is the simplified version of the Ohlson model. Further studies should consider using the more advanced value, relevance model. Other earnings management models could also be considered since this study only uses the performance-adjusted modified Jones model. More observations could be obtained by using more periods to enhance the external validity of the study.

REFERENCES

- Al Hamsah, M. H. (2015). Pengaruh kinerja akuntansi dan leverage terhadap harga saham: Studi empiris pada perusahaan bank, property dan real estate yang terdaftar di bursa efek Indonesia periode 2011-2013. *Jurnal Ilmiah Mahasiswa FEB Universitas Brwajaya*, 3(2), 1-15.

- Arifah, S. (2010). Arus kas dan laba variabel untuk memprediksi arus kas masa depan. *Jurnal Penelitian Inovasi*, 33(1), 89–98.
- Azhmi, M. F., & Subekti, I. (2014). Relevansi nilai laba, nilai buku, dan pengungkapan informasi melalui website perusahaan. *Jurnal Ilmiah Mahasiswa FEB Universitas Brawijaya*, 3(1), 1–22.
- Bangun, P., & Yuniana. (2009). Analisis atas pengaruh EPS, ROE, dan arus kas terhadap harga saham: Studi empiris pada industri barang konsumsi di BEJ. *Jurnal Akuntansi Krida Wacana*, 9(3), 183–202.
- Barth, M. E., Beaver, W. H., & Landsman, W. R. (2001). The relevance of the value relevance literature for financial accounting standard setting: Another view. *Journal of Accounting and Economics*, 31(1), 77–104. [https://doi.org/10.1016/S0165-4101\(01\)00019-2](https://doi.org/10.1016/S0165-4101(01)00019-2)
- Fachruddin, W. (2013). Pengaruh pembagian dividen kas, arus kas, ROA dan EPS terhadap harga saham pada perusahaan manufaktur consumer goods industry di bursa efek Indonesia tahun 2005-2008. *Jurnal Keuangan Dan Bisnis*, 5(3), 220–226.
- Francis, J., & Schipper, K. (1999). Have financial statements lost their relevance? *Journal of Accounting Research*, 37(2), 319–352.
- Gitman, L. J., & Zutter, C. J. (2015). *Principles of Managerial Finance Brief* (7th ed.). Pearson Education, Inc.
- Halim, J., Meiden, C., & Tobing, R. L. (2005). Pengaruh manajemen laba pada tingkat pengungkapan laporan keuangan pada perusahaan manufaktur yang termasuk dalam indeks LQ-45. *Symposium Nasional Akuntansi VIII Solo, 15-16 September*, 117–137.
- Handayani, R. S., & Rachadi, A. D. (2009). Pengaruh ukuran perusahaan terhadap manajemen laba. *Jurnal Bisnis Dan Akuntansi*, 11(1), 33–56. <https://doi.org/10.1143/PTP.105.537>
- Ifonie, R. R. (2012). Pengaruh asimetri informasi dan manajemen laba terhadap cost of equity capital pada perusahaan real estate yang terdaftar di bursa efek Indonesia. *Jurnal Ilmiah Mahasiswa Akuntansi*, 1(1), 103–107. <https://doi.org/10.14414/jebav.v21i1.1117>
- Ikatan Akuntan Indonesia. (2014). *Pernyataan Standar Akuntansi Keuangan: Laporan Arus Kas*. Jakarta: Salemba Empat.
- Jensen, M. C., & Meckling, W. H. (1976). Theory of the firm: Managerial behavior, agency costs, and ownership structure. *Journal of Financial Economics*, 3, 305–360.
- 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(4), 71–80. <https://doi.org/10.5539/ijef.v5n4p71>
- Kothari, S. P., Leone, A. J., & Wasley, C. E. (2005). Performance matched discretionary accrual measures. *Journal of Accounting and Economics*, 39(1), 163–197. <https://doi.org/10.1016/j.jacceco.2004.11.002>
- Kusuma, H. (2006). Dampak manajemen laba terhadap relevansi informasi akuntansi: Bukti empiris dari Indonesia. *Jurnal Akuntansi Dan Keuangan*, 8(1), 1–12. <https://doi.org/10.9744/jak.8.1.pp.1-12>
- Linda, & Syam, F. B. (2005). Hubungan laba akuntansi, nilai buku, dan total arus kas dengan market value: Studi akuntansi relevansi nilai. *Jurnal Riset Akuntansi Indonesia*,

8(3), 286–306.

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- Makhdalena. (2012). Pengaruh proporsi komisaris independen dan komposisi komite audit terhadap earnings management: Studi pada perusahaan konglomerasi yang listing di Bursa Efek Indonesia. *Jurnal Akuntansi*, 16(3), 336–349.
- Ohlson, J. A. (1995). Earnings, book-values, and dividends in equity valuation. *Contemporary Accounting Research*, 11(2), 661–687.
- Paluruan, A. R. N., & Siregar, B. (2009). Dampak manajemen laba terhadap relevansi informasi laporan keuangan dimoderasi oleh akrual diskresioner jangka pendek dan jangka panjang. *Jurnal Ekonomi & Bisnis*, 3(2), 145–166.
- Puspitaningtyas, Z. (2012). Relevansi nilai informasi akuntansi dan manfaatnya bagi investor. *Ekuitas: Jurnal Ekonomi Dan Keuangan*, 16(2), 164–183. <https://doi.org/10.24034/j25485024.y2012.v16.i2.2321>
- Rahman, A. F. (2011). Masalah keagenan aliran kas bebas, manajemen laba dan relevansi nilai informasi akuntansi. *Ekuitas: Jurnal Ekonomi Dan Keuangan*, 15(2), 232–246.
- Rosari, E. C. (2014). Relevansi laba akuntansi dan nilai buku terhadap harga saham dengan moderasi corporate governance pada perusahaan yang terdaftar di BEI tahun 2010-2012. *Calyptra: Jurnal Ilmiah Mahasiswa Universitas Surabaya*, 3(2), 1–15.
- Scott, W. R. (2015). *Financial Accounting Theory* (7th ed.). Pearson Canada Inc.
- Sholihah, H. P. (2013). The effect of earnings management on the value relevance of earnings and book value. *Jurnal Ilmiah Mahasiswa FEB Universitas Brwijaya*, 1(2), 1–15.
- Suastawan, I. P. (2014). Pengaruh arus kas bebas dan profitabilitas pada kebijakan utang perusahaan real estate. *E-Jurnal Akuntansi Universitas Udayana*, 9(3), 685–694.
- Subekti, I. (2010). Earnings management, value relevance of earnings and book value of equity. *Jurnal Akuntansi Dan Auditing Indonesia*, 14(2), 213–232.
- Subramanyam, K. R. (2017). *Analisis Laporan Keuangan* (Edisi 11). Salemba Empat.
- Suhendah, R., & Imelda, E. (2012). Pengaruh informasi asimetri, kinerja masa kini dan kinerja masa depan terhadap earnings management pada perusahaan manufaktur yang go public dari tahun 2006-2008. *Jurnal Akuntansi*, 16(2), 262–279.
- Sulia. (2012). Pengaruh laba akuntansi, arus kas, dan debt to equity ratio terhadap harga saham perusahaan LQ45 yang terdaftar di Bursa Efek Indonesia. *Jurnal Wira Ekonomi Mikroskil*, 2(2), 85–94. <https://doi.org/10.14198/jhse.2016.113.05>
- Sutarti. (2012). Penyajian laporan arus kas menurut PSAK 2 guna mendukung pengambilan keputusan investasi pada PT. PAN Brothers TBK (Cash flow statement based on PSAK 2 for investment decision making). *Jurnal Ilmiah Kesatuan*, 14(1), 87–91.
- Tiro, M. A. (2010). *Dasar-Dasar Statistika*. Badan Penerbit Universitas Negeri Makassar.
- Weygandt, J. J., Kimmel, P. D., & Kieso, D. E. (2013). *Financial Accounting IFRS Edition*. John Wiley & Sons, Inc.
- Widiastuti, N. P. E., & Meiden, C. (2013). Relevansi nilai laba dan buku ekuitas dengan dimoderasi oleh aspek perpajakan. *Media Riset Akuntansi*, 3(1), 105–125.
- Yendrawati, R., & Pratiwi, R. S. I. (2014). Relevansi nilai informasi Laba dan arus kas terhadap harga saham. *Jurnal Dinamika Manajemen*, 5(2), 161–170.

<https://doi.org/10.15294/jdm.v5i2.3658>

Yocelyn, A., & Christiawan, Y. J. (2012). Analisis pengaruh perubahan arus kas dan laba akuntansi terhadap return saham pada perusahaan berkapitalisasi besar. *Jurnal Akuntansi Dan Keuangan*, 14(2), 81–90. <https://doi.org/10.9744/jak.14.2.81-90>