ECONOMIC MOTIVES OF ADOPTION TIMING DECISION: The Case of PSAK 24 Revision

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ABSTRACT

This study examines the firms’ adoption timing decision using the case of PSAK 24 revision that was released in June 2004. Even though this revised standard became effective immediately, its mandatory adoption is extended to 2005, thus allowing multiyear adoption period. The purpose of this study is to determine the firms’ economic motives of adoption timing decision. This study hypothesizes that the early adopters have characteristics that differentiate them from the late adopters, which explain the motives of their early adoption decision.

Overall, the statistical test on hypothesis using logistic regression able to identify firms characteristics that determine PSAK 24 adoption timing decision, including size of the firms, implementation cost, earning management and audit firm. This study concludes that larger firms and firms with less PSAK 24 implementation cost are more likely to adopt early. Higher reported ROE due to PSAK 24 adjustment also motivates firm to adopt early. Another finding is that size of audit firm influences the firms’ adoption timing decision, due to the auditor’s familiarity with PSAK 24. This study fails to explain the economic motives of adoption timing decision based on debt hypothesis.

Keywords: Accounting Choices, Adoption Timing, Employee Benefit, PSAK 24
1. INTRODUCTION

Accounting choices has been an area that gains a lot of research interest. Accounting standards provide leeway to managers to choose among alternatives of accounting method that would best match the firms’ economic characteristics. For some subsequently released or revised standards, managers also have flexibility to choose to adopt the standards early or wait until the standard becomes mandatory. For example, FAS 52 on foreign currency allowed a three-year adoption period, FAS 87 on pensions allowed a five-year adoption period, and FAS 106 on employee benefits allowed a three-year adoption period. FASB justification for this extended adoption period is mainly due to the firms’ implementation cost (Langer & Lev, 1993). This extended adoption period gives managers more flexibility to choose the adoption timing for their own motives, as widely believed in earnings management literature. It is therefore interesting to examine characteristics of firms that take advantage of the multi-year adoption period and test whether managers use the timing decision to manage earnings.

Study by Ayres (1986) is among the first studies in this issue by using the case of adoption of FAS 52 on foreign currency translation. Ayres study indicates that early adopters have distinguished characteristics compared to those that adopt later. Sami and Welsh (1992) and Langer and Lev (1993) study on adoption timing of FAS 87 indicates that firm adoption timing decision is motivated by earning management to increase earnings. Amir and Livnat (1996) study on FAS 106 provides strong support for the FASB’s implementation cost justification. Another study on FAS 106 by Costello et al. (1994) does not support earning management hypotheses, however does not support FASB justification as well. To reconcile these mixed results, further research is required using a different set of samples, particularly samples originating from countries other than United States.

The release of revision of PSAK 24 on accounting for employee benefits in June 2004 open up opportunity to extend the same research question to Indonesian setting. Using samples of 105 Indonesian public firms, this paper examines the economic motives of early adoption decision of PSAK 24 revision. This paper concludes that the early adopters do have characteristics that differentiate them from the late adopters. The
result of statistical test using logistic regression provides empirical findings that explain the motives of firms’ early adoption decision. Larger firms and firms with less PSAK 24 implementation cost are more likely to adopt early. Higher reported ROE due to PSAK 24 adjustment also motivates firm to adopt early, which support earning management hypothesis. Firms audited by one of “Big 4” audit firms are more likely to adopt early, due to the auditor’s familiarity with PSAK 24 before it is formally released. The test on debt hypothesis finds that debt restrictiveness is not a factor that determines the adoption timing decision.

The rest of this paper is organized in several sections. Overview of PSAK 24 revision is presented in Section 2 right after this introduction. Section 3 discusses the theoretical background of accounting choices and researches on accounting choices that focus on adoption timing decision, and hypothesis development as well. It is followed by the explanation of research methodology in Section 4. Section 5 presents discussion on the result of statistical test on hypotheses. The paper is concluded by discussion on the implication of the research, weaknesses and potential future research.

2. PSAK 24 REVISION

In June 2004, Ikatan Akuntan Indonesia (IAI) released revision of PSAK 24 on employee benefits. PSAK 24 previously covers only recognition of pension obligation. Recognition of other post-employment benefits, as required by Labor Law no 13/2003, is left to the managers’ discretion according to PSAK 57 on Estimated Liabilities and Contingent Liabilities. The revised PSAK 24 covers all liabilities pertaining to employee benefits, including both pension and other post-employment benefits, using Projected Unit Credit (PUC) method. This new standard became effective for financial report started on or after July 1, 2004. However, its mandatory adoption is extended to 2005, thus allowing firms to choose to adopt early in 2004 or postpone to 2005.

PSAK 24 is an adoption of International Accounting Standard (IAS) 19, which is regarded as one of the most complicated accounting standard. Adoption of new PSAK 24 will require firms to change their accounting method of post employment benefits to PUC. The impact of accounting method change are treated retrospectively as adjustment to retained earnings, so that it has no impact on the current year net income.
The recalculation of employee benefit obligation under the new method and the requirement to restate financial report due to this adjustment imposes implementation costs. However, firms may choose to charge it as current year expenses if the amount is immaterial, that consequently will result in lower net income and lower retained earnings.

3. LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Managers’ discretion on accounting choices can be exercised in many ways. First, managerial judgment is required to estimate various accounting transactions, such as expected economic lives of long-term assets, allowance for doubtful accounts, asset impairments, and contingent liability. Second, managers also have flexibility to choose among acceptable accounting methods, for example FIFO vs. LIFO for inventory costing and straight-line vs. accelerated method for fixed asset depreciation, as well as whether interest be capitalized to self-constructed asset or be expensed. Managers also must decide on the structure of corporate transaction so that it qualifies for a specific accounting method, for example pooling vs. purchase method for business combination, and capital vs. operating lease for leased assets. Third, managerial judgment is exercised on the timing of accounting transactions, such as when to recognize revenue accrual, when to write off uncollectible accounts, and when to adopt a new accounting standard. It is widely believed earnings management take place through managers’ exercise of these discretion (Fields et al., 2001).

It is important to note that exercise of managerial judgment does not always result in earnings management, since such discretion can be either value maximizing or opportunistic (Watts and Zimmerman, 1990). It is the managers’ intent of such discretion that will qualify whether managers’ action fall into the definition of earnings management. When the judgment is exercised opportunistically to obtain some private gain (Schipper, 1989) or to mislead stakeholders about the underlying economic performance of the company or to influence contractual outcomes (Healy and Wahlen, 1999), then managers involve in earning management activities. Otherwise, the managerial decision reflects the real business process and financial report efficiently convey information on the outcome of such process. In practice, it is not easy to
distinguish between the two since the intent of managers’ action is not observable and consequently, identifying earnings management in empirical studies is difficult (Dechow and Skinner, 2000). However, the presence of such mixed intents that make the study of earnings management interesting (Fields et al., 2001).

There are at least three incentives for earnings management through accounting choices, i.e. asset pricing, contracting, and influencing external parties (Fields et al., 2001; Healy and Wahlen, 1999; Watts and Zimmerman, 1986). One consequences of market imperfection is the presence of information asymmetry. Managers, as insiders that have more information than outsiders, exercise their discretion on accounting choice as a mechanism to convey information to less-informed parties. By conveying such information, it is expected that market properly value the firms stocks. However, this also creates incentive for managers to manage earnings in an attempt to meet market expectation and to influence short-term stock performance. DeFond and Park (1997) study, for example, reveals that managers smooth earnings to meet earnings target by using discretionary accruals.

One environment risk faced by firms is the influence of external parties such as accounting standard setter bodies, tax authority, competitors, and labor unions. By exercising earnings management, managers expect to influence the decisions of these external parties. Study by Jones (1991) provides an example of earnings management using discretionary accruals in an attempt to influence the result of International Trade Commission investigation. In the context of SFAS 106 on post retirement benefits (PRB) other than pension, Costello et al. (1994) identifies early adopters to be bigger companies in terms of number of employee and dollars of assets, compared to the late adopters. Based on the political cost hypothesis, this study also expects that large firms tend to adopt early to avoid scrutinization by external parties and to avoid dispute with labor union.

H1: it is predicted that larger firms are more likely to be early adopters compared to smaller firms

FASB believed that many employers need additional time to obtain information for the implementation Projected Unit Cost (PUC) method as required by SFAS 87. Langer and Lev (1993) argues that adoption of PUC incurs direct cost to collect data
and indirect cost to renegotiate debt covenant. Firms that already used PUC method before the release of SFAS 87 are expected to be the early adopter since they incur less implementation cost compared to those that have not used PUC. Large firms are expected to adopt FAS 87 earlier than smaller firms since large firms generate more information for internal purposes. Study by Sami and Welsh (1992) also concludes that larger firms are more likely to choose early adoption due to their less information cost. The next prediction is based on this implementation cost hypothesis.

**H2: it is predicted that firms with less implementation cost are more likely to be early adopters**

Accounting data are widely used in the contracts between firms and their stakeholders, including investors and lenders. Compensation contracts are intended to align the manager and principal objective. Debt contracts are written to limit managers’ action so that creditors are protected. However, knowing that principal and creditors do not always observe managers action and undo the earnings management, these contracts creates incentives for managers to manage earnings. Study by Healy (1985) provides evidence that managers’ choice of accounting procedures is influenced by their bonus contract, while DeFond and Jiambalvo (1994) finds significantly positive abnormal total accruals and abnormal working capital accruals in firms reporting debt covenant violations. In the context of SFAS 87 on accounting for pension and SFAS 106 on post retirement benefits (PRB) other than pension, several studies examine managers’ adoption-timing motives and differentiate between early and late adopters. Langer and Lev (1993) concludes that debt variables appear to be unrelated to the adoption timing, which is consistent with the result of Scott (1991) study. Sami and Welsh (1992) find that early adopters are subject to more accounting-based debt constraint than late adopters. On the other hand, result of Costello et al. (1994) study shows that early adopters are likely firms with lower debt/equity ratios relative to the late adopters. The above discussion leads the third hypothesis that firms with less strict debt covenant tend to adopt early compared to firms with strict debt covenant. In other words, firms facing strict debt covenants tend to postpone accounting method that potentially violates the debt covenants, in order to renegotiate the contract.
H3: it is predicted that firms with less strict debt covenant will be more likely to be early adopters compared to firms with more strict debt covenant

It is also expected that firms’ adoption timing decision is motivated by earnings management, whether to smooth income or to take “big bath”. The “big bath” hypothesis in Costello et al. (1994) study is not supported as an explanation of SFAS 106 adoption timing decision. On the other hand, Amir and Livnat (1996) finds that many of the firms adopt the standard in the year (and quarter) with the lowest pre-SFAS 106 earning. This result is consistent with “big bath” hypothesis and indicates that earning management is a motive for adoption timing. Langer and Lev (1993) finds that increase in reported earnings is the only variable that can consistently discriminate between early and late adopters. It implies that managers are motivated to report higher earnings by timing its FAS 87 adoption. This conclusion is consistent with Pincus and Wasley study (1991) that “earning impact of mandated accounting changes was positive and more so for early adopters relative to late adopters”.

Adjustment due to PSAK 24 revision adoption is reported retrospectively as adjustment to equity. This adjustment have different impact in Return on Equity (ROE), depends on whether the adjustment decreases or increases the firms’ equity. Firms with favorable impact of PSAK 24 adoption on ROE will be motivated to adopt early. On the other hand, firms that report lower ROE due to PSAK 24 adjustment tend to postpone the adoption to avoid presentation of unfavorable ROE.

H4: it is predicted that firms with positive ROE change will be more likely to adopt early compared to firms with negative ROE change

The last hypothesis is based on study by Trombley (1989) on the adoption timing decision issue of SFAS 86 (Accounting for the Costs of Computer Software to be Sold, Leased or otherwise Marketed). Result of Trombley (1989) study suggests that the adoption decision is related to the auditor position against the SFAS 86. When a firm is audited by an auditor who favors SFAS 86, there is a great chance that the firm will adopt the standard early. It implies that auditor does matter in the firms’ accounting decision. However, since information pertaining to auditors’ position on PSAK 24 proceeding are not known, this study includes the auditor variable from the perspective of auditors understanding on PSAK 24. Considering the complex nature of
PSAK 24, firms may look to their auditors for advice about implementation of new accounting standards. It is assumed that big accounting firms are more exposed to IAS and therefore more familiar with complexities inherent in PSAK 24.

**H5: firms audited by “Big 4” audit firms are more likely to be early adopters compared to firms audited by non-big 4**

### 4. RESEARCH METHODOLOGY

#### 4.1 Sample Selection

Samples under this study are public companies listed in Jakarta Stock Exchange whose data are completely available. To control the industry-specific determinant of accounting adoption decision, the samples are limited to firms in manufacturing industry. One firm that reports in US Dollar is excluded from the sample because it is not comparable to other sample firms that report in Indonesia Rupiah (IDR). Firms with negative equity are also excluded from the sample since debt equity ratio cannot be calculated based on such negative equity. Some other firms are excluded from the sample due to incomplete data or insufficient disclosure pertaining to PSAK 24 adoption. After elimination as summarized in Table 1, the final samples to be used in the analysis consist of 105 manufacturing firms.

#### Table 1 Sample Selection

| Number of Firms in Manufacturing Industry | 150 |
| Firms excluded from final sample:         |     |
| - Firms with negative equity              | (20) |
| - Firm reporting in currency other than IDR| (1)  |
| - Firms with incomplete data              | (24) |
| Final Sample                              | 105 |

#### 4.2 Empirical Model

Considering the categorical nature of the dependent variable, this study employs logistic regression in the analysis, as follows:
Adoption Timing = \( \alpha + \beta_1 TA + D_1 PUC + \beta_2 \text{EMPLOYEE} + \beta_3 \text{EMPxNONPUC} \)
+ \( \beta_4 \text{DER} + \beta_5 \text{ROECHANGE} + D_2 \text{AUDITOR} + \varepsilon \)

Where,
Adoption Timing = 1 for firms that adopt in Year 2004 (early adopter),
= 0 for firms that adopt in Year 2005 (late adopter)

TA = Total Assets
PUC = 1 for firms that have employed PUC before 2004, 0 otherwise
EMPLOYEE = Number of firms’ employees
EMPx NONPUC = Interacting variable of employee and method other than PUC
DER = Debt Equity Ratio
ROECHANGE = Increase (decrease) in Return on Equity
AUDITOR = 1 for firms audited by “Big 4” Audit Firms, 0 otherwise

Dependent variable under this study is adoption timing decision, coded 1 for early adopters (i.e. adoption in year 2004) and 0 for late adopters. Information whether firms adopted revised PSAK 24 in 2004 is collected manually from each firm’s financial report disclosure in 2004, particularly in the accounting policy section, notes on employee benefits, and notes on accounting changes. If the disclosures mentioned explicitly that a firm adopts PSAK 24 early, the firm is classified as early adopter, otherwise it is coded as late adopter. This information is then confirmed to the 2005 financial report, especially late adopter firms. Firms that do not provide sufficient disclosure on the PSAK 24 adoption are excluded from the sample since the adoption year cannot be determined.

As commonly used in most studies, proxy for firm size is the firm’s total assets. Alternatively, this study also proxy the firm size using firms’ net sales and revenues in the additional test.

To measure the implementation cost, this study uses three different proxies. The first proxy is whether the firm already employs PUC method before the release of PSAK 24 revision, which was included in the model as a dummy variable. Firms that previously employed PUC method 2004 will incur less cost for PSAK 24 adoption. On
the other hand, firms that estimate their employee benefits obligation using non-PUC method must collect new data to support the recalculation of their employee benefit liabilities. Therefore, it is expected that firms with PUC before PSAK 24 Revision release are the early adopters. The second proxy for implementation cost is number of firms’ employees, as the larger the employee number, the higher the data collection costs. It is expected that firms with less employees are the early adopters since they can collect data faster and cheaper compared to firms with more employees. The third proxy is interaction between employee number and non-PUC method for employee benefit accounting. The cost of PSAK 24 implementation matters more for firms that previously employ non-PUC method and have large number of employees. It is expected that firms with such characteristics are the late adopters since they bear higher implementation cost.

Debt to Equity Ratio (DER) is included in the model as proxy of debt covenant restrictiveness. The rigidity of debt covenant is a function of firms’ debt financing relative to equity financing, as measured by Debt to Equity ratio. The higher the ratio, the more strict the covenant is. This variable is measured by firms’ Total Liabilities divided by Equity.

Proxy for earnings management is ROE change. To measure the ROE change, firms’ ROE in 2003 compared to ROE in 2004. The resulting difference is included in the model as dummy variable, coded 1 if it is positive (ROE increase) and coded 0 if it is negative (ROE decrease).

5. DISCUSSION ON RESULT OF STATISTICAL TEST

Descriptive statistics as presented in Table 2 shows that sample firms are divided into 63 early adopters and 42 late adopters. Early adopters are bigger compared to late adopters, measured by mean of total assets and market capitalization. Compared to late adopters, firms that adopt PSAK 24 revision early have relatively less employee. Comparison of debt to equity ratio shows that late adopters are less leveraged than the early adopters. Pertaining to performance, as measured by ROE, early adopters perform better than late adopters. However, the mean differences of each characteristic between the two samples are not statistically significant.
The result of statistical test on the empirical model is presented in Table 3. It shows that TA as proxy for firms’ size is statistically significant at 10% confidence level, implying that larger firms are more probable to adopt PASK 24 revision earlier. This result is consistent with the descriptive statistic presented in Table 2 and support hypothesis 1 that large firms tend to adopt PSAK early to avoid political cost. Another explanation is that implementation cost for larger firms is relatively less compared to smaller firms, due to their better information systems. This lower implementation cost thus motivates larger firms to adopt early. Another run using sales as proxy for firms’ size (not reported) results in same conclusion, thus confirms that size is one determinant of adoption timing decision, consistent with result of Sami and Welsh (1992) and Costello et al. (1994) studies.
Table 3: Result of Empirical Model Regression

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
<th>Wald</th>
<th>Sig.</th>
<th>Exp(B)</th>
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<td>.510</td>
<td>6.589</td>
<td>0.0103</td>
<td>0.269865</td>
</tr>
<tr>
<td>TA</td>
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<td>.000</td>
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<td>0.0928</td>
<td>1.000230</td>
</tr>
<tr>
<td>PUC</td>
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<td>.607</td>
<td>.829</td>
<td>0.3625</td>
<td>1.737805</td>
</tr>
<tr>
<td>EMPLOYEE</td>
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<td>.000</td>
<td>3.636</td>
<td>0.0565</td>
<td>0.999873</td>
</tr>
<tr>
<td>EMP x NONPUC</td>
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<td>.000</td>
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<td>1.000146</td>
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</tr>
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</table>

Implementation cost hypothesis is supported only by variable EMPLOYEE, which is statistically significant at 10% confidence level. Firms with more employees have less probability to adopt PSAK 24 early due to larger cost to collect additional employment data. This result should be interpreted with caution since EMPLOYEE may also serve as proxy for firms’ size. The interpretation that larger firms are firms with more employees may contradict the result of test on hypothesis 1. Referring to statistic descriptive in Table 2, early adopters are bigger in terms of total assets compared to late adopters, however they have fewer employees. It can be concluded that total assets and number of employee cannot be both used as measure of firms.
assets. EMPLOYEE is thus more appropriately interpreted as measure of implementation costs.

Other proxies for implementation costs, i.e. PUC and EMPxNONPUC, are not statistically significant and thus do not explain the PSAK adoption decision. Possible explanation for this result is the firms’ anticipation of PSAK 24 before it is formally released. It takes more than 2 years before IAI finally released PSAK 24 revision that refers to IAS 19. In the anticipation of PSAK 24 revision, firms might already recognize their other post employment benefit based on PSAK 57 on estimated liability using PUC method. Consequently, adoption of PSAK24 hat requires PUC is not a concern anymore for most of the firms. This might be the reason why variable PUC cannot explain the adoption timing decision.

Insufficient DEBT variable implies that debt restrictiveness is not a concern for adoption timing decision, which is consistent with the result of Langer and Lev (1993) and Scott (1991) study. However, this result is not as predicted and is inconsistent with results of several other studies. This result might due to inappropriate proxy for accounting-based debt covenant restrictiveness. Instead of total liabilities to equity ratio, the more accurate proxy should long term debt to equity ratio, since only long-term loan than impose debt covenants. Another explanation is that the debt equity ratio is already high for sample firms (the mean is 2.9 in Table 1), so that further increase in the ratio due to PSAK 24 adoption will not change their position pertaining to debt covenants violation. Another possibility is that lenders do not involve mandatory accounting standard change in the debt covenants.

ROECHANGE is statistically significant at 10%, which supports earning management hypothesis and is consistent with result of Langer and Lev (1993). Firms with ROE increase have more probability to adopt PSAK 24 early so that they report better financial performance as measured by ROE.

AUDITOR is statistically significant at 5%, which is consistent with the result of Trombley (1989) study that audit firm is important determinant of new standard adoption decision. The result shows that firms audited by one of the “Big 4” are more likely about 4 times to be early adopters compared to those audited by non “Big 4”, thus
supports hypothesis 5. The interpretation of this result is that auditors’ familiarity with the new standard determine the standard adoption timing of their clients.

6. CONCLUSION

Management discretion on accounting choices has been an area of research interest in accounting. This study explores the same research question using the case of PSAK 24 that allows multiyear adoption period. In particular, this study investigates the economic motives of PSAK 24 adoption timing decision based on several hypothesis, including political cost, implementation cost, debt, earning management and audit firm hypothesis. Based on the result of statistical test, this study concludes that early adopters are larger firms and firms with less PSAK 24 implementation cost. The finding also support earning management hypothesis that early adopters are motivated by higher ROE due to PSAK 24 adjustment. The size of auditor firms also matter in the adoption timing decision of their client, due to their familiarity with PSAK 24 that is adopted from IAS 19. However, the result does not support the debt hypothesis, thus debt restrictiveness seems not to be a determinant of adoption timing decision.

This paper contributes to the accounting literature by providing empirical findings on new standard adoption timing decision in Indonesian setting. Nevertheless, this study is subject to several shortcomings as follows:

1. The magnitude of earnings impact of PSAK 24 adoption is not considered. This is simply because of difficulty to obtain the magnitude of adjustment impact on earnings. For firms that choose prospective method, the adjustment for previous years are reported together with 2004 employee benefits expense. The disclosures only mention that the adjustment is immaterial, so that it is treated prospectively.
2. The analysis is limited to the case of PSAK 24 adoption, so that the result might not be generalized into any other new standards. It is an opportunity for future studies to explore same issue to other accounting standards.
3. Use of alternative proxies for several insignificant variables merits consideration and might show different result. For example, interest coverage ratio for debt is alternative proxy for debt restrictiveness, as used in Sami and Welsh (1992) study.
4. Sample under this study is limited to 105 firms in manufacturing industries. While it enables control on specific industry effect of PSAK 24 implementation, it limits the generalization of the conclusion to other industries.

This paper has important implication for IAI as standard-setter body in Indonesia, as it provides strong support for the implementation cost justification. By allowing extended adoption period, IAI has provided firms enough time to collect additional data necessary for PSAK 24 implementation. Another implication is relevant for user of financial report that relies on accounting numbers for their decision making. As PSAK 24 adjustment influence the ROE, users should use this measure of firms’ performance with PSAK 24 effect in mind.
REFERENCES


