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The Longitudinal Study of Earnings Management: Analysis on Companies Financial Abilities

Nik Mohd Norfadzilah Nik Mohd Rashid*, Rohaya Md Noorb, Norazam Matsukic, Nor Azlina AbRahmand, Normah Omara

*Faculty of Law, Accountancy and International Relation, University Sultan Zainal Abidin, Terengganu, 21300, Malaysia
bFaculty of Accountancy, University Technology MARA, Shah Alam, 40450, Malaysia
cAccounting Research Institute, University Technology MARA, Shah Alam, 40450, Malaysia

dAbstract

The aim of this paper is to provide empirical evidences of the relationships between the financial abilities towards in the financial statement to the earnings management level (EM) among of public sector companies on Bursa Malaysia from year 2001 until 2012. Primarily, the initial samples comprised 375 selected public listed companies with 4500 firm-years observation. From the samples, those companies who have not implied with the earnings management activities was excluded as a sample of the study. Thus, the final sample of this study was comprises 3971 firm-years observation. The study was adopted the Kothari Model as a measurement model for earnings management level in the business organization. Meanwhile, the findings of this study indicated significant relationships between earnings ability (EAB), financial structure's ability (FSAB), debt repaying ability (DRAB) and non-financial factors (NFF) towards the earnings management level (EM) in the business organization. Therefore, these evidences can be used as new financial mechanisms to potential and existing stakeholders in order to assist them for any decision making purposes.

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* Corresponding author. Tel: +603-5544-4921; fax: +603-5544-4992.
E-mail address: coordinator_ari@salam.uitm.edu.my
1. Introduction

This study will examine the financial abilities which might influence the earnings management level among of public listed companies on Bursa Malaysia from year 2001 until 2012. Therefore, this study was produced some useful input to potential stakeholders which rely the financial information disclosed by the business organization. This issue was very important to be discussed since the financial information disclosed by the business organization is based on the estimation calculation. These practices were allowed by the General Acceptable Accounting Practices (GAAP) and it has been applied to most listed companies on Bursa Malaysia. However, this provision would be manipulated by the irresponsible business organization due to several motives in their business organization. These strategies were commonly known as earnings management activities strategies or cooking the books activities, (Albrecht, Albrecht, & Zimbelman, 2012). In other words, there are possible fraudulent activities could be derived from an aggressive earnings management strategies employed in the capital market. Therefore, it’s very crucial to the existing and potential stakeholders to understand on how financial abilities that was contributed to the earnings management level in the business organization. Thus, by working on this concerned the current investigation was aimed to investigate the possible relationships could be exist between the financial abilities towards the earnings management level in the business organization.

2. Issues of the study

An existing and potential stakeholders usually concern with the issues of the profitability financial information disclosed by the business organizations towards the capital market players. However, the reliability issues of the financial information disclosed was not seriously concern by illiterate financial people during decision process was being made, (Sun, Salama, Hussainey, & Habbash, 2010). This also was contributed of the existing and potential stakeholders which are more interested with the profit and income figures that were disclosed in the financial report of the business organization. However, due to the increasing complexity of the business organizations activities nowadays, the accounting standard was provided some of leniency for the managers to manage their financial transaction, (Nurunnabi, 2014). Furthermore, with the accounting provision provided to the managers, there are possibilities of the aggressive earnings management activities were being employed by the business organization. Thus, these activities were being disclosed in the financial reports.

Consequently, the users of the financial reports usually were not aware with earnings manipulation activities that were employed by the managers to their financial information transactions, (Tsiouridou & Spathis, 2012). In the other words, the potential and the existing stakeholders usually will rely with the information disclosed in the financial report in relation to make some decision with their investment activities. Therefore, the reliability of financial information disclosed was been critically debated by the academic scholars regarding the impacts to the stakeholders, (Blanco, Garcia Lara, & Tribó, 2014). It’s because there are many issues related to the reliability of financial information which has been reported by the business organization. One of the close related issues with the reliability financial information is the factors of occurrence of earnings management activities, (Richardson, Sloan, Soliman, & Tuna, 2005). By having unclear mechanism in accessing earnings management activities, it is considered these activities will lead to any potential losses towards the potential and existing stakeholders’ decisions. Therefore, this study has provided some empirical evidence on how the financial abilities influence the earnings management activities among of business organization.

3. Earnings Management

Earnings management can be define as strategies by the managers in the business organization to manipulate the earnings level within the business organization activities, (Grougiou, Leventis, Dedoulis, & Owusu-Ansah, 2014). These strategies were applied by the managers in the business organization in order to conceal unfavourable financial position in the eye of the existing and potential stakeholders. According to (Filip & Raffournier, 2014), during the financial distress in the business organization the managers will tend to manipulate their earnings position within the business organization in order to avoid loss of confidence among of their potential and existing stakeholders. Another reasons behind the application earnings management activities is due to complexity of business transaction involved in the capital market, (Cormier, Houle, & Ledoux, 2013). Therefore, these strategies were allowed by the General Accepted Accounting Principle or GAAP in the accounting standards in order to meet the global environments of business transaction in the capital market itself.
Apart from above, there are situations where the managers were excessively applied the earnings management activities in their business transaction. These situations were also directly influenced the interest of the potential and existing stakeholders within the business organization. It because, the users of financial information usual was not aware the strategies applied by the managers in the financial information disclosure, (Kraft, Lee, & Lopatta, 2014). Beside the awareness issues on the reliability with the financial information disclosed by the managers in the business organization, the illiteracy issue of financial information also were become a factors on how the managers can easily manipulate their financial position without stakeholders arguments. From another point of views, earnings management activities could be used as a marketing financial method to the potential investors. Therefore, according to (Chapman & Steenburgh, 2010), they found that earnings management may be used as a marketing strategies in order to attract more investors’ attention with their income smoothing activities. They also claimed that, the marketing officers have more knowledge on accounting manipulation. It is could be significant in promoting their companies with earnings management activities to get more funds from any potential investors in the capital markets.

The earnings management strategies also will be more functional if it could meet the analysis forecast by the potential investors. This also was supported by (Sambharya, 2011) who claimed the earnings management strategies have significant impact to the securities analyst towards the performance of the company. In other words, they were argued the earnings management strategies will help the securities analyst on measuring the company’s performance before they made decision on making some investment on the company. The arguments on how the income smoothing will enhance the information of stock price was also studied by (Salehi & Manesh, 2011). In that research, the finding shows that earnings management activities will improve the information contents towards the level of stock price in capital market. They also claimed that the effects of informativeness of stock price were closely related to the future earnings level of companies. However, this arguments were not supported by (Suwardi, 2013) whereas that research found that creative accounting strategies will not directly influence the stock price in capital market because that kind of information will be treated as window dressing of financial position of a company. On the next section in this study, the discussions were continued with the measurement of variables used in this particular research.

4. Measurement Models of Earnings Management

In order to discuss the earnings management issues with the financial abilities in this particular study, it is important to understand with the proper measurement for these criteria. The study was started with the earnings management model. The earliest model of earnings management was proposed by the (Healy, 1985). The model was focused on accessing the earnings management level through the mean of total accrual in the accounting period. In the other words, this model was expected the earnings management level from non-discretionary accrual between the different of total accrual and discretionary accrual. The consequent from the model proposed, (DeAngelo, 1986) was introduced the new model in accessing the earnings management level in the business organization. The model was mentioned the non-discretionary accrual can be obtained by the random walk process.

Hence, the random walk process was referred to the non-discretionary which obtained from the total accrual in the prior of the accounting period. For this model, (Dechow, Sloan, & Sweeney, 1995) was indentified the “Lag Terms” for the prior values in estimation non-discretionary accrual for earnings management level. The evolvement on earnings management detection was proceed by (Jones, 1991). The model was proposed to control several financial abilities which stipulated with the non-nondiscretionary accrual in the business organization. However, this original of Jones Model was not able to eliminate the manipulation of revenue through the receivable transaction. Therefore, the Modified Jones Model was proposed by (Dechow et al., 1995) in order to eradicate the discretionary accrual in the account receivable transactions.

Nevertheless, for the recent model which is widely used in earnings management detections which proposed by (Kothari, Leone, & Wasley, 2005) was considered more powerful in earnings management detection. In this particular model, the approach to trace the discretionary accrual was different with previous model mentioned. The approach that was applied in this model is called as “Performance Matched Discretionary Accrual” whereas this model was modified the previous model which is Modified Jones Model. The modification was implied by adding the performance matched criteria in the model in order to detect the discretionary accrual in the business organization.

Meanwhile, for the Modified Jones Model, it was argued by (Kothari et al., 2005) in which the model was not described the relation between the firm performance with accrual in the business transaction. Hence, it is critically important to address the earnings management level from the discretionary accrual together with firm performance.
method criteria. By working on this evidence, this particular study was considered to imply the model which proposed by Khotari’s in order to detect the discretionary accrual for earnings management level in business organization. In measuring the discretionary accrual in this particular model, the performance matching on return on asset or ROA is monitored the effect of the firm performance. On the next section on this study, the discussions were continued with the elaborations of the literatures about the financial abilities used towards the earnings management level in the business organization.

5. Financial abilities Towards Earnings Management

In this particular study, there are several financial abilities were being addressed in order to investigate the possible relationship towards the earnings management level in the business transaction activities. As mentioned earlier, the financial abilities could be useful information among of existing and potential stakeholders in order to access the earnings management activities in the business organization. It was claimed in their study, the earnings management was significantly influence between the tested financial ratios. In the other hands, according to (Chen, 2011), it was claimed there is significant relationship between the financial abilities with financial distress in the business organization. However, their study was not mentioned the relationship between the financial abilities and the earnings management activities in the business organization. In fact, the term of financial distress was closely related to the earnings management activities in the business organization, (Filip & Raffournier, 2014). Therefore, the financial abilities were being used in order to be tested towards the earnings management level in the business organization.

As suggested from the above, there are several financial abilities could be used in order to access the earnings management activities in the business organization such as earnings ability (EAB), financial structure ability (FSAB), management performance ability (MNPER), debt repaying ability (DRAB) and non-financial factors ability (NFF). Next we continued the discussions with the earnings ability (EAB) towards the earnings management level in the business organization. The earnings ability can be defined as the abilities of the business organization to achieve profit or margins in the business transaction, (Tan & Jamal, 2006). The earnings ability can be further measured by various financial ratios.

Meanwhile, a previous study done by (Farrell, Unlu, & Yu, 2014), they was claimed the earnings per share ratios could be used as a measurement for the earnings ability indicator towards accessing the earnings management level in the business organization. Next, it is also believed that the financial structure ability (FSAB) could also important to the earnings management activities in the business organization. It can be simply defined as the capacity of the business organization to meet their liabilities from the investment made by the stakeholders, (Jackson, Keune, & Salzsieder, 2013). Thus, this type of financial ability could be measure by the debt to equity ratio in the business organization in order to access any suspicious accounting transaction disclosed in the financial report, (Ravisankar, Ravi, Raghava Rao, & Bose, 2011). Meanwhile, the debt equity ratio was also used in fraudulent financial report within the business organization in the capital market activities. (Munawer, Yahya, & Siti-Nabila, 2012).

Another focused of the financial ability that was tested in this particular study is based on the management performance ability (MNPER) towards the earnings management level in the business organization. This type of financial ability could be defined as ability of the managers in the business organization to meet their forecast in business transaction through their operating expenses transactions. According to (Dharmapala & Riedel, 2013), the management performance was closely related to the capacity of the managers in the business organization to manage their business expenses level. Meanwhile, (Tang & Firth, 2011) was suggested that management accounting transaction was useful in order to capture the fraudulent activities in the financial report transaction. Therefore, pre-tax margin ratio was used to measure this type financial ability in order to investigate the possible relationship towards the earnings management level in the business organization.

Debt repaying ability was important to be concerned by the existing and potential stakeholders in order to access
the capacity of the business organization meet their current liabilities based on their current asset holdings, (Delen, Kuzey, & Uyar, 2013). It also can be translated as the capabilities of the business organization fulfil their current obligation with their current capacity of asset level in business transaction activities. In the other words, if the business organization was not able to meet their current liability based on their current asset level, there is a red flag on earnings management to be happened within the business transaction activities, (Gullkvist & Jokipi, 2013). For another point of view, the debt repaying ability also was being used by the financial institution in their consideration in lending additional capital to the business organization. This mechanism was used in that purposed due to ensure the business organization was able to meet their obligation from the capital injunction in their business organization, (Rahman & Anwar, 2014).

Further, the last type of financial ability that was commonly used in accessed the financial position in the business transaction is related to the non-financial factors ability (NFF). The non-financial factors was become interesting among of managers in the business organization for their earnings management activities is because it was not directly represent the current financial position of the business organization, (Omar & Rizuan, 2014). It is because, the non-financial factors was usually inflated with earnings management activities in order to prevent the entrenchment among of stakeholders in the business organization, (Wang, 2014). On the next section, the discussion was continued with the research methodology used in this particular research.

6. Research Methodology

In order to measure the earnings management level in the business organization, the Kothari’s Model was referred in order to estimate the discretionary accrual in the business organization. A part from that, the discretionary accrual was obtained by subtracting the total accrual with non-discretionary accrual. Therefore, according to (Kothari et al., 2005), it was suggested to first calculate the total accrual based on the equation as below:

\[ TACC = \frac{[\Delta \text{Cash} - \Delta \text{Current Assets} - (\Delta \text{in Current Liabilities} + \Delta \text{Current portion of long term debt}) - (\text{Depreciation and Amortization})]}{\text{Lagged total assets}} \]

After estimating the total accrual from the above equation, the discretionary accrual was being estimated with model suggested by the (Kothari et al., 2005) using the following regression equation.

\[ TACC it = a_0 + a_1 (1 / \text{TA it - 1}) + a_2 (\Delta \text{SALES it} / \text{TA it - 1}) + a_3 (\text{PPE it} / \text{TA it - 1}) + a_4 \text{ROA it (or it - 1)} + \epsilon it \]

Hence, based on the equation on above, the performance matched discretionary model was included the ROA it or ROA it – 1 which is representing the current and prior year of ROA. This element was argued to be added in the model in order to be used as a control performance of the business organization. From this particular stage of earnings management estimation process, the regression analysis was employed in order to obtain the residual values. Hence, the residual values from the regression analysis was represented the discretionary accrual values in the selected companies in this particular study (Ecker, Francis, Olsson, & Schipper, 2013). Therefore, in order to get the non-discretionary values for the tested companies, it can be obtained from the fitted values in the residual values of regression line. On the next process, from the residual values obtained, it was converted to the absolute numbers since it was not give any meaning in earnings management activities either in the form of negative or positive. The rationale behind this argument is both condition either upward or downward was considered earnings management happened within the business organization.

In the other words, the zero values of residual from the selected companies were considered to have non earnings management activities happened in the business organization. The approach in converting the residual values into absolute values was also consistence with the past study done by (Rahman & Ali, 2006). At this stage, those companies who have less zero residual values were being eliminated form samples of the current study. It is important to understand the earnings management level was proxied by the residual values which represent the discretionary accrual in the business organization. Therefore, in this particular study it was used as a dependent variable which
noted as earnings management (EM) in the main regression analyses. As was mentioned in the past sections, the financial abilities was being measured with several financial ratios such as earnings per share for earnings ability (EAB), debt to equity for financial structure ability (FSAB), pre-tax margin ratio for management performance ability (MNPER), current ratio for debt repaying ability (DRAB) and dividend rates for non financial factors ability (NFF). Lastly on this section, based on these components mentioned above the current study was employed the investigations with the following regression equation as shown as below:

$$EM = \beta_1EAB + \beta_2FSAB + \beta_3MNPER + \beta_4DRAB + \beta_5NFF + lagEM + e$$

A part from the above equation, the variable of lagEM was being added into the regression equation in order to remove the serial correlation problems that could be exist in the regression analyses. A cusum test also was being employed in order to determine the stability of the model tested. Finally, the analyses were carried out based on the equation in order to investigate the possible relationship that could be exist between the financial abilities towards the earnings management level in the business organization. Meanwhile in the following section, the discussion was continued with findings from the above analyses which employed in the current study.

7. Research Findings and Data Analyses

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<th>Table 1: Summary of The Regression Analyses</th>
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<td>Coefficient</td>
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*Note: *** Significant level at the 1% level*

Based on the Table 1 above, the current study was identified several significant relationships between the financial abilities towards the earnings management level (EM) among of selected public listed companies on Bursa Malaysia. It was started with earnings ability (EAB) in which it has significant relationship towards the earnings management
level (EM) in the business organization. In the other words, this variable was able to influence the earnings management activities in the business transaction. It was followed by financial structure ability (FSAB) towards the earnings management level (EM) in which it was identified as significant relationship towards the earnings management activities within the business organization activities.

However, the study was recognized the management performance ability (MNPER) as not significant relationship towards the dependent variable which is earnings management level (EM) in the companies. In the other words, the management performance ability was not giving any influence towards the earnings management level in the business organization. A part from this analyses also, the current study was identified the significant relationships between the debt repaying ability (DRAB) and non-financial factor ability (NFF) towards the earnings management level in the business transactions.

On the meanwhile, based on the Figure 1 above, the analyses were confirmed that the model tested in the current study was stable to be carried out along the investigation process. Apart from that, the structural break for the model used was not exceeding with 5% significant level. The ‘cusum’ test was important to be employed in panel data analyses since it will ensure the stability of the model tested in the regression analyses, (Talas, Kaplan, & Celik, 2013). Therefore, based on the findings in the current study, it was believed the financial abilities can be used as a financial mechanism in detecting earnings management activities in the business organization. Next, the following section was continued with discussion of the current study together with several past research works in this area.

8. Discussion and Conclusion

As was mentioned in the previous section in this paper, the current study was identified significant relationships between the earnings ability (EAB) with earnings management level (EM) in the business organization. This result was indicates any changes happened in the earnings ability (EAB) within the business organizations for their earnings management level. This result was consistence with the previous study done by (Fung, Su, & Gul, 2013) in which they was claimed the earnings ability was being used by the managers in the business organization in order to prevent the entrenchment of their shareholders. Therefore, it is believed by having such mechanism the existing and potential
stakeholders should be more alert with red flag of earnings management activities in the business organization.

Next, the study also was recognized significant relationship between the financial structure ability (FSAB) with the earnings management level (EM) in the business organization. In the other words, the business organizations also have an opportunity to manage their earnings level through their financial structure ability. The companies usually used the financial structure ability in order to get more capital from the capital market players. Hence, this strategy was used to ensure the business organizations able to finance their debts level from their equities level, (Shu & Chiang, 2014). In the other words, the business organizations were probably having an initiative of earnings management activities with their offering of equities in the capital market transactions.

Nevertheless, the current study was also examined the insignificant relationship between the management performance ability (MNPER) towards the earnings management level (EM) in the business organization. In the other words, this type of financial ability was not given any influence or relationship towards the earnings management level (EM) in the business transaction activities. Hence, this result was suggested the pre-tax margin ratio cannot be used as a proxy for management performance ability in order to trace the earnings management activities in the business organization. However, this evidence was not consistency with the previous study done by (Marques, Rodrigues, & Craig, 2011) in which they was claimed that the earnings management activities could be influenced from the pre-tax margin in the business transaction activities.

On the meanwhile, the current study was also identified the significant relationship between the debts repaying ability (DRAB) towards the earnings management level in the business transaction activities. This situation were represented the capabilities of the companies in meeting their current liabilities based on the current asset level in the business transaction activities. Moreover, this financial ability can be used among of existing and potential stakeholders in order to trace the companies’ ability whether it have reasonable capacity to meet their current obligation in their business activities. This result also was consistency with the past study done by (de Andrés, Landajo, & Lorca, 2012) which claimed the debt repaying ability was useful to be used in order to trace the financial distress in the business organization.

For the last findings of this study, it was also recognized as significant relationship between the non-financial factor ability (NFF) with the earnings management level (EM) in the business transaction activities. The rationale behind this result is the managers in the business organizations would manipulate the dividend rates towards their stakeholders in the capital market. This strategy was enabled the business organization maintain the confidence level of the stakeholders in the capital market strategies. Moreover, this evidence was also consistency with the past study done by (Al-Malkawi, Bhatti, & Magableh, 2014). In the other words, the managers in the business organization could employed strategies for earnings management activities based on dividend rate smoothing activities in the capital market transactions.

Therefore, based on the evidences disclosed in this particular study, it was suggested that the financial abilities could be used a financial mechanism in order to trace any irregularities of financial transaction or earnings management activities in the business organization. However, it was recommended for the future research to be explored if there is relationship between the earnings management level towards the firm values of the companies. It is because, the firm values criteria also was become an interest among stakeholders while investigating the earnings managements strategies by the business organization

Reference