

VALUE RELEVANCE & PREDICTIVE VALUE OF COMPREHENSIVE INCOME FROM ENTITIES LISTED IN ISE

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Abstract : *The increasing number of companies in the era of industrialization today, requires companies to be able to compete in national and international markets. One good company can be seen from the value of the company, maximizing company value means increasing company performance in order to achieve the company's vision. The purpose of this research is to find out whether the influence between capital structure (DER), profitability (ROA), liquidity (CR), company growth and company size on firm value. The population in this study is the food and beverage sub-sector manufacturing companies listed on the Indonesia Stock Exchange in the 2015-2018 period. The sample in this study were 11 companies that met the criteria in the study. Data analysis technique used is multiple linear regression. The results showed a significant influence is capital structure and profitability. The benefit of this research is to provide additional information to researchers who will develop knowledge in the field of financial accounting.*

1 INTRODUCTION

The convergence of the International Financial Reporting Standards (IFRS) in Indonesia has an impact on the presentation of financial statements, one of which is the company's obligation to present a statement of profit or loss and other comprehensive income. This change requires companies to not only present net income, but also comprehensive income in their financial statements. The statement of profit or loss and other comprehensive income is different from the income statement because of the presentation of the company's comprehensive income. Comprehensive income considers all changes in equity, other than those caused by transactions with owners. It includes net income and other comprehensive income. Comprehensive income which consists of income and expense items (including reclassification adjustments) that is not recognized in the income statement, but which directly affects equity, is referred to as other comprehensive income (IAI, 2013).

IFRS convergence should be able to improve the quality of financial statements in Indonesia, which is illustrated by the quality of comprehensive income that is superior when compared to net income. This is consistent with the results of research from Biddle & Choi (2006) which states that comprehensive income improves the quality of financial statements. Conversely, according to Aldheimer & Huynh (2015), Dhaliwal et al., (1999), Pășcan (2014), it appears that comprehensive income does not improve the quality of financial statements when compared to net income.

This research is an explanatory research, where the aim of the research is to find out more about the quality of net income and comprehensive income, which is proxied by the value relevance and predictive value of both after IFRS convergence. Then, this research will compare the value relevance and predictive value of comprehensive income, which is presented in the financial statements after IFRS convergence, when compared to net income.

The results of this study indicate that both net income and comprehensive income have the quality of value relevance and predictive value. However, contrary to the objectives of the IASB regarding the establishment of IFRS, it is found that the value relevance and predictive value of net income is superior when compared to

comprehensive income. So, it indicates that IFRS convergence in Indonesia has not been able to improve the quality of financial statements, especially related to the presentation of earnings.

In addition, from the robustness test conducted in this study, it is found that the component of comprehensive income that has a value relevance and predictive value is net income itself. If there is a significant component of other comprehensive income, it is only due to the specific period under study and the uncertain period of time. This shows that the value relevance and predictive value shown by comprehensive income mainly comes from the value relevance and predictive value of net income.

2 LITERATURE REVIEW

Earnings quality is one of the focus of financial statements, because they are used as a summary measure of firm performance by a wide range of users (Dechow, 1994). Alali & Foote (2012), Barth et al., (2008), Beest & Boelens (2009) and Liu & Liu (2007) in Cahyonowati & Ratmono (2013) state that high quality information in financial statements is indicated by a strong relationship between stock price / return and earnings and book value of the company's equity, or what is commonly referred to as value relevance. This is in accordance with research from Ohlson (1995). Ohlson (1995) proposed a model that reflect the price of a company in its share price, where the company's stock price is a function of the company's income and the book value of the company. Kothari & Zimmerman (1995) in their study stated that in addition to the price model, researchers can also use the return model to view information content from income. Dhaliwal et al. (1999) in his research found that net income and comprehensive income were both significant, whether on price or stock returns. Therefore, in this study both stock prices and stock returns are used as proxies to measure information content of income.

Meanwhile, according to Beest & Boelens (2009) and Dechow et al. (1998), the operationalization of the quality of financial statements is from its ability to predict the condition of the company in the future, which can be done by looking at the ability of the report to predict earnings and the company's ability to generate cash flow in the future. To measure the predictive value of income, the first proxy used is the ability of earnings to predict the company's operating cash flow. Fraser & Ormiston (2013) state that the operation of a business depends on its success to generate operating cash flow. That's why, operating cash flow becomes important in its function as an analytical tool to determine the financial health of a business. In relation to operating cash flow, a company's income can be used to predict the company's operating cash flow in the future, especially one year after the fiscal year. This is because one of the changes in income is influenced by changes in company sales, which basically will affect the company's operating cash flow in the next fiscal year. Dechow et al., (1998) also found that company's income is a good predictor of the company's operating cash flow in the following fiscal year.

The second proxy used to measure the predictive value of income is its ability to predict future income. Graham and Dodd (1951) in Frankel & Litov (2009) state that past records can be used as an initial basis for assessing the future. Finger (1994) states in her research that income is a significant predictor of future income. Based on the facts and theories above, the following hypotheses will be tested in this study:

H1: Presentation of net income illustrates the quality of financial statements, which is proxied from value relevance.

H2: Presentation of net income illustrates the quality of financial statements, which is proxied from predictive value.

H3: The presentation of comprehensive income illustrates the quality of financial statements, which is proxied from value relevance.

H4: The presentation of comprehensive income illustrates the quality of financial statements, which is proxied from predictive value.

H5: Presentation of comprehensive income significantly increases the quality of financial statements when compared to net income, which is proxied from value relevance.

H6: Presentation of comprehensive income significantly improves the quality of financial statements when compared to net income, which is proxied from predictive value.

3 METHODOLOGY

This research is a basic research that aims to develop general knowledge about the quality of net income and comprehensive income, with value relevance and predictive value as a proxy, and to test which one is superior. The paradigm used is a quantitative approach.

The data used in this study are secondary data in the form of financial statements that have been published by companies listed on the Indonesia Stock Exchange (IDX) based on the IDX Fact Book except for financial sector companies, along with the company's stock prices for the period 2011-2014. Data obtained from the official website of the IDX and Yahoo! Finance with non-probability sampling as sample selection techniques, namely purposive judgmental sampling, the number of samples used in the study is 172 to 271 firm-years, depending on the regression model.

The model used in this study adopted the model in the study of Dhaliwal et al. (1999), namely:

- a. To test H1:
 $P_t = \alpha_0 + \beta_1 * NI_t + \varepsilon_t$ (1)
 $R_t = \alpha_0 + \beta_1 * NI_t + \varepsilon_t$ (2)
- b. To test H2:
 $CF_{t+1} = \alpha_0 + \beta_1 * NI_t + \varepsilon_t$ (3)
 $NI_{t+1} = \alpha_0 + \beta_1 * NI_t + \varepsilon_t$ (4)
- c. To test H3:
 $P_t = \alpha_0 + \beta_1 * COMP_t + \varepsilon_t$ (5)
 $R_t = \alpha_0 + \beta_1 * COMP_t + \varepsilon_t$ (6)
- d. To test H4:
 $CF_{t+1} = \alpha_0 + \beta_1 * COMP_t + \varepsilon_t$ (7)
 $NI_{t+1} = \alpha_0 + \beta_1 * COMP_t + \varepsilon_t$ (8)

Where:

P	= Market value of common equity at fiscal year-end
CF	= Net cash flow from operating activities
NI	= Net income
COMP	= Comprehensive Income
R	= Daily percentage returns compounded over the fiscal year.

The value of this variable is calculated from the daily stock price throughout the fiscal year, then the returns are sought through the natural logarithm from (P_{d+1}/P_d) , and then averaged, then compounded with the formula of $[(1+R_d)^{365}-1]$. P is price, d is day, and R is return.

H1 to H4 are tested by regression test, t test, F test, and coefficient of determination for all the models available. H5 and H6 are tested with Vuong likelihood ratio test which can state the explanatory power between the two existing models, whether the explanatory power is the same or different. Using the coefficient of determination (R^2), this test will assess which model has the closest distribution to the actual distribution model. The Z Vuong's Statistics formula is (Daraghma, 2010; Widiastuti, 2009):

$$Z_{vuong} = \frac{\{\ln(\sigma_w^2) - \ln(\sigma_x^2)\}}{[n^{0.5} \sum_1^n (\frac{e_{w,i}^2}{\sigma_w^2} - \frac{e_{x,i}^2}{\sigma_x^2})]^2}$$

$$\sigma_x^2 = \sigma_y^2(1 - R_x^2)$$

$$\sigma_w^2 = \sigma_y^2(1 - R_w^2)$$

Information:

R^2	= Coefficient of Determination
σ_w^2	= The residual variance for the model with NI_t as independent variable
σ_x^2	= The residual variance for the model with $COMP_t$ as independent variable
σ_y^2	= The variance of dependent variable (P_t, CF_{t+1}, NI_{t+1})
n	= Number of firm-years in the model
e	= Error

The null and alternative hypotheses of the tests are:

HO: $Z_{\text{vuong}}=0$, the two models have the same explanatory power

H1: $Z_{\text{vuong}} \neq 0$, the two models do not have the same explanatory power

If $Z_{\text{vuong}} < 0$, it implies that the model with NI_t as independent variable have bigger explanatory power. Conversely, if $Z_{\text{vuong}} > 0$, then the model with $COMP_t$ as independent variable have bigger explanatory power. The result of Z Vuong is significant at 5% significance level if Z Vuong calculated is bigger or smaller than ± 1.96 .

This research will also do *robustness test* to test the sensitivity of the results of hypothesis testing that have been carried out in the previous section. Robustness test is done by replacing the independent variable of comprehensive income in models (5) through (8) into some components of comprehensive income itself. The model used is:

$$P_t = \alpha_0 + \beta_1 * NI_t + \beta_2 * COMP_{FC-ADJ} + \beta_3 * COMP_{MKT-ADJ} + \beta_4 * COMP_{OTHER} + \varepsilon_t \dots \dots \dots (9)$$

$$R_t = \alpha_0 + \beta_1 * NI_t + \beta_2 * COMP_{FC-ADJ} + \beta_3 * COMP_{MKT-ADJ} + \beta_4 * COMP_{OTHER} + \varepsilon_t \dots \dots \dots (10)$$

$$CF_{t+1} = \alpha_0 + \beta_1 * NI_t + \beta_2 * COMP_{FC-ADJ} + \beta_3 * COMP_{MKT-ADJ} + \beta_4 * COMP_{OTHER} + \varepsilon_t \dots \dots \dots (11)$$

$$NI_{t+1} = \alpha_0 + \beta_1 * NI_t + \beta_2 * COMP_{FC-ADJ} + \beta_3 * COMP_{MKT-ADJ} + \beta_4 * COMP_{OTHER} + \varepsilon_t \dots \dots \dots (12)$$

Information:

P	= Market value of common equity at fiscal year-end
CF	= Net cash flow from operating activities
NI	= Net income
COMP	= Comprehensive Income
R	= Daily percentage returns compounded over the fiscal year.
COMP _{FC-ADJ}	= Other comprehensive income from change in cumulative foreign currency translation adjustment, after tax
COMP _{MKT-ADJ}	= Other comprehensive income from change in the balance of unrealized gains and losses on marketable securities, after tax
COMP _{OTHER}	= Other comprehensive income from other component other than COMP _{FC-ADJ} dan COMP _{MKT-ADJ} , after tax

4 FINDINGS AND DISCUSSION

Table 2 shows the results of the linear regression test and the t test. Both tests show that all independent variables have significant positive effect on the dependent variable. The results of the F test are the same as the results of the t test because the models (1) to (8) just consist of 1 independent variable. In Table 3, it can be seen that the model with the greatest coefficient of determination is in the model with the NI_{t+1} as dependent variable. Based on the results of tests, it is found that both net income and comprehensive income illustrate the quality of value relevance and predictive value of the financial statements. This result is in accordance with El Shamy & Kayed (2005), that net income is significant positive to the price of shares, and the information content of net income is greater when compared to the book value of the company. Finger (1994) and Kim & Kross (2005) state that net income has predictive value. The predictive value of net income is due to a certain stability trend in income, so that the past record can be used as an initial basis to assess the future, or in this case the following year's net income.

The value relevance of comprehensive income can be explained by the nature of comprehensive income that require managers and analysts to consider all factors, both internal and external, which can affect owner's equity (Khan, 2012). With comprehensive income, all information related to changes in equity that do not come from owner's transactions can be obtained, in accordance with clean surplus accounting where all changes, not including the one from owner's transactions, will appear on the income statement. Comprehensive income that includes internal and external factors should be better related to the company's value when compared to net income.

Bratten et al., (2014); Choi & Zang, (2006) state that comprehensive income is predictive. These results, according to Choi & Zang (2006), are caused by elements in other comprehensive income which are unrealized

gains and losses. Unrealized gains and losses give managers the freedom to determine the time of recognition of unrealized gains and losses. This causes the predictive value of net income to decrease due to the element of manager's freedom to choose a time of recognition that is profitable for the company. Thus, comprehensive income should have a better predictive value because it involves all information related to company gains or losses obtained in the current period, both realized and unrealized.

For testing the 5th Hypothesis that compares the value relevance between net income and comprehensive income, the coefficient of determination between the model with net income as independent variable and the model with the comprehensive income as independent variable can be compared. When compared, R^2 from net income is greater than comprehensive income. This result is in accordance with the results of the Vuong test in Table 4, which found that although both of them have significant effect on stock prices and stock returns, in fact the relevance of net income is higher when compared to comprehensive income. These results are consistent with the research of Elliott & Hanna (1996); Hayn (1995); Sudipta Basu (1997), where the components of comprehensive income that tends not to repeat, namely in other comprehensive income, causes disbelief in comprehensive income and ultimately reduce the value relevance of comprehensive income itself.

Although the explanatory power of net income is stronger, the superiority is insignificant because the value of Z Vuong is still smaller / greater than $-/+1.96$. This result can be explained by two reasons. First, the insignificant net income superiority can be caused by the most significant component of comprehensive income is the net income itself. In Appendix 4, it appears that on average, 85.4% of the components of comprehensive income in the company's years are net income. So, the significance of the net income dominates the test results of other components of comprehensive income, which may not have any value relevance.

The second reason for the insignificance of net income excellence can be explained by pros and cons that are still going in research between the benefits of net income and comprehensive income. This in the end brings confusion for users of financial statements in utilizing accounting information. There are users who prefer to use net income, but the use of comprehensive income is also gaining in popularity. As a result, net income and comprehensive income are both significant because each can be used to describe the relationship with stock prices and returns, although it is found that net income is still superior in describing stock prices and returns.

To test hypothesis 6 that compares the predictive value between net income and comprehensive income, it can be done by comparing the coefficient of determination between the models with each net income and comprehensive income as independent variable. The result of coefficient of determination, R^2 (adjusted R square) from net income for the regression model with operating cash flow for the following year and net income for the following year as dependent variable are again greater when compared to comprehensive income. These results are consistent with the results of the Vuong test in Table 4, which found that although both are equally significantly related to the following year's operating cash flow and net income, net income has a higher predictive value in describing the following year's operating cash flow and net income compared to comprehensive income.

These results are the same as stated by Beale & Davey (2001) in their research, that net income has better predictive ability when compared to comprehensive income. Pronobis & Zülch (2011) also stated that the predictive value of comprehensive income is not superior when compared to net income. In addition, according to Black (1993) in Dhaliwal et al., (1999), accounting variables such as income can maximize the information content if the income does not include many extraordinary and non recurring items. Because of the nature of comprehensive income components that are more volatile and tend not to be persistent, it causes a reduction in the ability of comprehensive income to predict future company performance when compared to net income.

Robustness test in this study is conducted to test the sensitivity of the results from hypothesis testing that had been done in the previous section. Additional analysis is carried out by breaking down comprehensive income in the regression model 3.5 to 3.8 into the constituent components of comprehensive income itself, namely net income (NI_t), other comprehensive income from change in cumulative foreign currency translation adjustment, after tax ($COMP_{FC-ADJ}$), other comprehensive income from change in the balance of unrealized gains and losses on marketable securities, after tax ($COMP_{MKT-ADJ}$), and other comprehensive income from other component other than $COMP_{FC-ADJ}$ dan $COMP_{MKT-ADJ}$, after tax ($COMP_{OTHER}$). The $COMP_{FC-ADJ}$ and $COMP_{MKT-ADJ}$ variables are chosen to be used as separate variables because the number of firm years that owns the two components is the most compared to the other components.

From the results of the robustness test in Table 5, it can be seen that the significant component of comprehensive income is only net income, except in equation (11) which shows that $COMP_{OTHER}$ is significant. This can be explained by comprehensive income which also has a predictive value towards future cash flows,

only for an uncertain period of time (Palea & Scagnelli, 2017). This relates to other components of comprehensive income which are unrealized gain or loss. It can remain on the balance sheet for several periods before the gain or loss can be recognized. Other comprehensive income also recognizes several economic events that affect cash flow. According to Pronobis & Zülch (2011), the results related to the predictive value of other comprehensive income components are highly dependent on the period under study, because for one period the results could be significant while the other periods were not. The predictive value of comprehensive income will be significant if the study period is more than one period.

These results can support the superiority of net income when compared to comprehensive income, because actually the value relevance of comprehensive income is caused by only one component, namely net income, while the other components do not describe the price and stock returns of the company. Likewise for predictive value, it is found that net income is the most significant component of the dependent variable among other components of comprehensive income. This means that the component of comprehensive income that has the most significant predictive value for the following year's operating cash flow and net income is only net income.

5 CONCLUSION

The testing of hypothesis in this research show that net income has a value relevance, meaning that net income has a significant influence on the dependent variable in the study, namely stock prices at the end of the fiscal year and stock returns. The effect of net income on stock prices and stock returns is positive which means it is in the same direction. The results also show that net income has a significant predictive value on the following year's operating cash flow and the following year's net income. The relationship of net income to the following year's operating cash flow and net income of the following year is positive which means it is in the same direction.

For testing the third hypothesis, the test results show that comprehensive income also has significant value relevance in describing stock prices and stock returns. The relationship owned by comprehensive income to stock prices and stock returns is positive which means it is in the same direction. For testing the fourth hypothesis, the test results show that comprehensive income has a significant predictive value on the following year's operating cash flow and net income. The relationship of comprehensive income to the following year's operating cash flow and net income is positive which means it is in the same direction.

Testing of the fifth hypothesis shows that net income has more value relevance and can explain the figures on stock prices at the end of the fiscal year and stock returns when compared to comprehensive income. But the superiority of the value relevance of net income is insignificant when compared to comprehensive income. For the sixth hypothesis test, it is found that net income has a higher predictive value in estimating operating cash flow and net income for the following year when compared to comprehensive income. But the superiority of net income prediction compared to comprehensive income is again insignificant. To improve the quality of research, the recommendation for future research is to use a longer research period to better capture the predictive value of comprehensive income, and cover the research period after 2014 in order to be able to show the impact of standard improvement after IFRS convergence. Lastly, other assessment of earnings quality can be used in addition of value relevance and predictive value.

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TABLE

Table 1: Descriptive Statistics for Regression Model (1)-(12)

	N	Minimum	Maximum	Mean	Std. Deviation
Regression Model (1)					
P_t	2 71	25,0000	25.267,2050	2.397,874393	4.059,6143322
NI_t	2 71	0,2021	5.206,7688	257,854513	535,9116512
Regression Model (2) dan (6)					
R_t	1 72	0,0006692 4	11,4675810 2	0,971679274 0	1,3254551355 3
NI_t	1 72	0,0000620 6	14,1561421 7	0,224480718 1	1,0803085525 7
Regression Model (3)					
CF_{t+1}	2 19	0,0508	5.163,9037	365,644886	671,8919619
NI_t	2 19	0,2021	5.206,7688	286,404444	584,4951804
Regression Model (4)					
NI_{t+1}	2 71	0,2637	5.618,0830	257,061365	563.6242162
NI_t	2 71	0,2021	5.206,7688	257,854513	535.9116512
Regression Model (5)					
P_t	2 70	25,0000	25.267,2050	2.406,003743	4.064,9425871
$COMP_t$	2 70	0,1725	5.273,7154	280,565734	557,5308967
Regression Model (6)					
R_t	1 72	0,0006692 4	11,4675810 2	0,971679274 0	1,3254551355 3
$COMP_t$	1 72	0,0000670	15,1356108	0,254791275	1,1594601437
Regression Model (7)					
CF_{t+1}	2 18	0,0508	5.163,9037	366,195674	673,3887645
$COMP_t$	2 18	0,2018	5.273,7154	311,902414	607,9790651
Regression Model (8)					
NI_{t+1}	2 70	0,2637	5.618,0830	25,353718	564,6502868
$COMP_t$	2 70	0,1725	5.273,7154	280,565734	557,5308967
Regression Model (9) dan (12)					

P_t	$\frac{1}{50}$	25,0000	22.448,8200	1.826,15880	3.126,9821703
NI_t	$\frac{1}{50}$	1,443	5.206,769	223,81937	581,241828
$COMP_{FC-ADJ}$	$\frac{1}{50}$	0,00000	233,27179	11,2575221	37,99768780
$COMP_{MKT-ADJ}$	$\frac{1}{50}$	0,0000	118,4795	4,074609	16,0421904
$COMP_{OTHER}$	$\frac{1}{50}$	0,0000	1.793,9683	28,327952	195,2720474
NI_{t+1}	$\frac{1}{50}$	1,2972	5.618,0830	229,555809	630,5486603
Regression Model (10)					
R_t	$\frac{1}{00}$	0,0000	11,46758102	0,93256988	1,4403125984
NI_t	$\frac{1}{00}$	0,000062	14,1561422	0,290740133	1,4103727886
$COMP_{FC-ADJ}$	$\frac{1}{00}$	0,0000	0,9794686	0,026623395	0,1142761469
$COMP_{MKT-ADJ}$	$\frac{1}{00}$	0,0000	0,5777343	0,01518354	0,072371341
$COMP_{OTHER}$	$\frac{1}{00}$	0,0000	0,7175873	0,02201943	0,092317943
Regression Model (11)					
CF_{t+1}	$\frac{1}{20}$	0,0508	5.163,9037	344,489828	700,8530342
NI_t	$\frac{1}{20}$	1,622	5.206,769	250,44504	643,535650
$COMP_{FC-ADJ}$	$\frac{1}{20}$	0,00000	233,27179	11,1408717	39,44670093
$COMP_{MKT-ADJ}$	$\frac{1}{20}$	0,0000	102,0342	3,422446	13,7118462
$COMP_{OTHER}$	$\frac{1}{20}$	0,0000	1793,9683	35,181870	217,9549770

Source: Processed Research Data

Table 2: Result of Linear Regression Test for Regression Model (1)-(8)

Regression Model	Dependent Variable	Variable	B	Sig. t
(1)	P_t	(Constant)	1,958	0,000**
		NI	0,521	0,000**
(2)	R_t	(Constant)	0,036	0,744
		NI	0,371	0,000**
(3)	CF_{t+1}	(Constant)	0,274	0,008**
		NI	0,875	0,000**
(4)	NI_{t+1}	(Constant)	0,362	0,000**
		NI	0,815	0,000**
(5)	P_t	(Constant)	2,024	0,000**
		COMP	0,477	0,000**
(6)	R_t	(Constant)	-0,070	0,484
		COMP	0,273	0,003**
(7)	CF_{t+1}	(Constant)	0,262	0,014**
		COMP	0,861	0,000**
(8)	NI_{t+1}	(Constant)	0,440	0,000**

		COMP	0,758	0,000**
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Source: Processed Research Data

** significant at 5% significance level

Notes: For model with R_t as dependent variable, the score of all variables except R_t are deflated by market value of common equity at the previous fiscal year-end. For other models, the score of all variables except P_t are deflated by number of shares of common stock outstanding at fiscal year-end adjusted for stock splits and stock dividends. Samples used for each model are (in firm-years): (1) 271 (2) 172 (3) 219 (4) 271 (5) 270 (6) 172 (7) 218 (8) 270

Table 3: Result of Coefficient of Determination Analysis for Regression Model (1)-(8)

Model Regresi	Adjusted R Square	Model Regresi	Adjusted R Square
(1)	0,377	(5)	0,327
(2)	0,070	(6)	0,045
(3)	0,589	(7)	0,576
(4)	0,727	(8)	0,646

Source: Processed Research Data

Table 4: Vuong Test Result

Measurement	Dependent Variable			
	P_t	R_t	CF_{t+1}	NI_{t+1}
σ_y^2	0,376	1,757	0,582	0,482
σ_{ni}^2	0,234248	1,62523	0,238038	0,131104
σ_{comp}^2	0,252296	1,66739	0,245604	0,169664
$\{\ln(\sigma_{ni}^2) - \ln(\sigma_{comp}^2)\}$	-0,07422	-0,0256	-0,03129	-0,25783
$\sum_{i=1}^n \left(\frac{e_{ni,i}^2}{\sigma_{ni}^2} - \frac{e_{comp,i}^2}{\sigma_{comp}^2} \right)$	-1,3247	-1,4526	-0,27046	-1,58701
$[n^{0.5} \sum_{i=1}^n \left(\frac{e_{ni,i}^2}{\sigma_{ni}^2} - \frac{e_{comp,i}^2}{\sigma_{comp}^2} \right)]^2$	473,7705	362,9069	15,94612	680,0186
Z_{vuong}	-0,00016	-0,000071	-0,00196	-0,00038

Source: Processed Research Data

Table 5: Result of Linear Regression Test for Regression (9)-(12)

Regression Model	Dependent Variable	Variable	B	Sig. t
(9)	P_t	(Constant)	1.509,153	0,000**
		NI_t	2,045	0,000**
		$COMP_{FC-ADJ}$	-5,824	0,357
		$COMP_{MKT-ADJ}$	-17,884	0,234
		$COMP_{OTHER}$	-0,083	0,946
(10)	R_t	(Constant)	0,921	0,156
		NI_t	0,306	0,191
		$COMP_{FC-ADJ}$	-2,179	2,361
		$COMP_{MKT-ADJ}$	-0,913	2,030
		$COMP_{OTHER}$	-0,239	1,576
(11)	CF_{t+1}	(Constant)	77,365	0,012**

		NI _t	0,969	0,000**
		COMP _{FC-ADJ}	0,447	0,510
		COMP _{MKT-ADJ}	-0,441	0,822
		COMP _{OTHER}	0,600	0,000**
(12)	NI _{t+1}	(Constant)	-8,159	0,435
		NI _t	1,068	0,000**
		COMP _{FC-ADJ}	-0,052	0,829
		COMP _{MKT-ADJ}	0,111	0,846
		COMP _{OTHER}	-0,046	0,326

Source: Processed Research Data

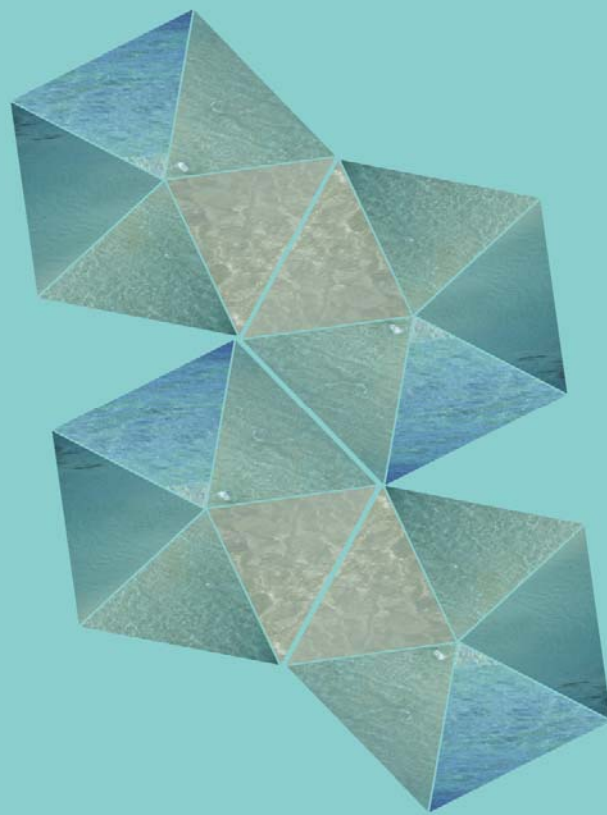
** significant at 5% significance level

Notes: For model with R_t as dependent variable, the score of all variables except R_t are deflated by market value of common equity at the previous fiscal year-end. For other models, the score of all variables except P_t are deflated by number of shares of common stock outstanding at fiscal year-end adjusted for stock splits and stock dividends. Samples used for each model are (in firm-years): (9) 150 (10) 100 (11) 120 (12) 150

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[Full Issue](#)

Articles

COMPARATIVE ANALYSIS BETWEEN LOCAL AND EXPATRIATE CONSUMERS CASE STUDY: LITTLE KICKERS INDONESIA

Rianto Nurcahyo, Mustika Tirani, Kareem Abdul Jabbar Pello

[PDF](#)

THE EFFECT OF E-LEARNING-BASED PROJECT LEARNING ON STUDENTS MOTIVATION

Annisa Dwi Astari, Citra Utami, Desty Kurnia Pratiwi, Prawidi Wisnu Subroto

[PDF](#)

FACTORS AFFECTING AUDIT QUALITY (Empirical Study of Public Accounting Firms in the City of Surakarta and Yogyakarta)

Crismonika Anggun Kusuma Dewi, Suhendro, Purnama Siddi

[PDF](#)

THE APPLICATION OF ASOCA ANALYSIS ON COMPETITIVENESS IMPROVEMENT STRATEGIES MUSLIM CLOTHING IN THE ASEAN REGION

Misrofingah, Sri Sugiarti

[PDF](#)

EFFECT OF WORK ENVIRONMENT AND JOB SATISFACTION ON EMPLOYEE PERFORMANCE IN PT. NESINAK INDUSTRIES

Yuan Badrianto, Muhamad Ekhsan

[PDF](#)

FACTORS AFFECTING THE VALUE OF COMPANIES IN THE FOOD AND BEVERAGE COMPANIES LISTED ON BEI

Rini Setyowati, Endang Masitoh, Purnama Siddi

[PDF](#)

THE INFLUENCE REGIONAL DEVICE UNIT WITH PERFORMANCE- BASED BUDGETING AS INTERVENING VARIABLES

Triana Lidona

[PDF](#)

VALUE RELEVANCE & PREDICTIVE VALUE OF COMPREHENSIVE INCOME FROM ENTITIES LISTED IN ISE

Yessica, Yie Ke Feliana

[PDF](#)

STUDY OF STUDENT SATISFACTION FROM THE MARKETING MIX ASPECT

Ragil Pardiyono

[PDF](#)

PRISON CONFLICT MANAGEMENT STRATEGY IN PREVENTING RIOTS

Riyanto

[PDF](#)

APPLICATION OF PERFORMANCE-BASED BUDGET ON PERFORMANCE MOTIVATION OF ENVIRONMENTAL SERVICE AND FORESTRY BENGKULU PROVINCE

Iswidana Utama Putra, Melly Susanti, Emy Wijaya

[PDF](#)

ANALYSIS OF FACTORS THAT INFLUENCE THE PAYMENT OF DEVIDENTS ON MANUFACTURING COMPANIES LISTED IN INDONESIA STOCK EXCHANGE 2012-2018

Awaliani Praditya Karisma Devi, Anita Wijanti, Yuli Chomsatu Samrotun

[PDF](#)

THE EFFECT OF SELF EFFICACY AND FRAUD DIAMOND ON FRAUDULENT BEHAVIOR ACADEMIC ACCOUNTING STUDENTS

Fatimah Azzahroh, Suhendro, Rosa Nikmatul Fajri

[PDF](#)

THE EFFECT OF STOCK PRICE AND TRADE VOLUME OF BID ASK SPREAD IN LQ 45 INDEX Period 2018-2019

Parulian

[PDF](#)

THE INFLUENCE OF TRAINING AND DISCIPLINE ON EMPLOYEE PERFORMANCE IN PT Y-TECH AUTOPARTS INDONESIA

Indra Setiawan

[PDF](#)

DETERMINANT OF STOCK PRICE OF COAL MINING COMPANY LISTED ON INDONESIA STOCK EXCHANGE 2014-2018

Nita Mayam Puspitasari, Suhendro, Rosa Nikmatul Fajri

[PDF](#)

FACTORS AFFECTING STOCK PRICES IN INSURANCE COMPANIES LISTED ON INDONESIA STOCK EXCHANGE

Rizki Arumsari, Riana R Dewi, Purnama Siddi

PDF

EARNINGS MANAGEMENT AT THE COMPANY THROUGH DEFERRED TAX ASSETS RESERVES

Nathania Sherly Oetama

PDF