Do Auditors Report Earnings Management?

Dr. Sompong Pornupatham

Faculty of Commerce and Accountancy, Chulalongkorn University, Bangkok, Thailand.

1. Introduction

Earnings management is the situation in which firms’ managers report firms’ earnings, as they wish rather than as the economic substance dictates (Healy and Wahlen, 1999). Reported earnings numbers do not thus reflect the actual underlying economic substance of the firm. External auditors play an important role in monitoring firms, resisting management’s opportunistic behaviour, and increasing the integrity of financial reports. DeAngelo (1981) defined audit quality as the joint probability that an auditor has competence to discover and independence to report a breach in the client’s accounting system. If this definition of audit quality is hold, a quality auditor should discover and report any misstatements including earnings manipulation. Earnings management was measured by discretionary accruals and tested by comparing its means and medians in each type of auditor’s report and size of audit firms. Research results showed that discretionary accruals differed among firms with different types of auditor opinions. Further analysis by types of audit firms reported difference in means of discretionary accruals for clean and unqualified with explanation.
opinions. Firms with non-Big 4 auditors had higher discretionary accruals than those with Big 4 counterparts for the two types of auditor’s reports. This research showed that Big 4 and non-Big 4 auditors had differing quality measured by discretionary accruals level and signal their quality in differing types of auditors’ opinions.

The remainder of this paper is organised as follows. Section two reviews prior literature on earnings management and external auditors. Section three develops hypothesis. Section four reports sample selection and section five describes earnings management measured by discretionary accruals. Section six provides research results. Section seven concludes the paper.

2. Literature Review

Earnings management occurs when ‘managers use judgement in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers’ (Hussey and Wahlen, 1999, p. 368). Similarly, earnings management is defined as ‘the process of taking deliberate steps within the constraints of generally accepted accounting principles to bring about a desired level of reported earnings’ (Davidson et al., 1987, cited in Schipper, 1989, p. 92). Similarly, earnings management may represent ‘a purposeful intervention in the external financial reporting process with the intent of obtaining some private gain’... A minor extension of this definition would encompass ‘real’ earnings management, accomplished by timing investment or financing decisions to alter reported earnings or some subset of it’ (Schipper, 1989, p. 368). Likewise, earnings management is the active manipulation of accounting results for the purpose of creating an altered impression of business performance (Mulford and Comiskey, 1996, p. 350). Earnings management may be motivated by a variety of reasons, including the desire to meet capital market expectations (Burgstahler and Dichev, 1997; Dechow and Skinner, 2000), to meet management’s compensation contracts’ requirements (Gaver et al., 1995; Healy, 1985), to avoid violating lending agreements (DeFond and Jiambalvo, 1994; Sweeney, 1994), and to avoid political costs (Han and Wang, 1998; Jones, 1991).

External auditors play an important role in corporate governance and increasing the integrity of financial reporting. The objective of an audit of financial statements is to enable the auditor to express an opinion on whether the financial statements are presented fairly, in all material respects, in accordance with GAAP (IAASB, 2004a, p. 2). An audit is designed to provide a reasonable assurance that the financial statements taken as a whole are free from a material misstatement, whether due to error or fraud. Error is an unintentional mistake or misstatement in the financial statements. In contrast, fraud is an intentional act by one or more individuals involving the use of deception to obtain an unjust or illegal advantage (IAASB, 2004b, p. 5). Fraud may be classified as of two types: the misappropriation of assets and fraudulent financial reporting. Misappropriation of assets is, for example, the stealing of assets, misuse
of assets for personal benefits or embezzling of receipts by employees or management. However, fraudulent financial reporting represents the manipulation of accounting records, and intentional misapplication of accounting principles in order to deceive the users of financial statements and this definition includes earnings management. Accounting researchers have attempted to identify multiple dimensions of audit quality and these dimensions may lead to different definitions. DeAngelo (1981) defined audit quality as the joint probability that an auditor will both discover and report a breach in the client’s accounting system.

After auditors collect and evaluate audit evidences, they should express their opinion as to whether the audited financial statements give a true and fair view (or are presented fairly, in all material respects) in accordance with the financial reporting framework. Thus, the auditor report is the final product of the audit examination that auditors use to communicate to users of the company’s financial statements (Porter et al., 2003, p. 366). The auditor’s report may be classified into two types: unqualified and modified reports, as mentioned in the International Standard on Auditing (ISA) 700 by the IAASB (2004c).

First, auditors issue an unqualified report when they consider the audited financial statements give a true and fair view in accordance with the financial reporting framework. Second, auditors will issue modified auditor’s reports based on the circumstances and materiality effect:

(1) Emphasis of matter or unqualified opinion with explanatory language. Auditors modify the auditor’s report when there is a material matter arising from a going concern or uncertainty problem. They add an emphasis of matter paragraph after an opinion paragraph to highlight a matter affecting the financial statements and the addition does not affect the auditor’s opinion.

(2) Qualified opinion. Auditors express a qualified opinion when they disagree with management on the application of accounting policies, or management or circumstances limited their audit scope, and these matters are not so material.

(3) Disclaimer of opinion. Auditors express a disclaimer of opinion due to a material limitation of audit scope and they could not obtain sufficient appropriate audit evidence.

(4) Adverse opinion. Auditors express an adverse opinion when they significantly disagree with companies’ management on the application of accounting policies.

Prior research on the auditor’s report and earnings management focuses on the association between audit qualifications, modified audit opinions and discretionary accruals. The study by Francis and Krishnan (1999) identified an association between firms with modified audit opinions for asset realisation and going concern uncertainties and extreme total accruals level. Also, the study by Chen et al. (2001) found management’s propensity to manipulate earnings is positively associated with modified audit opinions expressed by auditors. Similarly, Bartov et al. (2001) reported that absolute abnormal accruals cause auditors to express audit opinion modified for scope limitations and GAAP departures. Likewise, Bradshaw et al. (2001) revealed an association between firms with any type
of modified audit opinion and working capital accruals. In contrast, Butler et al. (2004) found no evidence that auditors issue a modified audit report due to discretionary accruals or earnings management level because auditors express modified opinions due to circumstances such as scope limitation, material uncertainty, and disagreement with management, rather than from an earnings management reason. Further, Butler et al. (2004) suggested that firms with audit opinions modified for the going concern problem have extremely negative abnormal accruals because they may have financial distress and negative accruals transactions such as overdue payables. Thus, large negative accruals may be a result of financial problems rather than an intention to manage earnings.

3. Hypothesis Development

A relationship between earnings management and audit opinion appears to be inconclusive. Bartov et al. (2001) found a significant and positive relationship between absolute discretionary accruals as the independent variable and audit opinion classified into qualified and unqualified opinion as the dependent variable. In contrast, Butler et al. (2004) suggested that auditors did not express their opinions based on discretionary accruals level and were unlikely to modify their opinions for earnings management reasons. This notion differed from Bartov et al. (2001) study which indicated that auditors modified their opinions based on earnings management measured by discretionary accruals. Butler et al. (2004) suggested that firms with modified opinions or going concern opinions are likely to have financial distress, poor performance and transactions for enhancing liquidity by delaying payables and factoring receivables, that might create negative accruals. Consistent with Butler et al. (2004), DeFond et al. (2002) indicated that the willingness of auditors to issue a going concern report is not empirical evidence supporting guaranteed auditor independence in terms of the ability to withstand management’s discretion. However, if Big 4 auditors are better than non-Big 4 auditors in detecting earnings management, consistent with Becker et al. (1998), the discretionary accruals level may be reflected through the auditor’s report. From discussion above, the following hypotheses were formulated for each type of audit opinion (i.e. unqualified and modified opinions):

Ha: Unqualified financial reports of Big 4 clients have lower discretionary accruals than those of non-Big 4 clients

Hb: Modified financial reports of Big 4 clients have lower discretionary accruals than those of non-Big 4 clients

4. Sample Selection

Secondary analysis of data was performed using financial data of Thai listed companies obtained from Worldscope. This database has been used by several studies in the corporate governance literature (Claessens et al., 2000; Claessens et al., 2002; Fan and Wong, 2002; La Porta et al., 1999; Lemmon and Lins, 2003; Mitton, 2002) and it appears to be reliable. Non-financial information, such as external auditor, was collected from the Integrated-SET Information Management System.
(I-SIM), and CD-ROMs of the Stock Exchange of Thailand (SET). The CD-ROMs provided information on auditor type (Big 4 or non-Big 4) and auditor’s report.

The secondary analysis of data was performed using the data set of selected listed companies across industries from 1999 to 2004 to study earnings management and avoid the effect of the 1997 financial crisis. Further, the use of time-series data would allow the researcher to evaluate results across times and minimise the influence of a specific year’s events. The analysis was undertaken on a cross-sectional basis to enable the researcher to compare factors in different organisations (Saunders et al., 2000).

As can be seen from Table 1, banks and financial institutions were excluded from the sample since they might have fundamentally different accruals processes that might not be measured by the Jones model (Peasnell et al., 2005). In addition, real estate as well as utilities firms were excluded from the sample since they might have methods to commit earnings management not detected by discretionary accruals models. Further, extreme total accrual values were excluded from the sample as these values might distort the research findings and cause heteroscedasticity. Consequently, the post-reduction sample consisted of 1,230 firm-years.

5. Earnings Management Measured by Discretionary Accruals

Prior literature suggests many accrual-based models for detecting earnings management such as the Healy Model, the DeAngelo Model, the Industry Model, the Jones Model, the modified-Jones Model, the KS Model, and the Margin Model. According to Dechow et al. (1995), a modified version of the model developed by Jones (1991) is the most powerful test of earnings management because it generates the fewest type II errors (i.e. the null hypothesis, that earnings are not managed, in response to the stimulus identified by the researcher, is not rejected when it is false). Further, prior

<table>
<thead>
<tr>
<th>Description</th>
<th>Number of companies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Initial sample 1999-2004 (non-financial firms)</td>
<td>1,350</td>
</tr>
<tr>
<td>Less: Missing Data</td>
<td>(96)</td>
</tr>
<tr>
<td>Extreme values</td>
<td>(24)</td>
</tr>
<tr>
<td>Preliminary sample</td>
<td>1,230</td>
</tr>
</tbody>
</table>

1 A type II error is used to evaluate the power of the model and a type I error is used to evaluate model specification (Peasnell et al., 2005).
literature reports that the Jones and modified-Jones models are better in terms of robustness than the Healy, the DeAngelo, the DeAngelo models (Young, 1999). Thus, this research will use the original Jones and modified-Jones Model to capture earnings management as a proxy of audit quality.

Models for capturing earnings management may start with the measurement of total accruals. Then, a specific model attempts to identify the non-discretionary component of the total accruals, or accruals which are not subject to management’s decision. Finally, a discretionary accruals portion is identified, which is the measure of management’s earnings manipulations, by subtracting non-discretionary accruals from total accruals.

Jones (1991) used an expectation model to improve the measures of discretionary total accruals applied in prior research. These models allow for changes in non-discretionary accruals that are caused by changes in economic conditions. The Jones model is shown below.

\[
\frac{T_{t}}{A_{t-1}} = \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \alpha_2 \left( \frac{\Delta \text{Revt}}{A_{t-1}} \right) + \alpha_3 \left( \frac{\text{PPE}_t}{A_{t-1}} \right) + \varepsilon_t
\]

Where:
- \( T_{t} \) = total accruals in year \( t \);
- \( A_{t-1} \) = total assets in year \( t-1 \);
- \( \Delta \text{Revt} \) = revenues in year \( t \) less revenues in year \( t-1 \);
- \( \text{PPE}_t \) = gross property, plant, and equipment in year \( t \);
- \( \varepsilon_t \) = error term in year \( t \), and
- \( \alpha_1, \alpha_2, \alpha_3 \) = firm-specific parameters.

The modified-Jones Model (Dechow et al., 1995) differs from the original Jones Model (1991) only by adjusting for the change in receivables in the event period because this approach assumes there is no systematic earnings management. The modified-Jones Model assumes that earnings management causes all changes in credit sales in the event period because manipulation of credit sales recognition may be easier than that of cash sales. The modified-Jones model is shown below.

\[
\frac{T_{t}}{A_{t-1}} = \alpha_1 \left( \frac{1}{A_{t-1}} \right) + \alpha_2 \left( \frac{\Delta \text{Revt}}{A_{t-1}} - \frac{\Delta \text{REC}_t}{A_{t-1}} \right) + \alpha_3 \left( \frac{\text{PPE}_t}{A_{t-1}} \right) + \varepsilon_t
\]

Where:
- \( T_{t} \) = total accruals in year \( t \);
- \( A_{t-1} \) = total assets in year \( t-1 \);
- \( \Delta \text{Revt} \) = revenues in year \( t \) less revenues in year \( t-1 \);
- \( \Delta \text{REC}_t \) = net receivables in year \( t \) less net receivables in year \( t-1 \);
- \( \text{PPE}_t \) = gross property, plant, and equipment in year \( t \);
- \( \varepsilon_t \) = error term in year \( t \), and
- \( \alpha_1, \alpha_2, \alpha_3 \) = firm-specific parameters.

The estimates of \( \alpha_1, \alpha_2, \alpha_3 \) are those obtained from the original Jones Model, not from the modified-Jones Model.
6. Tests for Difference in Means and Medians of Discretionary Accruals Classified by Auditor Opinions

This section aimed to measure level of discretionary accruals as classified by type of auditor opinions and by size of audit firm in order to ascertain the direction of discretionary accruals signalled by each type of auditor. The auditor’s report is the final product of auditors showing their opinions on the financial statements they audit. Tables 2 and 3 present the tests for difference in means and medians of discretionary accruals as measured by the Jones and modified-Jones models, analysed by auditor opinions, respectively.

As shown in Table 2, firms with unqualified opinion reported positive discretionary accruals by 0.12% of lagged total assets. Firms with qualified opinion reported positive discretionary accruals by 0.49% of lagged total assets, higher than those with unqualified opinion. Most qualified opinions reported in the sample were issued due to scope limitation by circumstances, for example, auditors were unable to verify the inventory quantity because they were appointed by clients after the stocktaking date. Firms with disclaimer opinion had negative discretionary accruals of -3.67% of lagged total assets, suggesting they might have negative operating performance and might suffer from negative accruals transactions such as delayed payables and bad debts provision. Auditors issued disclaimer opinion reports to clients that had material business uncertainty or going concern problems. Firms with unqualified and explanatory language reported negative discretionary accruals of -0.15% of lagged total assets less than those with disclaimer opinion. These firms differed from those with unqualified opinion, and auditors wanted to draw users’ attention to special matters such as changes in accounting policy and business uncertainty of future events.

Most observations with unqualified and explanatory language were firms with business uncertainty or with going concern problems and poor financial performance, consistent with Butler et al.’s (2004) study which found companies with going concern opinions had extremely negative abnormal accruals. In this study, the F-statistic was 2.922 and significant at the 5% level, indicating that means and medians of discretionary accruals differed among firms with different types of auditor opinions. Table 3 presents difference in means and medians of discretionary accruals as measured by the modified-Jones model. All directions of means of discretionary accruals in each type of auditor opinions were consistent with those reported in Table 2; however, the magnitudes were more positive. The F-statistic was significant at the 5% level, suggesting that means and medians of discretionary accruals differed among firms with different types of auditor opinions.

Further analysis of discretionary accruals was performed in order to ascertain whether they were affected by different types of opinion reported by Big 4 and non-Big 4 auditors. Tables 4 and 5 report the tests for difference in means and medians of discretionary accruals produced by the Jones and the modified-Jones models, respectively. As shown in Table 4, Big 4 clients with unqualified opinion had negative discretionary accruals of -0.32% of lagged
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Table 2 Tests for Difference in Means and Medians of Discretionary Accruals Classified by Auditors’ Opinions -the Jones Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>All Observations (n=1,230)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>Unqualified (Clean) (n=739)</td>
<td>.0012</td>
<td>.0000</td>
</tr>
<tr>
<td>Qualified (n=148)</td>
<td>.0049</td>
<td>-.0150</td>
</tr>
<tr>
<td>Disclaimer (n=39)</td>
<td>-.0367</td>
<td>.0000</td>
</tr>
<tr>
<td>Unqualified with explanation (n=304)</td>
<td>-.0015</td>
<td>-.0100</td>
</tr>
</tbody>
</table>

F-statistics = 2.922**

Unqualified = Unqualified audit opinion;
Qualified = Qualified audit opinion;
Disclaimer = Disclaimed audit opinion, and
Unqualified with explanation = Unqualified audit opinion with explanatory language

Note: Significant level at *** = 1%, ** = 5%, and * = 10% using the F-test

Table 3 Tests for Difference in Means and Medians of Discretionary Accruals Classified by Auditors’ Opinions-the modified-Jones Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>All Observations (n=1,230)</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
</tr>
<tr>
<td>Unqualified (Clean) (n=739)</td>
<td>.0022</td>
<td>.0000</td>
</tr>
<tr>
<td>Qualified (n=148)</td>
<td>.0056</td>
<td>.0150</td>
</tr>
<tr>
<td>Disclaimer (n=39)</td>
<td>-.0359</td>
<td>.0000</td>
</tr>
<tr>
<td>Unqualified with explanation (n=304)</td>
<td>-.0010</td>
<td>-.0100</td>
</tr>
</tbody>
</table>

F-statistics = 2.888**

Unqualified = Unqualified audit opinion;
Qualified = Qualified audit opinion;
Disclaimer = Disclaimed audit opinion, and
Unqualified with explanation = Unqualified audit opinion with explanatory language

Note: Significant level at *** = 1%, ** = 5%, and * = 10% using the F-test
Table 4 Tests for Difference in Means and Medians of Auditors’ Opinions by Auditor Size-Jones Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>Observations with Big 4</th>
<th>Observations with non-Big 4</th>
<th>Mean Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>(n = 782)</td>
<td>(n=448)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>Median</td>
<td>σ</td>
</tr>
<tr>
<td>Unqualified (Clean)</td>
<td>-.0032</td>
<td>.000</td>
<td>.0777</td>
</tr>
<tr>
<td>(B=462, NB=277)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Qualified (B=74, NB=74)</td>
<td>.0122</td>
<td>.0250</td>
<td>.0939</td>
</tr>
<tr>
<td>Disclaimer (B=26, NB=13)</td>
<td>-.0523</td>
<td>.0050</td>
<td>.1305</td>
</tr>
<tr>
<td>Unqualified with explanation</td>
<td>-.0068</td>
<td>-.0100</td>
<td>.0859</td>
</tr>
<tr>
<td>(B=220, NB=84)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>F-statistics</td>
<td>3.883***</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Unqualified  = Unqualified audit opinion;
Qualified  = Qualified audit opinion;
Disclaimer  = Disclaimed audit opinion, and
Unqualified with explanation  = Unqualified audit opinion with explanatory language.
*Significant at 10% level

Note: Significant level at *** = 1%, ** = 5%, and * = 10% using the F-test

total assets, whereas non-Big 4 clients with the same type of opinion had positive discretionary accruals of 0.86% of lagged total assets, a significant difference at the 1% level, indicating that Big 4 auditors signalled negative discretionary accruals whereas non-Big 4 auditors signalled positive discretionary accruals on the unqualified opinion. In other words, Big 4 auditors were more conservative than non-Big 4 auditors. This result supported the Ha alternative hypothesis suggesting Big 4 clients showed lower discretionary accruals than non-Big 4 clients for unqualified reports in Thailand.

Discretionary accruals between firms with Big 4 and non-Big 4 auditors for qualified and disclaimer opinions did not significantly differ. Big 4 clients reported positive discretionary accruals whereas non-Big 4 clients reported negative discretionary accruals for qualified opinion. However, Big 4 and non-Big4 clients reported negative discretionary accruals for disclaimer opinion suggesting that clients might have poor financial performance. For unqualified opinion with explanatory language, Big 4 clients had negative discretionary accruals of -0.68% of lagged total assets whereas non-Big 4 clients showed positive discretionary accruals of 1.23% of lagged total assets, a finding which was significant at the 1% level, and supported the Hb alternative hypothesis that Big 4 clients with modified auditors’ reports present lower discretionary accruals than non-Big 4 clients in Thailand. This result was
consistent with Butler et al. (2004), which indicated that auditor conservatism between Big 5 and non-Big 5 did not explain the relationship between abnormal accruals and going concern opinion (unqualified with explanatory language). A possible explanation might be that Big 4 clients had more going concern problems than non-Big 4 clients and the discretionary accruals of the former presented larger negative number than those of the latter. In other words, Big 4 clients with going concern problems reported negative discretionary accruals due to financial problems, not conservatism.

As shown in Table 5, discretionary accruals measured by the modified-Jones model showed the same sign as those measured by the Jones model reported in Table 4, however, the magnitudes showed larger positive number. The F-statistic was significant at the 1% level for Big 4 observations suggesting different Big 4 auditors’ opinion types might have different discretionary accruals level.

7. Conclusion

This research provided empirical evidence to answer a question whether auditors do report detected earnings management to the public. The sample was selected from listed companies in Thailand from 1999 to 2004 and the test was conducted by comparing means and medians of discretionary accruals as an earnings management proxy in each type of auditor’s opinion. Analysis of
auditors’ opinions and discretionary accruals revealed that firms with differing types of auditors’ opinions have differing earnings management levels. Further analysis of auditors’ opinions and discretionary accruals as classified by auditor size suggested that firms with Big 4 auditors with two report types, unqualified opinion and unqualified opinion with explanatory language, reported lower discretionary accruals than those with non-Big 4 firms. This result suggested Big 4 auditors might be better than non-Big 4 auditors in detecting earnings management and their ability was reflected in the audit opinion. However, this finding did not mean that auditors used their opinions to warn users of the financial statements of earnings management, since they expressed their opinion based on many factors, such as business uncertainty, going concern, and audit scope limitation, rather than discretionary accruals only.

This research may suffer from two major limitations. First, the empirical test results based on secondary analysis of data using discretionary accrual models should be treated with caution since discretionary accrual models are only a statistical proxy of earnings management at the firm level. Findings might not necessarily mean that the selected companies actually managed their earnings. Further, discretionary accrual models may have inherent measurement error. Second, the exclusion of some specific firms and non-listed companies previously mentioned might reduce the generalisability of the study findings to the auditing profession in Thailand, since the research lacked a comprehensive view of earnings management in the country as a whole. To overcome these limitations may be an avenue for future research.

References
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