The Effect of IFRS Adoption on Income Smoothing Practices by Indonesian Listed Firms

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ABSTRACT

The primary objective of this research is to answer the question whether the convergence accounting standards to International Financial Reporting Standards (IFRS) has significant impact on the income smoothing (IS) practices among Indonesian listed firms. The method of data analysis used in this research is quantitative method, the sampling method is purposive sampling and two statistic methods are: the paired t-test and the logistic analysis. Research concluded, there was a significant difference of IS practices after the convergence accounting standards to IFRS compared to its prior period respectively. The two independent variables such as company size and debt financing have positive significant influence to IS practices.

Keywords: income smoothing practices, ifrs, company size, debt financing

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INTRODUCTION

There are many factors involved in maintaining the growth of capital market but the Financial Report Quality (FRQ) of listed companies are the most important factors as they have been the research focus from different perspectives (Okpara et al., 2011). One such perspective is attributed...
to the high practices of earnings management and creative accounting (Lo, 2009). This can be done through income smoothing (IS) practices in which a company’s management takes steps to reduce and store earnings during the good years and defer them for use during the business-downturn years or vice versa. The IS practices will not only result non real company financial reports but in the long term it could also lead to complex manipulations (Markarian & Albornoz, 2009). Recent accounting research on IS practice reveals that in comparison to their developed country counterparts, IS practices in developing and emerging economies are higher than developed country (Bhattacharya, et al., 2004). As emerging market, Indonesia has a very high occurrence of IS practices since around 56% of Indonesian listed firms committed to it (Susanti, 2008). Conceptually, these IS practices have been a factor that contributes significantly to the poor FRQ among Indonesian listed companies.

To effectively constrain the IS practices attentions should be given to the accounting standard to be used to prepare the financial reports. Good accounting standards that can limit the opportunistic discretion and may result in accounting earnings that are more reflective of a company’s underlying economics and, therefore, are of higher quality (Jeanjean & Stolowy, 2008). It is expected that accounting amounts determined in accordance with International Financial Reporting Standards (IFRS) are of higher quality than those determined in domestic generally adopted accounting principles (Ding et al., 2007).

LITERATURE REVIEW

Previous studies have shown that the practices of income smoothing happen because management has the discretion to choose accounting principles in preparing income statements (Barth et al., 2006). After accounting scandals (e.g. Enron, Worldcom and Parmalat) the need for high quality and complete international accounting standards for financial statement reporting has intensifiers, IFRS clearly address this issues, its goal is to create comparable, reliable and transparent financial statements (Ding et al., 2007).

The Indonesian Accountants Association (IAI) and The Financial Accounting Standard Board (DSAK) which is responsible for developing and implementing the accounting standards committed that Indonesia accounting standards gradually converge to IFRS start from 2005. According to IAI, the adoption of IFRS is expected to reduce the barrier for Indonesian firms in raising capital, reduce their cost of capital and allow investors from other countries to value and compare investments in Indonesia using comparable financial statements.
HYPOTHESIS DEVELOPMENT

Studies the adoption of IFRS in European Union (Chen et al., 2010), Greek (Athanasious et al., 2009) as well as in Sweden (Pergola et al., 2009) show that earning management (EM) practices are lesser after the adoption of IFRS. Indonesia has experienced gradually converged to IFRS since 2005, it is an advantage to identify the income smoothing practices before and after convergence periods. It is expected that the income smoothing practices will decrease from the previous to succeeding periods. Based on above explanation, it is hypothesized after the adoption of IFRS the IS practices will be lesser. Accordingly the hypothesis for this study is stated as follows:

H₁: There is a significant difference of IS practice after the convergence to IFRS compared to the pre-period convergence.

The next step was to determine the factor affecting income smoothing practices on Indonesia listed companies, two explanatory variables were tested to ascertain the factors influencing IS practices.

- **Company Size**
  
  Previous studies find that company size has an effect on income smoothing behavior. Tseng and Lai (2007) conclude that small companies smooth income significantly more than large companies. One explanation is that smaller companies are likely to be subject to less public scrutiny than larger companies, therefore small companies are expected to smooth income more than large companies (Habib, 2002). In this study, the company size is measured by total assets (after taking logarithms).

H₂: There is a significant relationship between the IS practice and the company size.

- **Debt Financing**

  When companies raise money through debt financing, capital providers rely on lending agreements or debt covenants (Klai & Omri, 2011). Carlson and Bathala (1997) suggest that the issuance of debts provides an incentive for a firm to smooth its reported income. They will do this to loosen the binds of any debt covenants that are expressed in terms of accounting-based numbers. Therefore, a positive association between income-smoothing behavior and total long-term debt to total assets ratio (TD/TA) is expected, the relevant hypothesis is as follows:

H₃: There is a significant relationship between the IS practices and the total debt of the company.

RESEARCH METHOD

The process to identify which company is practicing IS among all companies listed in IDX was conducted by employing income variability method was used to
determine the income smoothing index (Eckel, 1981).

Income smoothing index = $\frac{CV_i}{CV_s}$

Where:
- $i =$ one-period change in income
- $s =$ one-period change in sales
- $CV_j =$ coefficient of variation for period $j$ (i.e., $j$’s standard deviation divided by its expected value)

If the $Cvi$ (the coefficient of variation for income) is less than the $CVs$ (the coefficient of variation for sales), the ratio will be less than one, then suggesting that the firm is an income smoother.

**SAMPLE USED IN THE RESEARCH**

For the hypotheses the purposive sampling method was used, the data for smoother and non-smoother firms were chosen from the first step of this study (Table 1) presents the final number of firms with complete data (418) for analysis after 91 firms were removed from the initial number of firms.

Table 1: Description of the Sample Used in the Study

<table>
<thead>
<tr>
<th>Description</th>
<th>Listed firms from 2000 to 2009</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>418</td>
</tr>
<tr>
<td>Bank and financial institution (-)</td>
<td>(58)</td>
</tr>
<tr>
<td>Incomplete data (-)</td>
<td>(33)</td>
</tr>
<tr>
<td>Complete data for analysis</td>
<td>327</td>
</tr>
</tbody>
</table>

For each of these 327 firms was then analyzed its income smoothing practice at two different periods, before convergence to IFRS (2000-2004) and after convergence to IFRS (2005-2009). A firm was categorized as a smoother firm if Eckel’s index were less than 1. Table 2 lists the number of smoothing and non-smoothing firms for two different periods.

Table 2: The Smoothing and Non-smoothing Firms for Three Different Periods

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Smoother</td>
<td>210</td>
</tr>
<tr>
<td>Non-Smoother</td>
<td>117</td>
</tr>
</tbody>
</table>

**FINDING AND DISCUSSION**

- **Convergence to IFRS and IS practices.**

The first hypothesis of this study is to answer whether firms’ IS practices significantly decreased after the Indonesian GAAP converged to IFRS in 2005. The effect of the convergence of IFRS to IS practices was analyzed by comparing the
proportion of smoother firms in two different periods. These periods were before the convergence (2000-2004) and after the convergence of Indonesian GAAP to IFRS (2005-2009) therefore, a statistical test for comparing two means can be used for this purpose. Table 3 provides the descriptive statistics for each of the two groups.

Table 3: T Test on Continuous Dependent Variables Before and After Convergence to IFRS

<table>
<thead>
<tr>
<th>Description</th>
<th>Mean</th>
<th>N</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 2000-2004</td>
<td>0.66</td>
<td>327</td>
<td>0.474</td>
<td>0.040</td>
</tr>
<tr>
<td>2005-2009</td>
<td>0.60</td>
<td>327</td>
<td>0.492</td>
<td>0.042</td>
</tr>
</tbody>
</table>

From the Table 4, the column labeled “mean” is the difference of the two proportion of smoothing firms before and after the convergence of Indonesian GAAP to IFRS. The proportion difference is 0.06 (0.66-0.60) which means that the proportion decrease. A paired sample t test showed a statistically significant difference between mean number before the convergence (2000-2004) (M=0.66, s= 0.474) and after the convergence to IFRS (2005-2009) with (M=0.60, s= 0.492) of the smoother firms, t (327) =2.546, p=0.012, α=0.05.

Table 4: Paired Differences T Test; Before and After Convergence to IFRS

<table>
<thead>
<tr>
<th>Description</th>
<th>Std. Mean</th>
<th>Std. Deviation</th>
<th>Std. Error Mean</th>
<th>t</th>
<th>df</th>
<th>Sig. (2tailed)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pair 2000-2004 with 2005-2009</td>
<td>0.06</td>
<td>0.302</td>
<td>0.026</td>
<td>2.546</td>
<td>136</td>
<td>0.012**</td>
</tr>
</tbody>
</table>

* Notes: The table indicated significance at 0.01 (***) , 0.05(**) and 0.1(*) levels

Therefore the findings of this study as presented in the Table 4 supported the first hypotheses that there is a significant difference of IS practices before and after Indonesian GAAP converged to IFRS.

**LOGISTIC REGRESSION ANALYSIS**

The hypotheses (H2 and H3) are to investigate the association between company specific variables to IS practices, this association was modeled using the logistic regression. Using this model, the dependent variable only contains two categories: the income smoothing status of companies, which 1 is for smoothers and 0 for non-smoothers.
Table 5: Logistic Regression Analysis

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>S.E.</td>
</tr>
<tr>
<td>SIZE</td>
<td>-0.6</td>
<td>0.2</td>
</tr>
<tr>
<td></td>
<td>58</td>
<td>55</td>
</tr>
<tr>
<td>DEBT</td>
<td>1.8</td>
<td>0.5</td>
</tr>
<tr>
<td></td>
<td>91</td>
<td>31</td>
</tr>
<tr>
<td>Constant</td>
<td>9.7</td>
<td>2.8</td>
</tr>
<tr>
<td></td>
<td>18</td>
<td>62</td>
</tr>
</tbody>
</table>

-2 Log-likelihood Value
Omnibus Test (Model Chi square) 86.093 (df=2) (p>0.000) 80.915 (df=2) (p>0.000)
Hosmer & Lemeshow (Goodness of fit test) 7.820 (df=2) (p>0.651) 6.156 (df=2) (p>0.630)
Cox & Snell R Square 0.562 0.697
Nagelkerke R Square 0.695 0.768

Notes: The table indicated significance at 0.01 (***) , 0.05(**) and 0.1(*) levels

Table 5 shows the logistic regression output with the logistic regression model which is as follows:
Logit (pi) = ln [pi/1-pi] = α + β1 SIZEi + β2 DEBTi
From these outputs, the estimated logistic regression equation for the period of after the convergence to IFRS (2005-2009) can be determined as follows:
Logit(pi) = 12.011 -0.881*SIZE + 2.480*DEBT

The result of Table 5 also shows the model Chi-square which tests the joint null hypotheses that all slope coefficients are zero proves to be statistically significant at the 1% level for all two periods. This implies that the two model’s predictors are able to predict the IS practices. The Nagelkerke R-square was 0.695 before the convergence (2000-2004) and was 0.768 after the convergence to IFRS (2005 -2009). This percentage indicates a moderately strong relationship between the
predictors and the prediction (Nuryanah et al., 2011).

To test the reliability of the estimated model, the study used the Hosmer and Lemeshow (H-L) goodness-of-fit test in testing the difference between the model's predicted values and the observed values. If the H-L goodness-of-fit test is greater than 0.05, as wanted for well-fitting model, with these in mind, the p-value of 0.630 for the period after convergence to IFRS (2005-2009), which is computed from the Chi-square distribution with 2 degrees of freedom, is not statistically significant and, therefore, the used model was quite a good fit.

FACTOR AFFECTING IS PRACTICES

- Firm Size and IS Practices

Previous studies found that the company size had an effect on income smoothing behavior (Nuryanah et al., 2011; Atik, 2009; Mansor & Achmad, 2009). Table 5 shows that there is a significant relationship at p= 0.015 for the period before the convergence to IFRS (2000-2004) and also significant at p= 0.012 for the period after the convergence to IFRS (2005-2009). The explanation was that after the financial crisis and economic recovery many investors were interested in investing their fund to well-established and profitable companies. Therefore, larger companies were likely to receive more attention from analysts and investors, and thus more information was available about them. This was the opposite of what happened to small companies; they were likely to be subject to less public scrutiny than the larger companies.

- Debt Financing and IS Practices

Table 5 shows a significant relation between IS practices and debt financing on level of p= 0.025 before the convergence to IFRS (2000-2004) and on p= 0.013 after the convergence to IFRS (2005-2009). This indicated the high relationship between the debt financing factors and IS practices. The explanations about these findings that the greater level of the debt, the stronger motivation for smoothing to lose the bind of the debt covenant. Given the impact of debt reliance is likely to influence IS practice; high debt reliance should affect shareholders’ perception of earnings reliability. It can be argued that firms, which are unable to avoid debt covenant violation, strategically manage their earnings in preparation for renegotiations relating to renew the debt contracts (Frankel & Litov, 2011).

CONCLUSION, LIMITATION AND SUGGESTIONS

This study has found evidence that the occurrence of IS practices in Indonesian listed firms get lesser after the convergence accounting standard to IFRS, but the occurrence was still high. Consequently, the regulators and
standard setters in Indonesia should realize that the big challenge is not merely on releasing standards and regulations but is on ensuring that they can be well-socialized, implemented and monitored.

There are two limitations and one suggestion of this research, first the convergence of accounting standards to IFRS was started from the year 2005 and was expected to fully converge at the end of 2011. The samples of this research were collected from 2005 up to 2009, thus it is still an open opportunity to study the effect of companies’ full convergence to IFRS to IS practice. Second, this study has focused on publicly listed companies in Indonesia, as an emerging capital market. Therefore, the findings reported in this study might not be generalizable to other firms in other countries with different economic and business settings. The suggestions for future research that future research can develop and combine a better IS practice model. It can develop a particular model for each industry, maybe with different industry characteristics, such as the influence of some other IS instruments to company income that might produce different and new IS models.

REFERENCES


