THE IMPACTS OF GOVERNMENT OWNERSHIP ON EARNINGS MANAGEMENT PRACTICES IN MALAYSIAN PUBLIC LISTED COMPANIES

Nor Farhana Selahudin
Department of Accounting, College of Business Management and Accounting, Universiti Tenaga Nasional Sultan Haji Ahmad Shah Campus, 26700 Muadzam Shah, Pahang, Malaysia
Email: SFarhana@uniten.edu.my

Dasilah Nawang
Department of Accounting, College of Business Management and Accounting, Universiti Tenaga Nasional Sultan Haji Ahmad Shah Campus, 26700 Muadzam Shah, Pahang, Malaysia
Email: Dasilah@uniten.edu.my

ABSTRACT

Government Linked Companies (GLCs) are companies in which the Malaysian Government has a direct or indirect controlling stake and protected by government. Typically, GLCs are the main providers of the core strategic utilities and services in Malaysia and large companies demand better corporate governance due to higher agency problems. Thus, this ownership structure appears to be a vital factor influencing the reliability of financial reporting. Strict requirements issued by Bursa Malaysia would motivate listed companies to window-dress their earning figures to look healthy financially to investors. The empirical evidence regarding earnings management practices among GLCs is not conclusive because it is relatively difficult to detect earnings management. Based on prior studies, this study proposes to use discretionary accruals as a proxy for earnings management and recommends three earnings management detection models: Kothari model (Kothari, Leone, and Wasley, 2005), earnings-threshold-based model (Givoly, Hayn, and Katz, 2010), and augmented modified Jones model (Ball and Shivakumar, 2006) be applied to detect earnings management practices. It is expected that GLCs engage more earnings management in an accrual-based accounting environment as compared to non-GLCs. The test of differences on the residuals of augmented modified Jones model (Ball and Shivakumar, 2006) indicates that our prediction is true in the sense that GLCs report higher level of discretionary accruals as compared to non-GLCs.

Key words: Government ownership; Monitoring; Public-listed companies.

Introduction

In 2011, Bursa Malaysia has issued strict requirements to all public listed companies. In order to remain listed on the main market, all public listed companies are required to comply with two requirements. First, public listed companies should not have an uninterrupted profit after tax for three to five years full financial years, with an aggregate exceeding RM20 million. Second, the public listed companies should have a profit after tax of at least RM 6 million in the most recent financial years (Bursa Malaysia, 2013). In addition, Bursa Malaysia has also issued a listing standard in order to monitor the quality of market for listed companies. Companies which are unable to maintain their quality in the market, will be listed as financially difficult companies according to Practices Note 4 and 17 (Sadique, Roudaki, Clark, and Alias, 2010; Choy, Munusamy, Chelliah, and Mandari, 2011). This regulated requirement would motivate companies in the main market listing to manipulate earnings in order to maintain their good performance in the market, especially for financially distress companies, low growth with surplus free cash flow companies and high leverage companies.

In Malaysia, government has significant participation in country’s economy, particularly by having ownership in Malaysian companies. As prior studies document that GLCs are normally protected by government, this expect that GLCs might engage more earnings management practices. As the presence or absence of earnings management is hard to be detected, it is interesting that this study recommends several methods including Kothari model (Kothari et al., 2005), earnings-threshold-based model (Givoly, Hayn and Katz, 2010), and augmented modified Jones model (Ball and Shivakumar, 2006) to further test the existence of earnings management in the Malaysian context for the period 2000-2013. That is, to ensure a more precise estimation of earnings management, researchers should employ various earnings management models as mentioned earlier. The issue on whether GLCs engage in a higher level of earnings management practices than non-GLCs is an empirical issue which can be examined through the suggested models.

This conceptual paper is organized as follows. The second section discusses the proposed hypothesis development on the relationship between GLC and earnings management. The third section discusses the recommended models. The final section provides the conclusion of this paper.
Discussion on Potential Hypothesis

Earnings management occurs when managers exercise their judgmental opinion in financial reporting and in structuring transactions to alter financial reports either to mislead some stakeholders about the underlying economic performance of the company or to influence contractual outcomes that depend on reported accounting numbers (Healy and Wahlen, 1999). Within the opportunities and loopholes offered by the accounting system, managers are able to manage earnings by selecting accounting methods that are acceptable by the General Accepted Accounting Principles (GAAP) or by making changes in the ways given methods are applied (Pornsit, Miller, Yoon, and Kim, 2008). Other than that, managerial intervention may occur in the reporting process through operational decisions like alterations in shipment schedules, acceleration of sales and delaying of maintenance and research and development (R&D) expenditures (Roychowdhury, 2006). According to Dechow and Skinner (2000), accrual accounting is part of earnings management and it is the most common tool in earnings management practices that use discretionary accruals.

Since the high-profile collapses of world large corporations which were involved in accounting fraud, there has been renewed interest in the corporate governance practices of modern corporations, particularly in relation to accountability. The most popular of corporate scandals such as Enron Corporation and WorldCom are the main reasons for the U.S. federal government passing the Sarbanes-Oxley Act in 2002 (Cornett, McNutt, and Tehranian, 2009). The new regulation is intended to restore public confidence in corporate governance and is applied to all companies, audit firms and several industries in U.S.

In Malaysia, there is a lot of studies on earnings management from various aspects such as ownership structure, corporate governance, accounting choices, initial public offering (IPO) and financial risk ratios (Johl, Jubb and Houghton, 2001; Aman, Iskandar, Pourjalali and Teruya, 2006; Rahmad and Ali, 2006; Ali, Salleh, and Hassan, 2008; Ismail and Weetman, 2008; Selahudin, Zakaria, and Sanusi, 2014). In addition, the Malaysian environment is particularly interesting as it has several distinctive features that may affect managerial incentives to manage earnings. Basically, the managerial action on earnings management could be restrained by managerial ownership mechanism as reported by Ali et al. (2008). The study claimed that this managerial ownership is less important when considering the size of the companies because large companies demand better corporate governance due to higher agency problems. A previous study had discussed the relationship between earnings management and audit quality. Independent audit committee is more likely to object to any wrongdoing or action by the management because they provide an effective monitoring mechanism over earnings management practices (Bukit and Iskandar, 2009).

According to Ahmad-Zuluki, Campbell, and Goodacre (2011), they found that management of 250 Malaysian IPO applied income-increasing on earnings management in the IPO year. However this evidence is found after the Asian financial crisis during 1997 and 1998 and the establishment of requirement to provide three years profit guarantee. In the other situation, the findings might be different as suggested by Saleh and Ahmed (2005). They found that managers used income-decreasing earnings management during Asian financial crisis for debt renegotiation in order to gain support from government. Hence, it will help to improve borrowing terms and avoid the bankruptcy risk. As compared study by Aman et al. (2006), leverage are not affecting earnings management because the corporate sector in Malaysia have more leverage and are heavily dependent on commercial bank financing after the 1997 economic crisis (Aman et al., 2006).

Among all corporate governance mechanisms, ownership structure appears to be a vital factor influencing the reliability of financial reporting (Yang, Kweh and Lin, 2014). In Malaysia, one of the significant observations in the ownership structure is the government ownership in companies. Prior studies have raised issues regarding earnings management in government-linked companies (GLCs) (for example, Saleh, Kundari and Alwi, 2011; Ismail, Kamarudin and Othman, 2012; Mohamad, Rashid and Shattari, 2012; Capalbo, Frino, Mollica and Palumbo, 2014). GLCs are companies in which the Malaysian Government has a direct controlling stake. However, the empirical evidence regarding earnings management practices among GLCs is not conclusive because it is relatively hard to detect earnings management practices.

In GLCs, the government could appoint the Board of Directors (BODs), senior management, as well as making major decisions for the companies either directly or through Government Linked Investment Companies (GLICs) (Khazanah Nasional, 2006). As GLCs are the main providers of the core strategic utilities and services in Malaysia including water and sewerage, electricity, banking and financial services, and public transport, it is important to examine earnings management practices among them. Prior studies have examined the similar issue focusing on government-owned firms in China.

According to Wang and Yang (2011) and Ding, Zhang and Zhang (2007), privately-owned firms in China exercise earnings management more than state-owned enterprises (SOEs) do. In contrast, Liu and Lu (2007) Chen and Yuan (2004), and Aharony, Lee and Wong (2000), found privately-owned firms practice earnings management at a lower degree as compared to SOEs in China. There are several reasons to support that government-owned companies exercise earnings management more than other companies including different capital markets structure, abnormal circumstances surrounding initial public offering and protective behavior by government (Ding et al., 2007; Alharony et al., 2000). Thus, the empirical evidence regarding earnings management practices among GLCs proposed a number of reasons to expect that GLCs might engage in more earnings management practices as compared to non-GLCs. Therefore, this study proposes the following hypothesis:

Potential Hypothesis: Earnings management practices in GLCs are greater than those in non-GLCs.

Description of Methodology - Empirical Model
Sample for this study are made up from all industrial sectors listed in Bursa Malaysia except for finance, investment, trust and funds companies due to different regulatory requirement according to Financial Services Act 2013 (FSA) and Islamic Financial Services Act 2013 (IFSA) and different accruals behavior (Srinidhi and Gul, 2007). Thus, homogeneous characteristics between these sectors will contribute to more accurate result. In addition, industries with less than ten companies will be excluded from the study because it could affect the measurement of earnings management and they are inappropriate to be generalized as an industry (Peasnell, Pope, and Young, 2000). Finally, observation with missing data will be eliminated from the dataset.

Discretionary accruals can be regarded as a proxy for earnings management. Discretionary accruals are the residual value of total accruals and non-discretionary accruals. The reason for using the discretionary accruals as proxy for earnings management is because the managers can influence accruals in obtaining the desired companies earnings. There are a lot of earnings management detection models that have been developed and employed in prior studies as cited by Guan, Pourjalali, Sengupta and Teruya (2005) such as Healy model, DeAngelo model, Industry Model, Jones model and Kaznik model. According to Dechow, Sloan and Sweeney (1995), the most powerful model in detection of earnings management is Modified Jones model (1995). Later, Kothari et al. (2005) proposed the performance matched discretionary accruals in the detection of earnings management model and they found that performance matched discretionary accruals measure is well specified and the most powerful tool under various circumstances after the Modified Jones model (Kothari et al., 2005).

In this study, three models proposed to measure earnings management are (i) zero-earnings and zero-earnings-change thresholds (Givoly et al., 2010), (ii) the augmented Modified Jones model (Ball and Shivakumar, 2006) and (iii) Kothari model (Kothari et al., 2005), which are explained as follows.

(i) Earnings-threshold-based model (Givoly et al., 2010)
First, this study will examine differences between GLCs and non-GLCs in earnings thresholds. Following Lang et al. (2003), the earnings are divided into bins with bin width of 0.01. Next, this study applies the concept as in Barth, Landsman and Lang (2008) to run the logistic regression below:

\[
\text{Prob}(SPOS_{i,t} = 1) = \theta_0 + \theta_{GLC_{i,t}} + \theta_{2,SIZE_{i,t}} + \theta_{3,LEV_{i,t}} + \theta_{4,CFO_{i,t}} + \theta_{5,TURN_{i,t}} + \theta_{6,GRO_{i,t}} + \varepsilon_{i,t}
\]

(1)

Where:
- \(SPOS_{i,t}\) Dummy variable equal one if (a) the ratio of net income to total assets or (b) the ratio of the change in net income to total assets lies between 0 and 0.01, and zero otherwise.
- \(GLC_{i,t}\) Dummy variable equal one if a firm is a government-linked company, and zero otherwise.
- \(SIZE_{i,t}\) The natural logarithm of total assets.
- \(LEV_{i,t}\) The ratio of total liabilities to total assets.
- \(CFO_{i,t}\) The ratio of operating cash flow to lagged total assets.
- \(TURN_{i,t}\) The ratio of sales to lagged total assets.
- \(GRO_{i,t}\) Changes in sales.

As discussed earlier, the coefficient on \(GLC\) is expected to be significantly positive.

(ii) The augmented Modified Jones model (Ball and Shivakumar, 2006)
Following Ball and Shivakumar (2006), this study put \(DCFO_{i,t}\) and \(DCFO_{i,t} \times CFO_{i,t}\) in augmented modified Jones model, where the error terms of the Equation (2) reflect discretionary accruals.

\[
TACC_{i,t} = \gamma_1 \times \frac{1}{TA_{i,t-1}} + \gamma_2 \times \frac{\Delta REV_{i,t} - \Delta TR_{i,t}}{TA_{i,t-1}} + \gamma_3 \times \frac{PPE_{i,t}}{TA_{i,t-1}} + \gamma_4 DCFO_{i,t} + \gamma_5 DCFO_{i,t} \times CFO_{i,t} + \gamma_6 ROA_{i,t} + \varepsilon_{i,t}
\]

(2)

Where:
- \(TACC_{i,t}\) Total accruals are defined as the difference between income from continuing operations and net cash flow from operating activities, excluding extraordinary items and discontinued operations.
- \(TA_{i,t-1}\) Total assets.
- \(\Delta REV_{i,t}\) Change in sales.
Change in trade receivables.

The ratio of property, plant, and equipment to lagged total assets.

Dummy variable equal one if \( CFO_{i,t} \) is negative, and zero otherwise.

The ratio of operating cash flow to lagged total assets.

The ratio of earnings to total assets.

This study expect GLCs to engage in earnings management practices in terms of discretionary accruals as compared to non-GLCs, which in turns reflect lower earnings quality.

(iii) Kothari model (Kothari et al., 2005)

Earnings management is estimated from the total accruals. Total accruals consist of non-discretionary and discretionary accruals elements that occur in the normal operation in the business. The companies are expected to have no earning management if the value of discretionary accruals is zero. Total accruals is estimated in order to obtain the amount of discretionary accrual because it is represented by difference between total accruals and non-discretionary accruals (Johl et al., 2001; Aman et al., 2006). In a regression model, the non-discretionary accrual is the expected accruals which are explained by the variables, and discretionary accruals are the unexpected accruals which are not explained by the variables selected or also known as the random error as proposed by Dechow et al. (1995). Thus, total accruals are:

\[
TACC_{i,t} = DACC_{i,t} + NDACC_{i,t}
\]

Where:

\[ \Delta \text{Non-cash current asset}_{it} \] Changes in non-cash current assets in current year of respective firm

Formula of estimated total accruals as proposed by Kothari et al. (2005) is as below:

\[
TACC_{i,t} = \frac{[\Delta \text{non-cash current asset}_{it} - (\Delta \text{current liabilities}_{it} - \text{excluding the current portion of long term debt}) - (\Delta \text{Depreciation and amortization}_{it})]}{\text{Total assets}_{i,t-1}}
\]

The total accruals is then regressed upon the independent variables proposed by Kothari et al. (2005) to generate the normal or non-discretionary proxy as the following regression equation:

\[
TACC_{it} = \alpha_0 + \alpha_1 \left( \frac{\text{ASSETS}_{i,t-1}}{\text{ASETS}_{i,t-1} - 1} \right) + \alpha_2 (\Delta \text{SALES}_{it}) + \alpha_3 \text{PPE}_{it} + \alpha_4 \text{ROA}_{it} (or \text{it} - 1) + \epsilon_{it}
\]

Where:

\[ \text{ASSETS}_{it} \] The total assets of firm \( i \) at the end of year \( t - 1 \)

\[ \Delta \text{SALES}_{it} \] Sales change in net of the change of account receivable of firm \( i \) between years \( t \) and \( t - 1 \)

\[ \text{PPE}_{it} \] The level of gross property, plant, and equipment of firm \( i \) in year \( t \)

\[ \text{ROA}_{it} (or \text{it} - 1) \] ROA of firm \( i \) at the end of year \( t \) (ROA of firm \( i \) at the end of year \( t - 1 \))

\[ \text{TACC}_{it} \] The total accruals of firm \( i \) in year \( t \)

This study will used transforms method in order to get absolute value of earnings management. The reason of using absolute value is because it could provide the mixed effect of earnings management irrespective of whether managers are increasing or decreasing of income. This is consistent with the studies of Rahman and Ali (2006), Choi, Kim and Kim (2010) and Jouber and Fakhfakh (2012).

Preliminary Analysis

To provide a preliminary check on recommendation, this study run the augmented Modified Jones model (Ball and Shivakumar, 2006) with the heteroscedasticity-consistent errors. The residuals obtained from the regression analysis are then used for the analysis. In the next step, this study compare between GLCs and non-GLCs in terms of the residuals, which represent discretionary accruals. The results in Table 1 show that significant differences exist between GLCs and non-GLCs in terms of
discretionary accruals, whereby GLCs report relatively higher degree of earnings management (0.0250) than non-GLCs (-0.0097).

<table>
<thead>
<tr>
<th>Firms</th>
<th>Observations</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Std. Error Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-GLCs</td>
<td>3,270</td>
<td>-0.0097</td>
<td>3.1402</td>
<td>0.0549</td>
</tr>
<tr>
<td>GLCs</td>
<td>1,262</td>
<td>0.0250</td>
<td>0.2082</td>
<td>0.0059</td>
</tr>
<tr>
<td>All</td>
<td>4,532</td>
<td>4.70E-16</td>
<td>2.6696</td>
<td>0.0397</td>
</tr>
</tbody>
</table>

Mann-Whitney U Test Value 15.669***

Conclusion

There are a lot of earnings management detection models that have been developed and employed in prior studies. The three earnings management detection models to be employed are Kothari model (Kothari et al., 2005), earnings-threshold-based model (Givoly et al., 2010) and augmented modified Jones model (Ball and Shivakumar, 2006). These three models are expected to be able to detect earnings management practices between GLCs and non-GLCs in public listed companies, to examine the robustness of each model and to determine any alternative explanation for the findings. It is important to applied three different models to detect earnings management by considering several factors that could mitigate heteroscedasticity and misspecification issues as compared to other aggregate accrual models.

Earnings management will over whelm the value of information in financial report and it may harm the reliability and quality value of information. This paper will highlight the earnings management practices by the manager in GLCs and it will help the government to enhance the control mechanism to govern the management action. The empirical evidence regarding impact of government ownership on earnings management practices in Malaysia public listed companies is not conclusive because it is relatively hard to detect earnings management practices. Thus, this study expects that GLCs engage more earnings management practices as compared to non-GLCs. The test of differences on the residuals of augmented modified Jones model (Ball and Shivakumar, 2006) indicates that our prediction is true in the sense that GLCs report higher level of discretionary accruals as compared to non-GLCs.

This study could be extended by considering the finance, investment, trust and funds companies because these industries could engage earnings management by utilizing different technique and the study related to earnings management for this industries is too limited especially in Malaysia. Future research could extend this study by extending the sample size and time frame of study in order to get generalized significant results. It is strongly encouraged to use the latest studies and new earnings detection model because different model are could relevant for a certain economic condition only.

References


