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## **Relationship of Earnings Management and Earnings Quality before and after IFRS Implementation in Indonesia**

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**Abstract:**

*Basic usage of principles-based, fair value and full disclosure at IFRS is expected to have a positive impact, resulting in improving quality of accounting information to be capable of reflecting the current economic condition of the company. Thus, it can increase the value relevance, which will decrease the information asymmetry between management and users of financial statements.*

*This study examines how the intensity of management in earnings management, how the earnings quality before and after the implementation of IFRS and whether earnings management affects the earnings quality. The results revealed that the intensity of management in earnings management is higher when it is compared to the one after the implementation of IFRS, by looking at the amount of discretionary accrual.*

*Therefore, it can be concluded that the implementation of IFRS can reduce the intensity of corporate management activity in earnings management. The results of subsequent research states that earnings management after the implementation of IFRS effect on the earnings quality was proxied with earnings persistence. The next finding is that the quality of corporate earnings after IFRS implementation is higher when compared to earnings quality prior to IFRS implementation.*

**Keywords:** *earnings quality, earnings management, earnings persistence and value relevance.*

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## 1. Introduction

Relevance and reliability of financial information determine the quality of financial reporting that needs qualified financial accounting standard. Qualified accounting standard covers comprehensive principles that are neutral, consistent, appealing power, relevant, and reliable, is needed by investors, creditors, and other parties to make business decision. The demand on qualified financial accounting standard leads to International Financial Reporting Standard (IFRS) adoption. The adoption of IFRS into Financial Accounting Standard (FAS) in Indonesia aims to produce financial report that has high level of credibility and accountability, able to fulfill the requirement on disclosure items that are higher, so it increases the firm's value. It is meant for company to be able to present financial information more relevantly and accurately, and can be compared more related to asset, debt, equity, earnings, and expenses of company.

The process of IFRS convergence into FAS in Indonesia is implemented through three stages. First is adoption stage in 2008 – 2011 which is the adopting stage of all IFRS into FAS, infrastructure preparation needed, as well as evaluation and management of the impact from IFRS adoption on applicable FAS. Second is final preparation stage in 2011 which is the completion stage of infrastructure needed to implement FAS that has adopted all IFRS. Third is implementation stage in 2012 which is the first implementation stage of FAS that has adopted all IFRS and evaluating comprehensively on the impact from the FAS implementation. Starting on 1<sup>st</sup> January 2012, financial reports of all companies listed on Indonesia Stock Exchange must be set based on Financial Accounting Standard (FAS) the has adopted IFRS fully.

IFRS has 3 fundamental characteristics which are principles-based, fair value, and full disclosure. The use of principle-based in IFRS has advantage in the form of ability to avoid agreement making or transaction following disclosure principle. The use of fair value on IFRS will produce accounting information that reflects more the present economic condition of company, so it can increase value relevance from the information produced. Meanwhile, full disclosure requires management to make more disclosures in financial report presented on all information owned and known. Therefore, information users have wider opportunity to obtain and consider relevant information that must be known related to decision making. Thus, IFRS implementation will reduce information asymmetry between management and financial report user.

The studies about the effect of IFRS about the effect of IFRS implementation have been conducted with varied results. The study done by Armstrong *et al.* (2010) related to market reaction after IFRS adoption in Europe, found the result that there are positive reactions from investors toward companies that have implemented IFRS that can be seen from the increase of information quality, so it increases capital allocation more efficiently. Moreover, Loureiro and Taboada (2012) conducted a

study about the effect of IFRS adoption both mandatorily and voluntarily on share rate information. Share rate information can be seen from the side of corporate environment that is more transparent, better investor protection, and lower information cost (Morck *et al.*, 2000).

According to Chen *et al.* (2010), IFRS implementation has the impact of increasing accounting quality (including earnings quality), reducing earnings manipulating activity, lower amount of accrual discretion absolute value, and higher tendency of accrual quality. Meanwhile, Ball (2006) stated the impact of IFRS implementation still must be documented whether it really brings the actual change toward earnings quality or only uniformity of standard.

The aim of FAS implementation that has adopted IFRS is to increase the relevance and reliability of information presented in financial report to be useful for users as the base of business decision making. To manifest the expediency, IFRS must be the foundation to present financial information in accordance with the real condition and contains all disclosures needed, so the users have the right foundation in evaluating corporate performance. Therefore, the implementation IFRS should limit the actions of management to conduct earnings management. It is because management is limited by IFRS implementation that has fundamental criteria of fair value in measuring assets, liabilities and equities, ad full disclosure. It means that IFRS implementation will reduce the intensity of management in conducting earnings management.

Regarding to financial information making, a main motivation of management in conducting earnings management is opportunistic purpose, which is an earnings management action by elevating earnings to increase the amount of compensation or bonus that will be received. Although the study done by Farichah (2017) demonstrated the result that compensation negatively relates to earnings management, the compensation is designed by considering justice element, so the compensation will reduce management motivation to conduct earnings management with opportunistic purpose.

Opportunistic purpose tends to disserve financial report users because information delivered by management becomes not accurate and does not describe fundamental value of company (Beneish, 2001), and will be responded negatively by investors. However, there is another motivation from management to conduct earnings management, which is efficient contract purpose. Based on efficient contract purposes, this motivation encourages management to conduct earnings management with the purpose of increasing firm's value, by presenting financial information in accordance with the actual condition, based on fair value, so information announced will be responded positively by financial report users. Efficient contract motivation is expected to give impact on the increase of share rate that will give impact on the increase of return of shares received by shareholders.

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## 1.1 Problem Formulation

Based on the background explained above, the research problems are formulated as follows:

1. Is there a significant difference between management intensity in conducting earnings management before and after IFRS implementation in Indonesia?
2. Is there an impact of earnings management on earnings quality before and after IFRS implementation in Indonesia?
3. Is there a significant difference between earnings quality before and after IFRS implementation in Indonesia?

## 2. Literature Review and Hypothesis Development

Some theories, such as agency theory and signaling theory, that underlie the relationship between IFRS implementation and management intensity to conduct earnings management and its relationship with earnings quality, as well as how the difference between management intensity in conducting earnings management, and between earnings quality before and after IFRS implementation, will be explained in the explanation below.

### 2.1 Agency Theory

Agency theory explains the agency relationship from a contract between principal and agent that basically contains the interest separation between both parties, which often create problem when each party has different goal. Agency theory will solve the problem emerging in agency relationship (Scott, 2009). The first problem is when the desire or the purpose of owner and agent is contradictive (different), and the second problem is the presence of difficulty and expensive cost for owner to conduct verification of what really has been done by agent. One assumption explained by agency theory is the presence of information difference owned by principal and agent that can be equated with the relationship between company and the owner of the company.

### 2.2 Signaling Theory

Signaling theory assumes that there is information asymmetry between manager and owner or shareholder of company. Manager is viewed to have information about company (inside information) that is not owned by shareholder. Signaling theory explains the reason of importance for company to present information to public (Wolk *et al.*, 2006). The information can be in the form of financial report, corporate policy information, or other information that is disclosed voluntarily by company's management. Signaling theory states on how a company should give information signals to its users. Signal can be in the form of information about what has been done by management to manifest the desire of the owner. Therefore, manager tries

to give information, among other by using earnings numbers. Earnings quality will affect the quality shareholder's decision.

### **2.3 IFRS Implementation**

The development globally in all sectors requires the presence of financial reporting standard that can fulfill the needs of information users in economic decision making. Accounting information that is useful for users is relevant and reliable information. To fulfill the requirement of relevant and reliable information availability, a financial reporting standard that can produce information that can be compared internationally is applied (Thalassinos and Liapis, 2014; Suryanto and Thalassinos, 2017). The standard is known as International Financial Reporting Standards (IFRS). More than 100 countries have adopted IFRS. IFRS implementation is based on the expectation that the quality of information presented in financial report should be increasing. Some studies that have been conducted to investigate the advantage from the adoption of IFRS, and its effect on accounting information quality, have concluded a result that there is increase on value relevance on reported information (Bartov *et al.*, 2005, and Barth *et al.*, 2007; Liapis and Thalassinos, 2013; Thalassinos *et al.*, 2012).

### **2.4 Earnings Management**

Earnings management is accounting policy selection by manager from existing accounting standard and naturally can maximize their utility and or corporate market value. According to Scott (2009), earnings management be: 1) opportunistic behavior from manager to maximize his/her utility in facing compensation contract, debt contract, and political cost (Opportunistic Earnings Management); 2) perspective of efficient contracting (Efficient Earnings Management), where earnings management gives manager a flexibility to protect themselves and company in anticipating unpredicted events for the benefit of the parties involving in the contract.

Until now, earnings management has not been defined accurately and applied in general. Although Dechow and Skinner (2000) mentioned two definitions that have been able to be accepted widely, which is earnings management is an intervention that is deliberately done with certain purpose toward external financial reporting process to obtain some personal benefit. According to Healy and Wahlen (1999), earnings management occurs when managers use their consideration in financial reporting and transaction making to change financial report with the misleading purpose toward shareholder based on organization's economic performance or to affect the result in accordance with the contract that depends on the reported accounting numbers.

### **2.5 Earnings Quality**

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Earnings quality very determines decision that will be taken by shareholder related to the company. The size used in evaluating whether the quality of earnings is high or low, one of them is earnings persistence. Persistent earnings are earnings that can reflect the sustainability of earnings (sustainable earnings) in the future that is determined by accrual components and their cash flows. Earnings persistence is an earnings revision that is expected in the future reflected from running year earnings. Therefore, earnings persistence can be used as future earnings indicator. Sustainable earnings persistence is stated as earnings that have high quality; in the contrary, if unusual earnings are stated as earnings that have poor quality (Penman and Zhang, 2002). More persistent earnings show more informative earnings; in the contrary, if earnings are less persistent, earnings become less informative (Tucker and Zarowin, 2006). Earnings persistence is as one measurement of earnings quality by seeing the slope coefficient of current earnings regression on lagged earnings.

## **2.6 Earnings Management Before and After IFRS Implementation**

IFRS implementation is done with the aim to give the base of financial report making that presents relevant and reliable information. For accounting information (including earnings information) to be relevant and reliable, it must be made based on principles-based, fair value, and full disclosure. Therefore, IFRS implementation will have effect on information provision that gives protection on investor in economic decision making.

Because the process of financial report making is based on principles-based, fair value, and full disclosure, management has space in earnings modification that is narrower, so it limits management intensity to present financial report that is misleading and disadvantageous for investors or other considered parties with corporate financial information. Based on the explanation, hypothesis of this study is formulated as the following:

*H1: Intensity of corporate management in conducting earnings management after IFRS implementation is lower than before IFRS implementation.*

## **2.7 The Relationship between Earnings Management and Earnings Quality**

There are two perspectives of earnings management, which are efficient contracting and opportunistic. Both perspectives aim to give signal to investor, with the expectation to obtain positive response that affects the increase of market response that will increase share return. If earnings management is done with opportunistic purpose, presented earnings aim to hide the bad of real management's performance. For advanced and rational investors, the real performance of a company will be easily known by seeing the information presented by other companies in similar industry. However, in stock market, there are types and characteristics of investors that are varied, not all investors are advanced and rational. Heterogeneity of investors will produce various responses toward disclosed accounting information.

Although there is heterogeneity of investors in stock market, disclosed earnings is not the real information, so the information will negatively affects earnings quality. Therefore, the hypothesis of the study is formulated as the following:

*H2: Earnings management negatively affects earnings quality before and after IFRS implementation.*

## **2.8 Earnings Quality Before and After IFRS Implementation**

Criteria of IFRS implementation will relate to financial report making that must be done based on principles-based, fair value, and full disclosure. If accounting information includes earnings information resulted from accounting process by focusing and emphasizing on disclosure and measurement on assets, liability, and equity based on principles-based and fair value, the information presented by corporate management is information that can be reliable, because it is reported in accordance with the real and relevant condition. If accounting information is presented in financial report containing all disclosures needed, the information is transparent information, so it can reduce information asymmetry that misleads users. Therefore, accounting information presented will contain qualified earnings information that is responded positively by users, including investors and potential investors. Rational investors will be interested on corporate performance in the future by looking at present earnings information to conduct revision of the possibility performance prediction in the future. Based on the explanation, the hypothesis of the study is formulated as the following:

*H3: Earnings quality of company after IFRS implementation is higher than before IFRS implementation.*

## **3. Research Methodology**

Sample used in this study is companies listed on IDX in 2009 to 2011 and from 2013 to 2015 to examine the relationship of earnings management and earnings quality, and to see the difference of management intensity in conducting earnings management and earnings quality between the ones before and the ones after IFRS implementation.

The study uses discretionary accrual as the measurement of earnings management that is detected by using Jones model modification (Dechow *et al.*, 1995). According to Thomas and Zhang (2000), modification of Jones model is the best model to detect earnings management if it is compared to other models. Jones model modification is better in detecting earnings management because it is adjusted with extreme financial performance and can overcome the problem of measurement error that might appear when a manager uses discretion in earnings disclosure. Detection of the presence or the absence of earnings management is done with the steps as the following:

*Calculating Total Accrual:*

$$TA_{it} = NI_{it} - CFO_{it} \quad (1)$$

*Information:*

$TA_{it}$  = Total Accrual for company i in period t

$NI_{it}$  = Net Income before unusual post of company i in period t

$CFO_{it}$  = Operation activation cashflow of company i in period t

*Calculating Discretionary Accruals:*

- a. The step done is regressing Total Accrual, with the formulation as the following:

$$TA_{it}/A_{it-1} = \alpha (1/A_{it-1}) + \beta_1 (\Delta REV_{it}/A_{it-1}) + \beta_2 (PPE_{it}/A_{it-1}) + \varepsilon_{it} \quad (2)$$

- b. The next step is calculating Nondiscretionary Accrual (NDA) with the formulation as the following:

$$NDA_{it} = \alpha (1/A_{it-1}) + \beta_1 (\Delta REV_{it}/A_{it-1} - \Delta REC_{it}/A_{it-1}) + \beta_2 (PPE_{it}/A_{it-1}) \quad (3)$$

- c. The next step is calculating discretionary accrual by reducing the amount of Total Accrual with Nondiscretionary Accrual that is deflated by total asset. The formulation used is:

$$DA_{it} = TA_{it}/A_{it-1} - NDA_{it} \quad (4)$$

$\Delta REV_{it}$  = Revenue of company i in period t reduced by revenue of period t-1

$\Delta REC_{it}$  = Net Receivables of company i in end of period t reduced by net receivable in end of period t-1

$PPE_{it}$  = Property, Plant and Equipment of company i in end of period t-1

$A_{it-1}$  = Total Asset of company i in end of period t-1

$DA_{it}$  = Discretionary Accrual of company i in end of period t

$NDA_{it}$  = Nondiscretionary Accrual of company i in end of year t

To determine values of  $\alpha$ ,  $\beta_1$ , and  $\beta_2$ , it uses ordinary least squares (OLS).

### 3.1 Measurement of Variable Earnings Quality

Earnings quality is proxied with earnings persistence measured by regression slope on the difference of current earnings with previous earnings ( $\alpha$ ). The formula used is the formula proposed by Dechow et al. (2010), as the following:

$$X_{it} = \alpha + \beta X_{it-1} + \varepsilon \quad (5)$$

$X_{it}$  = earnings of company i year t

$X_{it-1}$  = earnings of company i year t-1

### 3.2 Hypothesis Testing and Research Model

The testing of hypotheses H1 and H3 uses compare mean independent sample t test, to examine the difference of management intensity in conducting the action of earnings management and the difference of earnings quality before and after IFRS implementation. The testing of hypothesis H2 of the study uses multiple linear regressions—ordinary least square (OLS) by adding control variables of firm size (measured by total assets) and leverage level (measured by debt ratio). Analysis model of this study is formulated as the following:



$$\text{Pers} = a + b_{11} \text{Earn} + b_{12} \text{Size} + b_{13} \text{Lev} + e_{1i} \quad (6)$$

Pers = Earning Persistence, is a proxy from earnings quality that is calculated by regression slop on the difference of current earnings and previous earnings ( $\alpha$ ).

Earn = Earnings Management, that is proxied with discretionary accrual, that is calculated using modification of Jones model.

Size = Firm Size, that is measured by total assets.

Lev = Leverage Level, that is measured by corporate debt ratio.

#### **4. Research Result and Discussion**

The testing on H1 demonstrates the result that all companies listed on IDX conduct earnings management both before and after IFRS implementation. However, management intensity in conducting earnings management is higher if it is compared to the one after IFRS implementation, by seeing the amount of discretionary accrual. Therefore, it can be concluded that IFRS implementation is able to reduce corporate management intensity in conducting earnings management. The result of this study is in accordance with the rationale that IFRS implementation will limit the space for management to conduct opportunistic action, for example conducting earnings management. It occurs because of the use of principles-based, fair value, and the must of management to conduct full disclosure.

Hypothesis testing of H2 produces the evidence that earnings management done after IFRS implementation affects earnings quality that is proxied by earnings persistence. Some researchers also concluded that there is effect relationship between earnings management and earnings quality. Earnings announced by company that conducts earnings management sometimes obtain strong market reaction. It shows that not all investors are advanced and rational investors. Some investors who are naive and irrational who do not realize that the announced earnings are the result from earnings management action.

The rationale used in this study is that earnings resulted from earnings management action will reduce earnings quality. Regarding to the needs of stock market, qualified financial information (including earnings information) is needed as the base of decision making for investors. Therefore, management is responsible on information provision that is punctual, relevant, reliable, complete, and easy to be understood, so it reduces information asymmetry. Thus, information users will be able to observe and supervise performance and prospect of company entirely.

The hypothesis testing of H3 found the evidence that earnings quality of company after IFRS implementation is higher if it is compared to the earnings quality before IFRS implementation. The rationale of this study is that earnings management, both done with the purpose of efficient contracting and opportunistic will be responded negatively by investors and potential investors, that will reduce quality of earnings announced in stock market. Regarding to the financial report making, IFRS

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implementation will reduce management intensity in conducting earnings management. It is caused using principles-based, fair value, and full disclosure, as the base of financial report making. Therefore, information presented by management after IFRS implementation is more qualified information because it is more reliable, and more relevant because it is reported in accordance with the real condition of the company.

The testing result on control variables of firm size (Size), and leverage level (Lev) shows that the result is not significant. It means that firm size and leverage level of company do not affect earnings quality. The testing result can be meant that information about firm size and leverage level of company is not important and not responded by market that does not affect earnings quality.

## 5. Conclusion

This study can find evidence that IFRS implementation is able to reduce management intensity of company in conducting earnings management. The result of this study is in accordance with the rationale that IFRS implementation will limit the space for management to conduct opportunistic action, for example by conducting earnings management. Earnings management done after IFRS implementation negatively affects earnings quality that is proxied by earnings persistence. This study also found the evidence that earnings quality of company after IFRS implementation is higher if it is compared to the earnings quality before IFRS implementation. Those findings are in accordance with the rationale that earnings resulted from earnings management action, both conducted with the purpose of efficient contracting and opportunistic will be responded negatively by investors and potential investor that will reduce earnings quality announced in stock market.

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