A Model of Earnings Quality Strengthened by the Application of International Financial Reporting Standard in Indonesia

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Abstract

As part of the financial statement, earning must be qualified, having a predictive ability and variability. The indication of quality earnings is earning persistence, referring to the possibility of quality earnings present company earnings will occur again in the future so that investors are interested in the management performance. The sample was taken by purposive sampling method on the public companies listed on the Indonesia Stock Exchange from 2008 to 2013 using interaction test (Moderated Regression Analysis). This study attempts to examine the effect of the IFRS adoption, earning and dividend against future earnings, to confirm the prospect theory, signaling theory of dividends and the benefit of earnings information through timely earning. It shows that the earning of the current period affect future earnings or earnings persistence period. The components of cash flows and earnings accrual of the current period affect future earnings or earnings persistence period. Return dividend affect the current period or the next period earnings persistence. Stock returns affect the persistence of earnings, and the adoption of IFRS in Indonesia affects the persistence of earnings and IFRS as pure moderating variables towards the effect relationship between earnings performance and the persistence of earnings, dividends with earnings persistence and stock returns towards the persistence of earnings.

Keywords: earning persistence, signaling theory, prospect theory

1. Introduction

It is common that investors demand for more information, being more transparent and more comparative in the financial statements. This condition also demands serious efforts of management to improve the quality of earnings. Besides that, the IFRS adoption has been pushing for capital market regulators to provide legal protection against transparency with strict financial reporting in any country (Eg. Shonhadji, 2013; Li, 2010; Burgstahler et al, 2006; Ball et al., 2005; Ball et al., 2000). Some previous previous studies (eg, Leuz et al., 2003 and Ball et al., 2000) also showed that earnings quality is higher in countries that have adopted IFRS compared with those which have not.

IFRS is expected to enhance the comparability of financial statements, strengthen corporate transparency, and improve the quality of financial reporting. To emphasize the usefulness of earning, in accounting norms, the Indonesian Accountants Association stated that the objective of financial statements is to provide information concerning the financial position, performance and changes in financial position of an enterprise, being useful to a large number of users for making economic decisions. For that reason, earning as part of the financial statements must be qualified and has predictive ability and variability.

Indications of quality earnings are earning persistent (Kathleen et al., 2011; Asbaugh et al., 2008 and Hanlon, 2005). It means being referred to the possibility of quality earnings of the company present earnings can recur in future periods (Araujo et al., 2011; Nam, 2010; Nichols and Wahlen, 2004), and investors were interested in the management of performance, which is reflected in earnings to come. However, future earnings as a measure of management performance are determined by: (1) earnings with a high component of cash flows or (2) the amount of dividends that are intended to give a signal to investors. Therefore,
earnings persistence study is important, because the company's earning figure is an accounting measure of the change in value of the company during the period (Nam, 2010; Nichols and Wahlen, 2004), which required the shareholders for decision-making.

With regard to the value of the relevant information on earnings, previous studies can be grouped into five areas of accounting research (in conjunction with the capital market), namely: market efficiency, the modeling Feltam-Ohlson, relevance values, behavior analysts, and behavior (accrual) discretionary (Armstrong, 2010; Cahan et al., 2008; Barth et al., 2008). The first two fields, market efficiency and modeling Feltam-Ohlson, is fundamental areas (basic platform) that allows us to observe the role of accounting in capital markets. The last three areas: relevance values, behavior analysts, and behavior discretionary are the observation that combines some form of accounting structures or individual behavior. Even, the capital markets research is currently trying to integrate penelitian accounting in the capital market with the adoption of IFRS (Wayne et al., 2012; Barth et al., 2010; Li 2010; Dechow et al., 2010; Chen et al., 2009; Chua et al., 2008; Daske et al., 2008) to determine the effect on the earning quality of the application of IFRS.

Pedoman Standar Akuntansi Keuangan (PSAK), the Indonesian Financial Reporting Standard has been changed into International Financial Reporting Standard (IFRS). This convergence has been carried out by the Institute of Accountants Indonesia since December 2007. IFRS implementation has been done in stages and it is targeted for completion in 2012 (Shonhadji, 2013). The IFRS adoption has, in fact, taken long enough time, which was formerly oriented to US GAAP but recently is changed based on it. Based on the commencement already published by the IAI (Institute of Accountants Indonesia) dated May 6, 2010, IFRS began to be adopted in 2008. Finally, it has been obligatory for all the companies that have been listed in the Indonesia Stock Exchange since 2012, in which it is done by changing the PSAK into its new version adapted to the IFRS regulation (Purba, 2010).

The effect of the quality of accounting information or earnings before and after the implementation of IFRS in Indonesia was initiated through the research done Angkoso (2012), Cahyonowati (2012) and Cahyati (2010), examining the difference of quality accounting before and after the IFRS adoption in Indonesia. In that study, the researcher used variables of value relevance, earnings management, and recognition of loss on time. It was found that the application of IFRS can increase the quality of accounting that is by increasing and decreasing the value relevance of earnings management. However, IFRS implementation did not affect the increase timely recognition of losses. On the other hand, research by Melinda (2014) and Santy (2013) which examined difference between before and after the IFRS full adoption in the financial statements of companies listed on the Stock Exchange showed there was no difference.

Another study by Cahyonowati (2012) testing the quality of earnings by using the persistence of earnings provides information that after the IFRS adoption in Indonesia the persistence value has increased significantly. This increase indicates an increase in the quality of earnings resulted from the persistence of fundamental changes in financial reporting as previously dominated by the historical cost and fair value. The amendment also indicates that there is a decrease in unrecorded reserved earnings in the period of IFRS. Thus, the earnings should demonstrate as it should be in the financial report.

In connection with this present study, the researches attempt to address the research objectives such as to find out whether the factors of the IFRS adoption, earning and dividend affect the future earnings in manufacturing companies listed in Indonesia Stock Exchange. Besides that, it also tries to confirm the consistency of prospect theory, signaling theory of dividends and the benefit of earnings information through timely earning in relation to earning quality. The researchers believe that the findings will be beneficial to the regulators
in Indonesia and investors in benefiting the financial information, and to develop financial accounting theory.

1.2. Formulation of the problem
In this study the problems are formulated as the following:
1. Does the current period earning have an effect on the earning of future periods?
2. Do the cash flow component of earning the current period and the accrual component of earnings of the current period have an effect on future period earnings?
3. Does the dividend income of the current period affect future periods?
4. Does the current period stock return affect earnings persistence?
5. Does the adoption of IFRS in Indonesia affect the persistence of earnings
6. Does the adoption of IFRS into the moderating influence of the relationship between the performance of earnings, dividends and stock returns of the current period to the persistence of earnings

2. Literature Review
2.1 Asymmetry of information
The dividend signaling hypothesis testing cannot be separated from the condition of knowledge information about the company's prospects which are different between the owners and company management. The difference in possession of both parties with different information about the company’s prospects is called asymmetric information. Management practices dividend signaling to distinguish the prospective company better than other companies, which is common in conditions of information asymmetry (Scott, 2009).

Asymmetric information exists if one party, in the market, has information that is not owned by another party. For example, in the labor market, employers often have more information about the status of the company than the company or association of trade unionism. They can use that information as the basis of ownership of negotiations. If investors are in a state of information asymmetry, they need accounting information to reduce investment risk. Meanwhile, due to the different behavior of individual investors with institutional investors, the ownership can affect the usefulness of accounting information in influencing investor behavior.

2.2 Agency theory
The hypothesis test for persistence and dividend signaling can not be separated from the relationship between the owners and company management. To measure the management performance as authorized (as agent), the shareholders authorizing (as principal) can use two measures such as internal and external measures (Scott, 2009). Internal management performance measure is earning, and the external size is the stock price. A study the relationship between the shareholders (owners) and the agent (management) can be explained by the agency theory. This agency relationship gives space for potential conflicts of interest between owners and agents. Moreover, it is not possible for the owner or agent at zero cost to ensure that the agent will make optimal decisions based on the owner’s view, so that it raises agency costs (Jensen and Meckling, 1976).

2.3 Dividend Signaling Theory
Dividen signaling theory is usually used to describe the phenomenon of stock price reactions to the changes (surprise) in dividend. This signaling theory shows that the manager has more information about the company, using the dividends to inform investors about the quality of earnings. For example, Hartono (2004) stated that Ross (1977) was the first to introduce the debt signaling theory in the field of finance, and as a model Ross, Bhattacharya (1979) built
the first dividend signaling theory.

2.4 Prospect theory
Prospect theory is a theory of judgment and decision making (JDM) developed by Kahneman and Tversky (1979), discussing the decision making under uncertainty. Prospect theory indicates that people consider the results, with thousands considerations based on psychological principles, rather than economic principles. In addition, prospect theory provides more descriptive theory (rather than normative) about decision making under uncertainty, and the sensitivity of the company on the idea that investors may have a preference on the pattern of earnings. Therefore, prospect theory implies that the company will set up its earnings to avoid loss of earnings (see Burgstahler and Dichev, 1997).

2.5 Implementation of International Financial Reporting Standard (IFRS) in Indonesia
An IFRS was issued by the International Accounting Standards Board (IASB). This IASB was formerly the International Accounting Standards Committee (IASC), an independent agency to formulate accounting standards. This organization has the aim to develop and promote the use of global accounting standards with of high quality, being understandable and comparable (Dimitropoulos et al., 2013; Jeanjean et al., 2008; Chua et al., 2008).

Indonesia adopts IFRS as the consequence of being involved in G20 requesting all the companies to provide the qualified financial information to public (Sulistiawan, 2011). As it was still using the local accounting standard (PSAK), in which, in this regulation, all are based on the historical cost. This is still considered weak in terms of low relevance value. This IFRS adoption is expected to provide the high relevance value in the financial information. In addition, the regulators suggested that all the companies have to implement the IFRS. It has been done since 2012. Thus, in the essence PSAK was still historically-based cost as it was suspected to implement earning management while IFRS on the fair value, in which it expects the quality of earning increase (Purba, 2010).

2.6 Framework and Research Hypotheses

![Diagram](image)

The hypotheses are stated as follows:

- **H1**: Earning affects the current period earning of future periods
- **H1b**: The components of cash flow of the current period and earning accrual of the current period affect the future period earnings.
- **H2**: Dividend of the current period affects the earning of future periods.
- **H3**: Return stocks of current period affect earning persistence.
H₄: IFRS adoption in Indonesia affects the persistence of earnings
H₅: IFRS adoption as a moderating affects the relationship between the component of earnings, dividends and stock returns against earnings persistence.

3. Research Methods
3.1 Population, Sample and Data Collection
The population consists of companies listed on the Indonesia Stock Exchange (ISE). The sample was selected by purposive sampling method with certain criteria, such as public companies listed on the ISE from 2008 to 2013. The sample was taken from the companies listed on the Stock Exchange, both of those which are listed in the Indonesian Capital Market Directory (ICMD) and those listed in idx.co.id.

3.2 Measurement of Variables
3.2.1. Size Gain
Nichols and Wahlen (2004) used quarterly and annual earnings. To calculate changes in income, the means used is to reduce earnings before heading extra ordinary current period (period-t) with earnings before heading extra ordinary previous period (period t-1).

Accrual = (ΔAL - ΔKas) - (ΔKL - ΔPUL) - Dep (1)

Notation: ΔAL: changes in current assets; ΔKas: changes in cash; ΔKL: changes in liabilities or current debts; ΔPUL: changes in long-term debt are included in current liabilities, and Dep: the cost of depreciation, amortization, and depletion.

3.2.2 Accrual Component Size
As referred to the previous studies (Dechow et al., 1995; and Sloan, 1996), they were based on the balance sheet and income statements.

3.2.3 Size of Cash Flow Components
The sizes of the companies are based on total assets, measured by the average of total assets book value of beginning and end of the year. It can be seen as the following:

Component of Cash Flow = \frac{\text{Operation Earning} - \text{Accrual}}{\text{Total Asset on Average}} \quad (2)

3.2.4 Dividends Now
Like Apostolos et al. (2011), this study also uses dividend per share (DPS) quarterly. This data is used to examine the relationship of earnings in dividends.

3.2.5 Size Return Upcoming Period
In calculating the return of the coming period, Amihud and Li (2002) used the price at the end of the month that preceded the month when the dividend was announced, and return of the following abnormal period as abnormal cumulative return of the future periods abnormal cumulative obtained by summing the return future periods abnormal for 2 days, days 0 and +1 (day 0 is the day of the announcement of the dividend).

Size 3.2.6 Adoption of IFRS
Based on previous studies (Wayne et al., 2012; Barth et al., 2010; Li 2010; Dechow et al., 2010; Chen et al., 2009; Daske et al., 2008; Burgstahler et al., 2006), the size of the adoption of IFRS is measured by using dummy variables, for companies that have adopted and implemented it are coded 1, while those that have not adopted IFRS are coded 0.
3.3. Technique of Testing the Data
1. Normality Test Data
2. Classical Assumption Test
3. Simultaneous Test (Test F) and partial test (t test)
4. Moderating Regression Analysis (MRA)

4. Results and Discussion
4.1 Results of testing the first hypothesis (H₁₀): Current period earnings affects the future period’s earnings

The test result on the testing of this sample, shows that the earning of the current period affects earnings of future periods (H₁₀), which means that the persistent earnings, while earnings have been persistent, and the earnings to be qualified. This result is consistent with the theory assuming that earnings provide information on equity holders about the earning ability of current and future periods (Beaver, 1998, Bandi, 2009). Beside, it is also consistent with findings by Kornendi and Lipe (1987); Bandi (2009) and Mashayekhi et al., (2010) that concluded that the persistence of earnings helps explain the relationship between stock returns and earnings coming period. Persistent earning also shows that investors will more easily take advantage of the information contained in the current period’s earning for forecast of future periods. For the two benefits of qualified earnings, it can be used for short-term and long term decision making.

The persistence of earnings through the improvement of the quality of accrual earnings can be detected from the accrual of four items, namely: cost amortization, net increase in account receivable, an increase in inventory, and a decrease in account payable and accrual liabilities. In this case, cost amortization is a non-discretionary accruals, assumed that the policy regarding the amortization is given. The increase in account receivable is assumed to come from a decrease in allowance for doubtful accounts which is the result of a less conservative estimate. This is discretionary accruals, because management can flexibly control the amount of the allowance; or because the credit policy and the recording of accounts receivable balance at the beginning and end of the period.

The test result above also indicates that current earnings affect earnings persistence, the earning that can be used as an indicator of future earnings. The persistence of a sustainable earning expressed as earnings have high quality; otherwise if unusual earning expressed as earnings have poor quality (Penman and Zhang, 2002). Penman (2003) distinguishes earnings into two groups: sustainable earnings (earnings persistent or core earnings), and unusual earnings or transitory earnings. The persistence of income that has the ability as an indicator of the future earnings generated by the company repeatedly in the long term (sustainable). On the contrary, unusual earnings or transitory earnings is the earning generated temporary and can not be generated repeatedly (non-repeating), so it can not be used as an indicator of future periods earnings.

Earning that is increasingly persistent is more informative; otherwise if earnings are less persistent. I so, the earning becomes less informative (Tucker and Zarowin, 2006). The persistence of earnings as a measure of earnings quality is measured from the slope of the regression coefficient on lagged earnings current earnings. For example, Nichols and Wahlen (2004) stated that the theory of earnings quality lead to the persistence of earnings depends on three assumptions. First, the theory assumes that the earnings (or, more broadly financial statements) provide information to shareholders about the current earning ability and expectations of future periods. Second, the theory assumes that the current earning ability and future periods to provide information to shareholders about dividends current and future periods. Third, the theory assumes that the share price is
equal to the present value (present value) of the dividend expectations of future periods. Meanwhile, Tucker and Zarowin (2006) state that earning information.

This above finding is also consistent with prospect theory, assuming that investors prefer companies with earnings of persistent to the large earnings that follow a loss (Koonce et al., 2005). Based on these findings, persistent earning support the premise that management will report earnings for persistence (certainty effect) and avoid the loss even though small or even lowering its dividend (reflection effect).

4.2 Results of testing the first hypothesis ($H_{1b}$): the components of cash flow and earnings of the current period and the component of accrual earnings of the current period affect the future period’s earnings.

Hypothesis ($H_{1b}$) is a component of cash flows and earnings of the current period and the component of accrual earnings of the current period affect the future period’s earnings. As Sloan (1996) and Bandi (2009) found, the effect of income components in relation to the earnings performance of the current period and future period’s earnings performance, earnings period is now broken down into components of cash flow and accrual components. The result of this study informs that the components of cash flow and the component of accrual earnings affect the current period earnings persistence.

The components of cash flow income and earning accrual in this study is referred to as earnings performance. It is the company that will strongly influence the persistence of earnings when the earnings performance information free from bias. Therefore, when the company’s earning performance is good, the forecast of earning growth in the coming period will be a better. It means that it can affect the company’s earnings performance of the earnings persistence.

In this research model, according Richardson et al., (2005), the reliability of the measurement of accruals in the current period have different influences on earnings in future votes. High earnings derived from accrual reliable components will be more persistent than the derived from the accrual component that is less reliable. This is because the higher level of subjectivity in the measurement of the accrual component is the reliable it is. The accrual is reliable than its components. Therefore, the expectation for the results of model testing is the earning for the period that is positively associated with persistence of earnings.

4.3. Results of testing the second hypothesis ($H_{2}$): dividend income of the current period affect the future periods

The second hypothesis is the effect of the current period dividend income on the coming period earning. The test results t test showed that the significance of the test results $p <0.05$ meaning that $H_0$ is rejected. The independent variables affect the dependent variable significantly. Based on the results of this test $H_0$ rejected and $H_a$, stating that the dividend charcoal affect the earnings of the future period, is accepted. These results are also consistent with that of the hypothesis testing for the predictive ability in 1a that is the current period earnings in the earnings period ahead. These results also answered contradiction findings of previous research that the dividend does not contain predictive information on future period’s earnings. The findings of this study indicate that earnings and dividends are a means of earning forecast for the coming period.

According to the result of this study shows that dividend income of the current period effect on future periods ($H_2$). It means that the dividend policy indicates future
prospects for increased management performance, which can be demonstrated by persistent earning. These results are consistent with the findings of Healy and Palepu (1988) who found that dividend changes signify specific information managers about changes in earnings coming period, Koch and Sun (2004) and Bandi (2009) that concluded that the dividend signaled the persistence of earnings, and investors anticipate that reflected in the coming period stock returns. Besides these findings confirm the theory of signaling dividend that increased the dividend showed an increase in earning performance coming period, as well as reinforce the theory that assumes that the earningability of current and future provide information on shareholders equity of the dividend period of present and future (Beaver, 1998; Nichols and Wahlen, 2004). Ammihud and Li (2002) states that the dividend signaling is costly, and those companies are less likely to use the dividends to transmit information except for those with good prospects. These findings confirm the dividend signaling theory. Therefore the dividend signaling expensive, the dividend increase is a signal about the prospects for future performance (ie, earning coming period). Sample companies in this study showed a dividend increase affects the earning increase future periods. These results also reinforce the results of previous studies (Gwilym et al., 2006) found that there was influenced between dividend payout ratio and the income growth.

Moreover, the results above also support the assumption of the effects of certainty in prospect theory that management will choose earning, because they do not like risk, and assuming the reflection effect in prospect theory that management will choose a smaller risk, than the possibility of earning that is uncertain. It implies that increasing dividend will be followed by earning up, or investor will capture a negative signal if it changes in earnings contrasts with dividend changes (effects of certainty), and dividends down will be followed by earning up, or the company will suffer losses both as investor anticipation for the decrease in dividends (reflection effect).

The above findings support the proposition that the dividend changes will be followed by changes in the future period earnings as a reflection of the company's prospects. Therefore, these findings confirm the hypothesis signaling dividends. The results confirm the signaling theory assumes that the company is a high-quality (better information) will communicate credible in the market. Samples of this companies show that the companies communicate to the market prospects through their dividend policy. These results support the assumption that the company's dividend signaling theory of dividend increases indicate good prospects for the company, and is unlikely to lower dividends because it can cause negative effects on investors.

The results also confirm the theory prospect assumes that someone would give far too much weight definitive results, and relatively little on outcomes is still new (Kahneman and Tversky, 1979; Bandi, 2009). The findings of this study indicate that the change in dividend policy provides information about upcoming earnings period (certainty effect of prospect theory), so that investors use quality earnings information, which means the earnings information timely. This finding also supports the proposition that is compiled on the basis of dividend signaling theory that the bigger. The dividend will be even greater earnings coming period and more timely information. It can be signaled by earnings with dividend changes.

4.4. Results of testing the third hypothesis (H3): Return the stock effect on earnings persistence

The third hypothesis is the stock return that affects the earnings persistence. Stock return is the rate or magnitude of the results of a stock investment by investors in the
secondary market. The higher stock return shows the company’s performance was excellent. Generally, companies that have good financial performance will tend to have good information so that when the information is used to generate a earning, the earning generated is also likely to be consistent. The result of this study also supports previous research by Bandi (2009) that stated that the current period stock returns affect future period earnings.

The above evidence also confirms the signaling theory of dividend that the increased dividend shows an increase in earning performance of the future period, and this can strengthen the theory assuming that current stock returns and in the future provide information to equity holders of the dividend for both present and future periods (Beaver, 1998; Nichols and Wahlen 2004; Bandi, 2009). It also indicates that accounting approach is more informative than financial approach to view of the future period earnings.

4.5. Results of the fourth hypothesis testing (H4): the IFRS adoption in Indonesia affects the persistence of earnings.

It shows that the IFRS adoption in Indonesia affects earnings persistence. This implies that the dummy variable has significant and positive effect on the earnings persistence. This means that investors perceive that the IFRS adoption can raise the value of relevant accounting information and use that information for making decisions. This is consistent with the results by Daske et al., (2008), Armstrong et al., (2010), and Barth et al., (2008) that the IFRS adoption can increase the quality of accounting information. Furthermore, this study also tested the interaction between dummy variables and income variable.

The evidence above shows that the earnings information is responded positively by the market, higher in the period after the IFRS adoption as compared to the period before the IFRS adoption. Thus, it provides an indication that investors better respond to information of the earning generated from IFRS standards compared to local standards. In other words, in this study supported the hypothesis. This study also informs that IFRS adoption-based fair market value has higher reliability to increase earnings quality. One of the purposes of IFRS adoption is to increase the reliability of the information, meaning that the persistence of earnings is adapted well. IFRS is a dummy variable, which nevertheless remains IFRS that has the meaning as a variable that consistently affects the quality of earnings.

4.6. Results of testing the fifth hypothesis (H5): the adoption of IFRS in Indonesia as a moderating variable.

It shows that the IFRS adoption in Indonesia affects the earnings persistence. It indicates that the dummy variable significantly and positively affects the variable of earnings persistence. Thus, investors perceive that the IFRS adoption can raise the value of relevant accounting information, and they can use it for making decisions. This is consistent with the results of Armstrong et al., (2010); Daske et al., (2008) and Barth et al., (2008) that the IFRS adoption can increase the quality of accounting information. Furthermore, this study also tested the interaction between dummy variables and income variable.

The result shows that the earnings information is responded positively by the market which is higher in the period after the IFRS adoption as compared to the period before the adoption. This evidence provides information that investors better respond to information of the earning generated from IFRS standards compared to that by local standards. In other