

THE VALUE RELEVANCE OF INTERNATIONAL ACCOUNTING STANDARD IMPLEMENTATION AND AUDIT QUALITY

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ABSTRACT

The implementation of international accounting standards in Indonesia has significantly affected financial reporting. It increases information relevance for the investors because a fair value comprehensively represents assets and liabilities of an entity as of the balance sheet date. However, this triggers polemics over the value relevance of International Financial Reporting Standard (IFRS). This can be seen from stock price decline. This study aims to find out the effect of net income and other comprehensive income on stock price and to observe the effect of other comprehensive income moderated by audit quality. Furthermore this study also aims to find out the effect of the subjectivity of OCI components. Using a sample of 79 companies, the writer analyzes 2014 financial statements derived from Indonesia Stock Exchange. Based on the result, the predetermined hypotheses are unable to prove. Net income is the only variable that affects stock return. Thus it can be concluded that net income has a value relevance for the investors in making economic decisions.

Keywords: Net Income, Other Comprehensive Income, Stock Price and Audit Quality

INTRODUCTION

The implementation of international accounting standards affects the preparation of financial statement around the world, including Indonesia. Previous studies state that the implementation of International Financial Reporting Standard (IFRS) is unable to increase value relevance, especially in developing countries working on IFRS convergence. A study conducted by Nelly (2014) states that other comprehensive income does not affect stock return. It examines the 2013 and 2012 financial reporting periods when the IFRS started to obligatorily apply in Indonesia. This motivated the writer to conduct a further study in order to acquire a comprehensive picture of value relevance of IFRS-based financial reporting.

Indonesia has been working on IFRS convergence since 2009, and by 2012 most of international accounting standards have been adopted by Indonesian Financial Accounting Standards. Thus, 3 years after the implementation of IFRS, it is expected that the public information disclosure will be able to increase value relevance. Some parties doubt the increase of value relevance from the implementation of IFRS, because there's a concept of fair value within. The concept is considered hard to acquire because it requires more estimates, assumptions and judgments. One of IFRS-based reporting needing a high level of estimate, assumption and judgment is other comprehensive income reporting.

Previous studies conducted by Dhaliwal et al (1998) and Fargher & Zhang (2014) find a fact that OCI has a relatively small effect on stock return and tends to have no value relevance. On the other hand two other studies state differently. Biddle & Choi (2006) and Lee & Park (2013) state that OCI has a value relevance in which unrealized gain and loss on marketable securities and foreign currency translation adjustment show a positive effect on stock return.

These discrepancies may be caused by various audit qualities. Audit quality according to DeAngelo (1981) reflects the capability of auditor in finding misstatements or unfairnesses in the preparation of financial statements. Auditor is obliged to evaluate estimates, assumptions and judgment prepared by the management in the financial statement, including OCI reporting.

There are many studies on audit quality and its effect on value relevance of financial information. However, there is only a little studies that specifically relate it to other comprehensive income. This study is a replication of studies conducted by Lee & Park (2013) and Nelly (2014). The main discrepancy of this study is the application of OCI component that is "Changes in revaluation surplus of fixed assets and intangible assets." Unlike previous studies that relate it to stock return, this study specifically relate it to stock price only. Another discrepancy is that this study examine the 2014 data of research conducted in Indonesia. Based on the description above, moderated by audit quality, this study aims to find out the effect of net income and other comprehensive income on stock return.

The result shows that net income in IFRS-based reporting has a value relevance on stock price. A good audit quality is considered having a good effect on stock price. However, this study is unable to prove that the value of OCI and OCI component with a high or low subjectivity affect stock price. The contributions of this study are: **first**, there's an empirical evidence that shows that not all components of IFRS-based reporting have a high value relevance. This indicates that most of investors in Indonesia is still naive, where their trading in capital market is not based on the company financial statement. **Second**, a higher audit quality is considered affecting value relevance. Therefore an enhancement of audit quality is badly needed to enhance the quality of information.

LITERATURE STUDY

Economic and noneconomic informations are taken in account by market traders when making any investing decision. Various economic, social and political events and policy changes may contain relevant informations for them. They will respond to these informations so that it leads to market reaction. One of them is the implementation of IFRS on financial reporting that obliges entities to report their other comprehensive income and preferences in selecting auditor for their financial statements.

Agency theory is developed by Jensen & Meckling (1976). The theory modifies financial accounting model by adding human behavior aspect into economic model. The theory states that contractual relationship between the owner and manager is basically hard to realize, because their interests are conflicting each other. According to the theory, the main principle of work relationship between the giving authority (principal), which is the owner, and the receiving authority (agent). The relationship between principal and agent may lead to imbalance information or so called information asymmetry for the agent has much more information than the principal do, assuming each of them acts to maximize their own interests. Scott (2012) explains that there are two kinds of information asymmetry:adverse selection and moral hazard.

Fitriany (2011) explains that regarding moral hazard, manager tends to select auditor that provide discretion in deciding any preferred accounting procedure. IFRS requires entities to provide other comprehensive income as a part of comprehensive income statement, and this demands more estimates, assumptions and judgments. As it closely relates to fair opinion from auditor in other comprehensive income reporting, the management tends to select auditor that provide discretion to provide fair value of estimates, assumptions and judgments.

The concept of economic consequences first disclosed by Zeff (1978) in Scott (2013) states that financial statements provided by the management affect the businessmen, government and creditors in making decisions. Therefore income information disclosed by the management becomes the main focus of the financial statement users.

A study conducted by Shamki and Rahman (2012) states that most of investors use net income information in making investment decisions. A study conducted by Collins et al. (1997) proves that the value relevance of earning and book value does not decline. Although incremental value relevance of earning declines, the value relevance of book value increases. A study conducted by Nichols & Wahlen (2004) states that income information may now be a basis to forecast the next period's income, and the next year's income may forecast the dividend of the company. Income may be a useful information for the investors in

judging the probability of investment return reflected in the stock price increase as well as a higher dividend for both national and international investors.

Based on the previous studies, it can be concluded that net income information in financial statements is taken into account by the users to make economic decisions, including buying stocks, selling stocks and other investment activities. Thus, a higher net income leads to a higher stock price.

H_1 = Net Income affects stock price positively

OCI in IFRS fully describes the state of an entity, because OCI is a value containing unrealized gain or loss as of the balance sheet date. Hence, it can be used as an information to forecast the state of the entity in the future. A study specifically relating the relevance of OCI is one conducted by Biddle & Choi (2006). It proves that comprehensive income derived from traditional net income and fully comprehensive income affects stock return. A study conducted by Chambers et al. (2007) states that OCI components, such as unrealized gains and loss on marketable securities and foreign currency translation adjustment, affects stock price positively.

Based on the previous studies, it can be concluded that other comprehensive income is taken into account by the financial statement users to make investment decisions because it comprehensively represents unrealized gain or loss as of the balance sheet date. If a company tends to have a higher unrealized gain than loss, the investors will react faster towards information beneficial for them. Thus, a higher other comprehensive income leads to a higher stock price.

H_2 = Other Comprehensive Income affects stock price positively

The need to perform more estimates, assumptions and judgments to generate fair value may lead to the increasing number of reporting which does not reflect the actual condition of the company. This may mislead the financial statement users in making decisions. This condition is known as agency conflict due to information asymmetry. A study conducted by Fargher & Zhang (2014) states that the use of assumptions in fair value measurement may increase income management and reduce information value of income.

In order to reduce information asymmetry, an audit is needed. Watts and Zimmerman (1991) states that audit may reduce the agency cost. Audit quality depends on the process of auditing itself. Audit quality is often associated to the size of public accountant firm (KAP). A previous study conducted by Lee & Park (2013) states that there are reasons to make the size of KAP as an indicator of audit quality. **First;** A bigger public accountant firm, in this case KAP big four, often faces more lawsuits than a smaller KAP (non big four). **Second;** KAP big four put focus on reducing information asymmetry between agent and principal more than KAP non big four. **Third;** KAP big four has a better system of quality management and receives inspections from PCAOB more than KAP non big four, because in general KAP big four has much more clients. **Fourth,** KAP big four has a better capability of accounting and auditing than non big four, because they

have a better audit technology and are capable of maintaining the quality of their findings.

Audit quality will be the main focus of the investors, because a well-audited financial statement represents the true value of the company. Based on the description above, it can be concluded that OCI audited by a reputable KAP will give a signal to the investors that the statement is well-qualified, resulting a higher stock price.

$H_3 = \text{Other Comprehensive Income moderated by audit quality affects stock price positively}$

A study conducted by Lee & park (2013) states that OCI components have different subjectivity values. According to Lee & Park (2013), gain and loss from the revaluation of financial assets categorized as “available for sale” have a lower subjectivity than other OCI components, because securities instrument has a quotation in an active market as in the stock market, dealer market, brokerage market and inter principal market.

In order to improve the reliability of financial statements, especially ones applying fair value, an auditor have to ensure the fairness of assumptions, estimates and judgments provided by the management. An auditor's capability in this case reflects his quality. Hence, the auditors of KAP big four evaluate OCI components containing higher subjectivity better than those of KAP non big four.

$H^4 = \text{Moderated by audit quality, OCI components with higher subjectivities have a higher influence on stock price than those with lower subjectivities}$

RESEARCH METHOD

Using quantitative method, this study utilizes research model developed by Lee & Park (2013) and Nelly (2014) that apply the following OLS regression models. Data are collected from PDEB of University of Indonesia and the website of Indonesia Stock Exchange. Model 1 is applied to answer the first, second, and third hypotheses, whereas model 2 is applied to answer the fourth hypothesis.

Model 1 :

$$PRICE_i = \beta_0 + \beta_1 \text{Audit Quality}_i + \beta_2 OCI_i + \beta_3 KAP_i + \beta_4 OCI KAP_i + \beta_5 ASSET_i + \varepsilon$$

Model 2 :

$$PRICE_i = \beta_0 + \beta_1 \text{Audit Quality}_i + \beta_2 SEC_i + \beta_3 NSEC_i + \beta_4 KAP_i + \beta_5 SECKAP_i + \beta_6 NSECKAP_i + \beta_7 ASSET_i + \varepsilon$$

The population of this study is 504 entities listed in Indonesia Stock Exchange. The sample excludes financial and banking companies, and this study specifically selects entities that have OCI value unequal to 0. Thus the sample of this study is 79 companies.

Findings & Discussions

Based on data collected from 79 companies in 2014, the descriptive statistics and variables can be presented as follows:

Table 1 Descriptive Statistics

Variable	N	Minimu m	Maximu m	Mean	Std. Deviation
Price	7 9	50.00	25000.00 4	2928.163	5267.00949
NI	7 9	-2871.30	19181.00	925.6728	2927.15056
SEC	7 9	- 40173.86	37675.00	-43.6681	9722.84849
NSEC	7 9	- 306213.0 0	1335341. 34	22101.36 87	1.70610E5
OCI	7 9	- 333705.0 0	1335341. 34	22057.70 05	1.71304E5
NIKAP	7 9	-891.06	19181.00	938.5385	2882.91751
SECKAP	7 9	- 27492.00	34500.19	513.5785	6006.34779
NSCEKAP	7 9	- 306213.0 0	576560.0 0	4065.193 0	80882.5222 7
OCIKAP	7 9	- 333705.0 0	576560.0 0	4578.771 4	82562.4633 1
KAP	7 9	.00	1.00	.5570	.49992
ASSET	7 9	7.97	11.37	9.6228	.76303
Valid N (listwise)	7 9				

Description:

PRICE : Stock price of company i on closing period; **NI**: Net income before other comprehensive income of company i divided by millions; **OCI**: other comprehensive income of company i divided by millions; **KAP**: Dummy variable, 1 if the company uses KAP Big Four and 0 if non Big Four; **SEC**: gain or loss of asset categorized as “available for sale” of company i divided by millions; **NSEC**: The sum of changes in revaluation surplus, actuarial gain or loss

of defined benefit plan, gain or loss of that comes up from financial statement disclosure by foreign entity, and the effective portion of gain and loss of hedging instrument in order to hedge the cash flow of company i divided by millions; **ASSET**: natural logarithm of total assets of company.

Based on the table above it is found that, from 79 samples, the minimum value of **stock price** is 50 and maximum 2500 with mean 2928.1634 and standard deviation 5267.00949. The minimum value of **Net Income** is -2871.30 and maximum 19181.00 with mean 925.6728 and standard deviation 2927.15056. The minimum value of **SEC** is -40173.86 and maximum 37675.00 with mean -43.6681 and standard deviation 9722.84849. The minimum value of **NSEC** is -306213.00 and maximum 1335341.34 with mean 22101.3687 and standard deviation 1.70610. The minimum value of **Other Comprehensive Income (OCI)** is -333705.00 and maximum 1335341.34 with mean 22057.7005 and standard deviation 1.71304. The minimum value of **NIKAP** is -891.06 and maximum 19181.00 with mean 938.5385 and standard deviation 2882.91751. The minimum value of **SECKAP** is -306213.00 and maximum 576560.00 with mean 4065.1930 and standard deviation 80882.52227. The minimum value of **OCIKAP** is -333705.00 and maximum 576560.00 with mean 4578.7714 and standard deviation 82562.46331. The minimum value of **KAP** is 00 and maximum 1.00 with mean .5570 and standard deviation .49992. The minimum value of **Natural Logarithm** is 7.97 and maximum 11.37 with mean 9.6228 and standard deviation .76303.

Model 1

Applying regression model 1, it is gained an empirical evidence that net income affects stock price. Thus, the first hypothesis is proven, where the value of Prob is 0.0562. This indicates that with 10% of significance level NI affects stock price positively. The higher NI, the higher stock price. However, this study is unable to prove the second and third hypotheses for the value of Prob exceeds 5%. The following table is the regression result:

Table 2 Results of Regression Coefficient Model 1

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NI	0.403732	0.208042	1.940627	0.0562
OCI	-0.000485	0.003556	-0.136534	0.8918
KAP	2326.172	1232.251	1.887742	0.0630
OCIKAP	-0.006562	0.007377	-0.889505	0.3767
ASSET	1275.445	873.3040	1.452168	0.1507
C	-10973.72	8133.474	-1.349205	0.1814
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R-squared	0.258774	Mean dependent var	2928.163	
Adjusted R-squared	0.208005	S.D. dependent var	5267.009	
S.E. of regression	4687.327	Akaike info criterion	19.81602	

Sum squared resid	1.60E+09	Schwarz criterion	19.99598
Log likelihood	-776.7329	Hannan-Quinn criter.	19.88812
F-statistic	5.097102	Durbin-Watson stat	2.103375
Prob(F-statistic)	0.000460	Mean dependent var	

Description: **NI** : Net income before other comprehensive income of company i in year t; **OCI**: other comprehensive income of company i in year t; **KAP**: Dummy variable, 1 if company uses KAP Big Four and 0 if non Big Four; **OCI_KAP**: moderating variable, the multiplication of OCI and KAP; **ASSET**: natural logarithm of total asset of company i in year t;

To find out the validity of the predetermined hypotheses, a t-statistic test is used to find out the partial effect of free variable on bound variable. The t-statistic test is done by comparing $t_{statistic}$ to t_{table} . The value of t-statistic is acquired by using Eviews 8.0 software. The test result of each free variable in the equation is shown in the following table.

Table 3 Test Results of t Regression Model 1

Variable	t-count	Prob.	Significance	HYPOTHESIS
NI	1.940627	0.0562	Significant **	H_1 Accepted
OCI	-0.136534	0.8918	Insignificant	H_2 Rejected
KAP	1.887742	0.0630	Significant **	
OCIKAP	-0.889505	0.3767	Insignificant	H_3 Rejected
ASSET	1.452168	0.1507	Significant **	

Significant *** (5%), Significant ** (10%) and Significant * (15%)

Based on the test result above, the hypothesis of the effect of net income on stock price is proven. This is in accordance with the previous studies conducted by Nelly (2014); Lee & Park (2013); Biddle & Choi (2006) that state that the value relevance of net income is moderated by audit quality.

Researches in Indonesia show that KAP big four dominates the market share of auditing, because based on the sample of this study, 44 companies perform audit engagement with KAP big four and 35 companies with KAP non big four. This indicates that the market highly trust net income information that comes up from reputable KAP.

On the other hand, the second and third hypotheses is not proven. The result of this study is different with ones conducted by Lee & Park (2013); Chambers et al. (2007); Kanagaretnam et al. (2009). However, this study is in accordance with the result of one conducted by Nelly (2014) that, using 2012 and 2013 data, states that OCI moderated by audit quality does not affect stock return. Most investors in Indonesia is still considered “naive” or “non sophisticated”. It

means their trading in the market is not based on the quality of information provided in financial statements.

Model 2

Applying regression model 2, it is gained an empirical evidence that neither a high nor low subjectivity OCI affects stock price. It is seen from the value of Prob that exceeds the value of significance. Thus both coefficients are not comparable. The following is the result of regression model 2:

Table 4 Results of Regression Coefficient Model 2

Variable	Coefficient	Std. Error	t-Statistic	Prob.
NI	0.409389	0.209675	1.952494	0.0548
KAP	2299.601	1242.407	1.850923	0.0683
SEC	-0.001001	0.070773	-0.014150	0.9888
NSEC	-0.000493	0.003583	-0.137650	0.8909
NSECKAP	-0.008651	0.007741	-1.117562	0.2675
SECKAP	0.082794	0.116015	0.713644	0.4778
ASSET	1209.228	889.6771	1.359176	0.1784
C	-10364.23	8245.309	-1.256985	0.2129
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R-squared	0.268375	Mean dependent var	2928.163	
Adjusted R-squared	0.196243	S.D. dependent var	5267.009	
S.E. of regression	4722.004	Akaike info criterion	19.85362	
Sum squared resid	1.58E+09	Schwarz criterion	20.09356	
Log likelihood	-776.2179	Hannan-Quinn criter.	19.94975	
F-statistic	3.720614	Durbin-Watson stat	2.036375	
Prob(F-statistic)	0.001746	Mean dependent var		

Description:

PRICE : Stock price of company i on closing period; **NI**: Net income before other comprehensive income of company i divided by millions; **OCI**: other comprehensive income of company i divided by millions; **KAP**: Dummy variable, 1 if company uses KAP Big Four and 0 if non Big Four; **SEC**: gain or loss of asset categorized as “available for sale” of company i divided by millions; **NSEC**: The sum of changes in revaluation surplus, actuarial gain or loss of defined benefit plan, gain or loss of that comes up from financial statement disclosure by foreign entity, and the effective portion of gain and loss of hedging instrument in order to hedge the cash flow of company i divided by millions; **ASSET**: natural logarithm of total assets of company i.

To find out the validity of the predetermined hypotheses, t-statistics test is used to find out the partial effect of free variable on bound variable. The t-statistic test is done by comparing $t_{statistic}$ to t_{table} . The value of t-statistic is acquired by using Eviews 8.0 software. The test result of each free variable in the equation is shown in the following table.

Table 5 Test Results of t Regression Model 2

Variable	t-count	Prob.	Significance	HYPOTHESIS
NI	1.952494	0.0548	Significant **	
KAP	1.850923	0.0683	Significant **	
SEC	-0.014150	0.9888	Insignificant	
NSEC	-0.137650	0.8909	Insignificant	
NSECKAP	-1.117562	0.2675	Insignificant	H4 Rejected
SECKAP	0.713644	0.4778	Insignificant	H4 Rejected
ASSET	1.359176	0.1784	Significant **	

Significant *** (5%), Significant ** (10%) and Significant * (15%)

This study shows a different result with one conducted by Dhaliwal et al. (1999) and Lee & Park (2013) that state that a high subjectivity OCI affects value relevance differently. This study is in accordance with one conducted by Nelly (2014) that, using 2012 and 2013 data, states that despite IFRS has been obligatorily applied for three years—Indonesia has applied IFRS since 2012, it is not proven that OCI increases value relevance. This indicates that investors in Indonesia are unable to recognize significantly OCI containing higher information risk as a result of the preparation of estimates, assumptions, and judgments by the management. Investors still focus on the “bottom line” value in the comprehensive income statement without taking into account other comprehensive income.

CONCLUSIONS

Based on the result described in the previous chapters, it can be concluded that net income affects stock price positively. On the other hand other comprehensive income does not affect stock price positively. Likewise, when it is moderated by audit quality, the result is insignificant. The hypothesis regarding the subjectivity of OCI is not proven, because neither a high nor low OCI affects stock price.

Limitations

The limitation of the study is that the data are relatively small. Therefore, the next researcher interested in the same subject may further study the value relevance of other comprehensive income by adding other samples from other countries, because the limited amount of data regarding OCI in Indonesian capital market leads to the inability of this study to describe the value relevance of OCI

thoroughly. The measure of audit quality that is depended on the size of KAP has many weaknesses. Therefore, the next researcher may use a better measure that illustrates the practice of auditing in Indonesia.

Implications of the Study

Most investors in Indonesia are not fully capable of cultivating information in financial statements. It can be seen from the fact that other comprehensive income is not proven to have value relevance for the users of financial statements. Therefore, all related parties in the capital market have to encourage the participants to optimize the information provided in financial statements, including information regarding the high and low subjectivities OCI.

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