Corporate Governance and Earnings Management: Evidence from Financially Distressed (PN17) Companies in Malaysia

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There have been many studies regarding the connection between corporate governance mechanisms and Earning Management (EM) practices. However, the results from the studies are mixed and require further research. EM practices has becomes more important to investors in order for them to avoid any financial losses. This paper examines the relationship of corporate governance mechanisms in terms of board independence, total number of board members, frequency of board meetings, directors’ shareholdings and frequency of audit committee meetings towards the EM practices among financially distressed companies in Malaysia. Logistic regression was used to determine the correlations that exist between the variables. The data used in this paper were 36 companies from Practice Note 17 (PN17) listed on the Bursa Malaysia Website during the period of 2014 - 2018. By testing five hypotheses, the results showed that there were all significant negative relationships between board independence, total number of board members, the frequency of board meetings being held, the total directors’ shareholdings and frequency of audit committee meetings towards the EM practices. This paper consequently outlined the important mechanisms that impact EM practices. In relation to this, the corporate governance mechanisms should be highlighted, as a few of the factors can ensure the interests of investors are protected.

Key words: Earnings management, corporate governance mechanisms, financial distressed.
Introduction

The Malaysian Stock Exchange Listing Requirements and Malaysian Stock Exchange Rules state that a listed company that does not have a core business or has failed to meet minimum capital or equity and companies’ shareholders’ funds will be classified as a financially distressed company or PN17 Company. These companies are required to submit their plan on how to regularise or face possible delisting to the Malaysian Stock Exchange. Every PN17 company that has caused any of the criteria pursuant to Practice Note 17 of the Main Market Listing Requirements of Malaysian Stock Exchange is said to be reprimanded. The companies that are in accordance with the Bursa Securities decision will be removed from the official list of Bursa Securities, after the imposition of suspension and delisting procedures against the companies if failed to be regularised (www.klse.com), retrieved on 7th February, 2010).

Previous studies have examined the firms’ financial reporting behaviour in response to financial health (Agrawal & Chatterjee, 2015; Bennett, Bradbury, & Prangnell, 2006; Deangelo & Deangelo, 1994; DeFond & Park, 1997; Rosner, 2003). Prior studies have stated that firms often resort to earnings management by manipulating their accounting policies in order to meet their reported target. Agrawal & Chatterjee (2015), declared various reasons that motivate firms to adopt various accounting policies to manipulate their financial information. A study taken by Iskandar, Noor, & Omar (2012) also examined whether Board of Directors plays a vital role in turning a PN17 companies and regain their listing status on Bursa Malaysia and result shown that it is effective to recover the listing status of PN17 companies. As the Board of Directors have the ability to perform income manipulation on the companies’ financial reports, there is a possibility that financial distressed companies performed earnings managements to meet the reported target set by Bursa Malaysia. Certain manipulation techniques such as cost allocation between different cycles in a way that once the managers decide to apply each hypothesis, resulting by such system will lose its accuracy and would be manipulation of the earnings figures by the management (Abdoli, Mirazami, & Bakhtiarinejad, 2012).

Therefore, it is important for a company to have effective corporate governance that can improve the economic development of the whole country (Mohd Nasir & Mohd Ali, 2018; Sajid, Muhammad, Nasir, & Farman, 2012). Nonetheless, with the increase number of fraud corporate cases and company failures, there is doubt to be determined whether the current corporate governance mechanisms have been effective in preventing fraud cases from happening (Alabede, 2016; Mohd Nasir & Mohd Ali, 2018). This paper examines if there are any earnings management behaviours taken by top managements in the financially distressed (PN17) companies on Bursa Malaysia for the period of 2014-2018, and examines the
corporate governance mechanisms which may lead to earnings management under this situation.

**Literature Review and Hypothesis Development**

**Financial Distress**

Financial Distress is explained as a phenomenon of a corporate failure, and has been commonly used as the synonym of bankruptcy. However, the two should be distinct from each other in terms of the sequence of events and the firm’s financial health. Demirkan & Platt (2009), declared that financial distress is the last stage of firm decline, followed by the major events such as bankruptcy, liquidation and insolvency. Khaliq, Altarturi, Thaker, Harun, & Nahar (2014), stated that financial distressed is a situation when a company cannot meet the problem of paying off its financial obligations to creditors. A financially distressed company can experience loss that is linked to situations including opportunity costs of projects, intense financing and less dynamic employees.

In Malaysia, financially distressed companies are being defined as PN17, that stands for Practice Note 17/2005 and is issued by Bursa Malaysia. The PN17 was introduced on 3 January 2006 to achieve the same objective as PN4, which was introduced in 15 February 2001 to ensure adequate disclosure was made on distressed companies and assure inadequate operation companies undergo legal enforcement through restructure to address their unhealthy state (Chua, 2012). Since the enforcement of PN17 in 2006, it has provided a given timeframe to help distressed companies to restructure the company under terms and condition (Alifiah, Salamudin, & Ahmad, 2013). The financially distressed companies in Malaysian context are required to submit proposals that could restructure and revive the company financial status to the Approving Authority in order to maintain its listing status (KL Management Service, 2019).

**Earnings Management (EM) Practices**

“Earnings management” can also be defined as income manipulation, which refers to techniques being used by top managers intentionally employed to achieve a desired target of reported earnings, but it differs in the techniques used or the intensity with which they are employed (Rosner, 2003). Rosner (2003) also added that discretionary accruals management has been generally accepted within the general accepted accounting principles (GAAP), if it does not materially misstate the financial statement. Nevertheless, top managers can deliberately and fraudulently misrepresent transactions, material events, or other significant information in financial statements through discretionary accruals management. Thus, it is only a fine line between both fraud and earnings management that
involve discretionary accruals (Statement on Auditing Standards [SAS] No. 82: AICPA 1997).

It is proven that earnings management practices often result in misleading and inaccurate financial reporting, due to the financial information reported in the financial statements not aligning with the exact amount generated from the business operation (Dechow & Skinner, 2000; Healy & Wahlen, 1999). Among all the techniques of earnings management, the most commonly used techniques are cookie jar reserve, big bath, income minimisation and maximisation (Cornett, McNutt, & Tehranian, 2009; Leventis & Dimitropoulos, 2012; Rahman & Mohamed Ali, 2006; Selahudin et al., 2014; Tangjitprom, 2013). Prior studies by researchers have examined earnings management practices and corporate governance. Leventis & Dimitropoulos (2012), analysed 315 US listed commercial banks and findings turned out to be banking firms with sound corporate governance report relatively small positive income to a lesser extent than banks with weak governance. Aside from that, Iqbal & Strong (2010), tested UK rights issuers over the period of 1991 to 1995 and found that firms with good corporate governance are less likely to perform earnings manipulations. Top managers of a corporation are keen to get involved in earnings management practices to hide unlawful transactions and face high litigation risk (Jiang, Lee, & Anandarajan, 2008; Rahman & Mohamed Ali, 2006). Obliquely, managers deliberately try to maintain the reputation of the company by showing their companies are performing well in the market.

**Board Independence**

Board independence can be defined as a board comprised of independent directors who have no relationship with the firm. An independent director refers to the extent which a director is not involved in the company’s business activities and whose role is to provide an outsider’s contribution and oversight to the board of directors (Kim & Yoon, 2008). Some researchers assume that an independence director who is entirely independent from the board can provide stakeholders and shareholders the greatest protection in monitoring management activities (Baysinger & Butler, 1985). The high-level monitoring ability of independent directors can be attributed to their respective incentives to maintain their reputation in the external labour market (Jensen, Eugene F. Fama, 1983).

Previous literature generally follows the international corporate governance guidelines that recognise the relative importance of independent directors’ monitoring roles (MCCG, 2017; OECD, 2014). According to Mansor, Che-Ahmad, Ahmad-Zaluki, & Osman (2014), the authors took a test on 264 family owned and non-family owned companies and the result stated that the independence of the board has a significant negative relationship to earnings manipulation practices in both groups. Besides, another study made by Ebrahim (2007) is
aligned with previous literature stating that board independence is negatively related to earnings management.

Therefore, the study predicted the following hypotheses:

**H1:** There is a significant relationship between board independence and EM practices.

**Board Size**

The board size was defined by Pfeffer (1972) in the 19th century as the size of the board is influenced by the relationship of environment: the greater the dependence on different organisations, the larger will be the board of directors of a firm. Thus, Pfeffer (1972) proposed that the size of the board grows with the size of the company. Pfeffer also concluded that the financial earnings of the companies departed from the estimated optimal board of directors’ equation is lower and the size of the board is hugely influence by external environment. Nevertheless, Zahra & Pearce II (1989), argued that a company with a larger board that has less influence with members that have different skills and knowledge can form an effective corporate governance that can enhance the overall company’s performance. Moreover, the authors added that a larger board that is governed by outsiders can be more favourable in debating and discussing company’s future goals, mission and possible strategies (Zahra & Pearce II, 1989). The study has been supported by Kiel & Nicholson (2003) that took a test on 348 public listed firms in Australia that proved a positive relationship between the board size and financial performance.

In addition to this, Geraldes Alves (2011), whom has taken a similar test with a sample of 34 non-listed firms in Portugal, stated that a larger board will affect the boards’ overall performance and functions. This has been supported by Loderer & Peyer (2002), who stated that “a larger board could bring together specialists from various functional areas and therefore contribute to higher firm value.” Similar perspective has been shared by Ebrahim (2007) and Eisenberg, Sundgren, & Wells (1998), that a larger board size can reduce the likelihood of the occurrence of discretionary accruals. On the other hand, Dowell et al. (2011), argued that the effect of a board size is difficult to determine as its role in the company might be different. A study taken by (Mansor et al., 2014) stated that the board sizes were actually significant positive related to earnings management practices in Malaysian firms.

Considering there are numerous arguments on the number of board members on the board, the the study formulate the following hypotheses:
H2: There is a significant relationship between larger board size and EM practices.

**Frequency of Board Meetings**

The MCCG (2017) encourages the board of directors to meet regularly in order to review the issues of the corporation’s activities. Thus, details of meetings including attendance of board members and number of meetings being held in the financial year should be disclosed in the company annual report (Salleh & Othman, 2016). The total numbers of board meetings has been said to be a good proxy for the corporate governance to control managers’ behaviour (Shuaib, 2013). Zhou & Chen (2004) proposed that an effective board is expected to meet more often to stay on top of accounting and control-related matters to ensure the financial report process is functioning in an optimal level. On the contrary, a high number of board meetings might trigger that the board is aware of the company’s poor financial activities, which could possible lead to bankruptcy, insolvency or financial distress (Chen, Firth, Gao, & Rui, 2006).

As stated by Brick & Chidambaran (2010), the increase in board meetings may lead to a possibility of financial distress because directors may want to protect themselves from being prosecuted for not performing in the financial year. Firms that held large numbers of board meetings in the year preceding the filing of bankruptcy may reflect the problems related to bankruptcy filing (Brédart, 2014). Conversely, Jensen (1993) pointed out that total number of board meetings could not be used to identify the effectiveness of the board due to the fact that details of the meetings are usually not disclosed, such as length and topics being discussed during the meetings. Ahmed (2013), found the same result as there were no positive relation between the number of board meetings held by the board of directors and earnings management in Malaysian listed companies from 2001 to 2005. In Nigeria, Abubakar, Ishak, & Chandren (2017) found a similar result with previous literatures as they proved that there is a negative relationship between board meeting frequency and earnings manipulation practices in Nigerian financial institutions. Another study taken by Mansor et al. (2014), proved that board meetings being held have a significant negative relation to earnings management practices in the study as well.

As a result, this discussion leads to the following hypothesis:

H3: There is a significant relationship between total number of board meetings being held and EM practices.
**Directors’ Shareholdings**

Directors’ shareholdings represent the percentage of shares held by the board members in the company (Mohamed Sadique, 2016). Jensen & Meckling (1976), proposed that the managers that have a large interest in a company are most likely to increase the value of the company. The authors further added that board members will reduce the likelihood of fraud as they would not put the company at risk. Besides, the managerial ownership also can act as a motivation for managers to align closely to the objectives of other shareholders (Dhaliwal, Salamon, & Smith, 1982). Chi-keung & Brossa (2013), supported that the overlap between the owners and the managers of the firms could reduce the conflict of interest and achieve higher firm value. Whereby, when the managers are not owners of the company, they might have greater freedom to pursue their own objectives.

Moreover, García-Meca & Sánchez-Ballesta (2009) stated that managerial and institutional ownerships are two main thoughts when it comes to major internal mechanisms that help control agency problems. It has also been said that insiders or managers with higher proportion of insider ownerships are less likely to engage in aggressive reporting or discretionary accruals that will damage their inherent ownership benefits (Warfield, Wild, & Wild, 1995). Thus, the paper concluded that having a lower managerial ownership in the company can achieve greater firm value to manage accounting numbers imposed in accounting-based contracts (Warfield et al., 1995). Similarly, Shayan-Nia, Sinnadurai, Mohd-Sanusi, & Hermawan (2017) also stated that managerial ownership is significantly negatively related to earnings manipulation practices in financially distressed firms in Malaysia. On the other hand, Jensen, Eugene F. Fama (1983) argued that firms controlled by top managers are less likely to survive in the competition as it can give managers more ability to pursue their own objectives without fear of punishment. Yang, Lai, & Leing Tan (2010) stated that managers with higher ownership of the firm could perform income manipulation in order to maximise their personal wealth. Thus, higher directors’ shareholdings may inspire managers to use discretionary accruals to improve reported earnings and the value of their stock holdings.

As a result, the study has come out with these hypotheses:

**H4:** There is a significant relationship between directors’ ownerships and EM practices.

**Frequency of Audit Committee Meetings**

Audit committees are being set up as an important part of the corporate governance to monitor and control the firms’ financial reporting. The Sarbanes-Oxley Act (section 301) states that an independent audit committee is vital to prevent the occurrence of earnings
management and improve the integrity of financial reporting standards (Bi & Sadique, 2016). In addition, audit committee meeting frequency acts as an important role in audit committee effectiveness with respect to audit and control quality (Goodwin-Steward & Kent, 2006). The results shown that audit committees operate to enhance audit quality and to strengthen the system of monitoring processes. Zain, Subramaniam, & Stewart (2006) examined the relation between audit committee frequencies of 76 Malaysian public listed firms and concluded that companies that held regular audit committee meetings enhanced the overall quality of internal audit functions. Alqatamin (2018) also found those audit committees that meet more frequently are likely to achieve better financial performance than financially distressed companies.

Prior literatures have measured the activity of audit committees by the total number of audit committee meetings (Collier & Gregory, 1999; Raghunandan & McMullen, 1996). The findings stated that the more frequently the audit committee meetings present monitoring mechanisms and oversights, the more effective the financial activities, such as the reporting and preparation of company financial information. It has also been proven that financially distressed companies did not have audit committee meetings as often as regular companies (Raghunandan & McMullen, 1996).

Hence, this leads to the following hypotheses:

**H5:** There is a significant relationship between the frequency of audit committee meetings and EM practices.

*Theoretical Framework*

The study uses dependent variables of earnings management practices, whereas independent variables are board independence, board size, board meetings, directors’ shareholdings and frequency of audit committee meetings. Figure 1 shows the theoretical framework for this study, which proposed the association of dependent variable and independent variables.
Based on the theoretical framework above, this study examined the earnings management’s behaviours taken by top managers at the PN17 companies for the period of 2015 to 2017. As per this framework, previous studies found that characteristics of the board may affect the companies’ EM practices.

**Methodology**

**Sample of PN17 Companies**

To identify companies under financial distress status, we have used two different sources: the list of PN17 companies over the period of 2014 to 2018 by Bursa Malaysia. A total of 40 companies have fallen under the criteria. Out of 40 selected companies, four were excluded because of missing information on the proxy statement of annual reports or insufficient data. The study was able to identify 36 financially distressed companies. Table 1 below shows the sample of financially distressed companies identified by industry. As documented in Table 1, a total of 36 PN17 companies are chosen, including 10 consumer products and services companies, eight industrial products and services providers, five real estate or construction companies, four energy supply companies, four technology companies, three basic material or resources supply companies, one telecommunication and media firm and one financial services firm.
Table 1: PN17 Companies divided by industries and percentages

<table>
<thead>
<tr>
<th>Industry</th>
<th>No. of Firms</th>
<th>Percentage %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Basic Materials/Resources</td>
<td>3</td>
<td>7.5</td>
</tr>
<tr>
<td>Consumer Products &amp; Services</td>
<td>10</td>
<td>27.5</td>
</tr>
<tr>
<td>Energy</td>
<td>4</td>
<td>12.5</td>
</tr>
<tr>
<td>Financial Service</td>
<td>1</td>
<td>2.5</td>
</tr>
<tr>
<td>Industrial Products &amp; Services</td>
<td>8</td>
<td>22.5</td>
</tr>
<tr>
<td>Real Estate/Constructions</td>
<td>5</td>
<td>12.5</td>
</tr>
<tr>
<td>Technology</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Telecommunication &amp; Media</td>
<td>1</td>
<td>5</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>36</strong></td>
<td><strong>100%</strong></td>
</tr>
</tbody>
</table>

Data Collection Procedure

This study adopts the quantitative method that was used for descriptive and hypotheses testing. Besides that, it also determines the relationship of corporate governance mechanism on EM practices under financial distress status. The units of analysis for the study are companies which had been taken mainly from the companies list of the PN17 list under the Malaysian Main Market. It employs the longitudinal method for the time from January 2014 until December 2018. The main source of this study is secondary data, where information on this study is collected through the annual report of the companies listed under the Practice Note 17 based on the Bursa Malaysia website. As the reports were taken from Bursa Malaysia, the data generated is more reliable and would reduce the inaccuracy of the data.

The study used probability sampling on the total population of companies in Malaysia. Disproportionate stratified sampling is selected in this study because the data will be collected in separate industries from Bursa Malaysia’s listing of companies. This type of sampling will give a sample of population which best represents the entire population of PN17 companies in Malaysia. In addition, this type of sampling will diminish the sample selection bias when conducting this study as well as ensuring that certain segments of the population will not be over-represented or under-represented.

Variables Measurement - Dependent Variable

The dependent variable for the study is the earnings management (EM) practices among the PN17 companies. In order to measure earnings management practices, the study uses Beneish M Score (Beneish, 1999) to measure the earnings management. The following regression model is used to predict the EM practices. The model consisted of eight ratios to capture whether earnings financial statement distortions resulted from earnings management or to identify inclination to engage in earnings manipulation as shown below.
M-Score = -4.840 + 0.920*DSRI + 0.528*GMI + 0.0404*AQI + 0.892*SGI + 0.115*DEPI + 4.679*TATA - 0.327*LVGI

Based on research carried out by Beneish (1999), an M-score greater than -2.22 indicates that the firm might have performed earnings management practices.

Table 2: The Operationalization/Measurement of Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Acronyms</th>
<th>Operationalization/ Measurement of Variables</th>
</tr>
</thead>
<tbody>
<tr>
<td>Days' Sales in Receivable Index</td>
<td>DSRI</td>
<td>Receivables$<em>t$/Sales$<em>t$ / Receivables$</em>{t-1}$/Sales$</em>{t-1}$</td>
</tr>
<tr>
<td>Gross Margin Index</td>
<td>GMI</td>
<td>$(Sales_{t-1} - CostOfGoodsSold$<em>t$)/Sales$<em>t$, $(Sales</em>{t} - CostOfGoodsSold$</em>{t-1}$)/Sales$_{t}$</td>
</tr>
<tr>
<td>Asset Quality Index</td>
<td>AQI</td>
<td>$1 - [(CA$<em>t + PPE$<em>t$)/TA$<em>t$] / $1 - [(CA</em>{t-1} + PPE</em>{t-1})/TA</em>{t-1}]$</td>
</tr>
<tr>
<td>Sales Growth Index</td>
<td>SGI</td>
<td>Sales$<em>t$/Sales$</em>{t-1}$</td>
</tr>
<tr>
<td>Total Accruals to Total Assets Index</td>
<td>TATA</td>
<td>($\Delta$Current Asset$_t$ - $\Delta$Current Liabilities$_t$ - $\Delta$Current Maturities of Long Term Debts$_t$ - $\Delta$Inventory$_t$ - $\Delta$Depreciation and amortization$_t$)/Total Assets$_t$</td>
</tr>
<tr>
<td>Depreciation Index</td>
<td>DEPI</td>
<td>Depreciation$<em>{t-1}$/Depreciation$</em>{t-1} + PPE$_{t-1}$ / Depreciation$_t$/Depreciation$_t + PPE$_t$</td>
</tr>
<tr>
<td>Leverage Index</td>
<td>LVI</td>
<td>(LTD$<em>{t-1}$ + Current Liabilities$<em>t$)/Total Assets$<em>t$ / (LTD$</em>{t-1}$ + Current Liabilities$</em>{t-1}$)/Total Assets$</em>{t-1}$</td>
</tr>
<tr>
<td>Inventories Ratio</td>
<td>INVR</td>
<td>(Inventory$<em>t$/Inventory$</em>{t-1}$)/Total Assets$_{t-1}$</td>
</tr>
<tr>
<td>Inventories Growth Over Sales Growth Ratio</td>
<td>INVSR</td>
<td>$\frac{Inventory_{t-1} - (Inventory_{t-1} / Inventory_{t-1})}{Sales_t - (Sales_{t-1} / Sales_{t-1})}$</td>
</tr>
</tbody>
</table>

Where PPE is the gross/net of property, plant and equipment for the year.

Variables Measurement - Independent Variables

The independent variables for corporate governance mechanisms which are board independence, board size, frequency of board meetings, directors’ shareholdings and
frequency of audit committee meetings have been classified using items outlined by previous literatures.

Table 3: The Operationalization of Independent Variables

<table>
<thead>
<tr>
<th>Independent Variables</th>
<th>Acronyms</th>
<th>Operationalisation</th>
<th>Measurement of Items</th>
<th>Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Board Independence</td>
<td>INBOD</td>
<td></td>
<td>The proportion of independent directors to total amount of board members in percentage (%)</td>
<td>(Abdullah, 2006b; Mohamed Sadique, Roudaki, Clark, &amp; Alias, 2010; Oh &amp; Jeon, 2017; Sarkar, Sarkar, &amp; Sen, 2008)</td>
</tr>
<tr>
<td>Board Size</td>
<td>TBOD</td>
<td></td>
<td>Total number of board members</td>
<td>(Mohamed Sadique, 2016; Zam, Pok, &amp; Ahmed, 2014; Zhang, Mahenthiran, &amp; he Huang, 2012)</td>
</tr>
<tr>
<td>Frequency of Board Meetings</td>
<td>BODMEET</td>
<td></td>
<td>The total number of board meetings being held in the year</td>
<td>(Ebrahim, 2007; Mohamed Sadique, 2016; Salloum, Schmitt, &amp; Bouri, 2012)</td>
</tr>
<tr>
<td>Directors’ Shareholdings</td>
<td>DIROWN</td>
<td></td>
<td>Percentage of company shares owned or retained by the directors</td>
<td>(Gaio &amp; Raposo, 2011; Geraldes Alves, 2011; Mohamed Sadique, 2016)</td>
</tr>
<tr>
<td>Frequency of Audit Committee Meetings</td>
<td>ACMEET</td>
<td></td>
<td>Total number of audit committee meetings held in the year</td>
<td>(Ismail, 2011; Mohamed Sadique, 2016)</td>
</tr>
</tbody>
</table>

Multicollinearity

The high amount of multicollinearity would have created problems like an increased standard for error and it will be hard to identify the contribution of dependent variables and independent variables (Field, 2009). Pearson Correlation analysis is being used in this study to identify and measure the multicollinearity problems.

Pearson Correlation Coefficient Analysis

This study runs a correlation analysis in the middle of regression analysis in order to give a description on the linear relationship among those variables in relation to their direction and strength. The result of Spearman’s Correlation Coefficient of this study is shown below.
Table 4: Result of Pearson Correlation Coefficient

<table>
<thead>
<tr>
<th>Variables</th>
<th>INBOD</th>
<th>TBOD</th>
<th>BODMEET</th>
<th>DIROWN</th>
<th>ACMEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>INBOD</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>TBOD</td>
<td>-.367*</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BODMEET</td>
<td>.000</td>
<td>.238</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>DIROWN</td>
<td>-.143</td>
<td>-.098</td>
<td>-.393*</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>ACMEET</td>
<td>-.096</td>
<td>.249</td>
<td>.495**</td>
<td>-.410*</td>
<td>1</td>
</tr>
</tbody>
</table>

* Correlation is significant at 0.05 level (2-tailed).
** Correlation is significant at 0.01 level (2-tailed).

Table 4 represents the result of correlation of PN17 companies for this study. The results shown that all independent variables are consistently correlated towards each other. As shown in Table 4, there is no coefficient that exceeds 0.8 which means a good indicator. Therefore, those variables do not have any multicollinearity problem (Pallant, 2007).

Regression Model

To analyse and test the relationship between the likelihood of earnings manipulation occurrence and the corporate governance mechanisms, the following logistic regression model (similar with Beasley, 1996; Persons, 2006; Uzun, Szewczyk, & Varma, 2004) was applied to examine whether any earnings management behaviours have been performed by top managers under financially distressed companies.

Logistic Regression model for this study:

\[ EM_i = \alpha + \beta_1 \text{INDBOD}_i + \beta_2 \text{TBOD} + \beta_3 \text{BODMEET}_i + \beta_4 \text{DIROWN}_i + \beta_5 \text{ACMEET}_i + \epsilon_i \]

Where:
- \( EM \) = A dummy variable with a value of 1 when a firm is alleged to have experienced earnings management and a value of 0 otherwise.
- \( \text{INDBOD} \) = The proportion of independent directors to total amount of board members in percentage (\%).
- \( \text{TBOD} \) = Total number of board members.
- \( \text{BODMEET} \) = The total number of board meetings being held in the year.
- \( \text{DIROWN} \) = Percentage of company shares owned or retained by the directors.
- \( \text{ACMEET} \) = Total number of audit committee meetings held in the year.
- \( i \) = The firms.
- \( \epsilon \) = The residual.
- \( \beta \) = The slope coefficient
Findings

Descriptive Statistic

Based on Table 5, the descriptive statistics show the results of all variables in this study across the period from 2014 to 2018 among the Financially Distressed (PN17) Companies. Twenty-eight out of eighty companies were found to have a total M-score higher than -2.22. By calculating the Beneish model, results show that 22 companies or 61% of the whole sample has a greater than -2.22 score, which is a signal that companies are likely to perform earnings manipulation. This also indicates that the rest of the companies, 14 or 39% of the whole sample, is less than -2.22.

As per Table 6, the first independent variable, board independence, has a maximum value of 80% and a minimum value of 40% of the companies. The mean score and standard deviation are 55.1 and 10.99 separately. The subsequent independent variable, the board size of financially distressed firms has maximum and minimum values of 8.8 and 4 members on the boards. The mean and standard deviation value are 6.739 and 1.2465 respectively. The next independent variable is board meetings held in the year with a maximum and minimum value of 13.2 and 4 individually. The mean and standard deviation are 6.306 and 1.9709 respectively. The following independent variable is directors’ ownership with a maximum value of 60% and minimum value of 0% of the companies’ shares. The mean and standard deviation are 12.9 and 15.29 respectively. The final independent variable is audit committee meetings held with the value of mean, maximum, minimum and standard deviation of 5.322, 8.40, 3.8 and .9384 individually.

Table 5: Percentage of M-score >-2.22

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total M-Score &gt;-2.22</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>The likelihood of earnings management practices being performed by firms</td>
<td>22/36</td>
<td>6</td>
</tr>
</tbody>
</table>

Table 6: Data Descriptive Statistics of Independent Variables

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Maximum</th>
<th>Minimum</th>
<th>Std. Dev.</th>
</tr>
</thead>
<tbody>
<tr>
<td>INBOD</td>
<td>.551</td>
<td>.80</td>
<td>.4</td>
<td>.1099</td>
</tr>
<tr>
<td>TBOD</td>
<td>6.739</td>
<td>8.8</td>
<td>4</td>
<td>1.2465</td>
</tr>
<tr>
<td>BODMEET</td>
<td>6.306</td>
<td>13.2</td>
<td>4</td>
<td>1.9709</td>
</tr>
<tr>
<td>DIROWN</td>
<td>.129</td>
<td>.60</td>
<td>0</td>
<td>.1529</td>
</tr>
<tr>
<td>ACMEET</td>
<td>5.322</td>
<td>8.4</td>
<td>3.8</td>
<td>.9384</td>
</tr>
</tbody>
</table>
Regression Analysis

EMi= α + β1INDBOi + β2 TBOD +β3 BODMEETi + β4DIROWNi + β5 ACMEETi + ei

Table 7: Regression Results of Model

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Variables</th>
<th>B</th>
<th>S.E.</th>
<th>Exp (B)</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>β0</td>
<td>Constant</td>
<td>-.630</td>
<td>4.035</td>
<td>.533</td>
<td>.876</td>
</tr>
<tr>
<td>β1</td>
<td>INBOD</td>
<td>-.097</td>
<td>3.517</td>
<td>.908</td>
<td>.978</td>
</tr>
<tr>
<td>β2</td>
<td>TBOD</td>
<td>-.012</td>
<td>.314</td>
<td>.988</td>
<td>.970</td>
</tr>
<tr>
<td>β3</td>
<td>BODMEET</td>
<td>.020</td>
<td>.211</td>
<td>1.020</td>
<td>.926</td>
</tr>
<tr>
<td>β4</td>
<td>DIROWN</td>
<td>2.814</td>
<td>2.845</td>
<td>16.682</td>
<td>.323</td>
</tr>
<tr>
<td>β5</td>
<td>ACMEET</td>
<td>.140</td>
<td>.452</td>
<td>1.151</td>
<td>.756</td>
</tr>
<tr>
<td>Pseudo R²</td>
<td></td>
<td>0.031</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wald X²</td>
<td></td>
<td>.024</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Logistic regression was conducted in order to analyse the relationship between corporate governance mechanisms and EM practices in financially distressed companies. The correlation analysis was used to determine the existence of the relationship, as this analysis indicates the strength and direction of the association. The use of logistic regression in analysing the data has been adopted by many other studies in the same area as this study (Beasley, 1996; Beasly, Carcello, Hermanson, & Lapides, 2000; Kamarudin, Wan Ismail, & Kamaruzzaman, 2017; Manzaneque, Priego, & Merino, 2015b; Mohamed Sadique et al., 2010; Nahar Abdullah, Zalina Mohamad Yusof, & Naimi Mohamad Nor, 2010; Ong, Choong Yap, & Khong, 2011; Zam et al., 2014).

After all the data were collected and tested by using regression model, the analysed data are shown in Table 7. The results in Table 7 from the regression model indicate that the Psuedo R²= .031, p< 0.5. F-ratio is statistically significant at 5% level. The regression model contributes 3.1% of the variance in the EM practices among the companies which shows low results of EM practices. The Wald X² values for the model is .024, with a significance of p< 0.001 for this model, which indicates that statistically significant components of the variation in the dependent variable is explained by variation in the set of independent variables.

The EM practices do have a significant negative relationship towards all the independent variables, namely board independence, board size, audit committee meetings, board meetings and directors’ ownership when the results of the model obtain p value equal to 0.978, 0.970, 0.926, 0.323, 0.756 (p>.05) respectively which indicate the significant negative relationship. Thus, this indicates that H1 (board independence), H2 (board size), H3 (frequency of board
meetings), H4 (directors’ shareholdings) and H5 (frequency of audit committee meeting) have been accepted, as they have a significant negative influence on the EM practices at level 5%.

**Discussions**

**Board Independence**

Board independence has resulted in affecting the EM practices on financially distressed companies as the board of directors will be performing earnings manipulation to reach the optimum target. Thus, the hypothesis in this study examines the relationship between board independence and EM practices (H1). Based on Table 7, there is a significant negative relationship between board independence and EM practices. This concludes that the independent board directors will not affect the EM practices in financially distressed companies. This result aligns with a study conducted by Mohd Nasir & Mohd Ali (2018), who found that having a large percentage of independent directors on the board will lead the company to perform earnings management and suffer financial distress. In addition to that, Mansor et al. (2014), also found that companies consist of independent board members able to assist in hindering earnings management from taking place on the board because they would be able to act on behalf of the shareholders in mitigating the agency problems. By retaining independent directors on the board, it does not mean that the board has better monitors than other directors, as they have better knowledge on the regulations which would find the agency problems in the company.

**Board Size**

According to previous literature, board size is said to be a vital role in affecting the earnings management practices among financially distressed companies in Malaysia. Subsequently, it will enhance the corporate governance of the companies as different ways of thinking will control the decision making. The result in Table 7 indicates that board size has significant negative effect on the earnings management practices on the companies. This result confirms the study undertaken by Coles et al. (2008), Dowell et al., (2011), Goodstein et al., (1994), Judge & P.Zeithaml (1992), Zeithaml & Fry (1984), which states that the effect of overall board size is hard to define as the roles of each board members might be different. Thus, Dowell et al., (2011) stated that a smaller amount of board members in the company can increase the firms’ advising, monitoring and the ability of access to company’s resources. Similarly, Goodstein et al., (1994) and Zeithaml & Fry (1984), also found that smaller boards will have a higher chance to be involved in strategy setting which leads to faster decision making. Hence, this can be concluded that a smaller board size can decrease the chance of managers performing earnings management.
Frequency of Board Meetings

Based on previous literature, board meetings are perceived to influence the EM practices in both criteria of companies. Thus, the hypothesis in this study examines the relationship between frequency of board meetings and EM practices (H3). Based on Table 7, there is a significant negative effect on earnings management practices on the companies. The result indicates that a higher level of board activity has no relationship with the occurrence of EM practices among the companies, which aligned with Daghsni, Zouhayer, & Mbarek (2016), which stated that as the more active board activity is better for the shareholders’ interests, board directors would spend more time and energy on the company affairs. Besides, Ahmed (2013), had the same result, which can be explained as most members of the board have no right to held extra meetings as most of the companies only can hold meeting once a month, and most of the firms desire to fulfil the very least number. It also can be referred to most of the board lacking an organised system to hold sufficient board meetings and thus enhancing the disconnection. Likewise, this result is consistent with AbuSiam, Nur Hidayah, & Khairi (2014), since the study pointed out that higher frequency of board meetings reduces the possibility of earnings manipulation, as regular meetings allow the directors to identify and resolve potential problems. Thus, we can conclude that the frequency of board meetings held for the year has a significant negative relationship with the earnings management practices in both financially distressed firms.

Directors’ Shareholdings

As per previous literatures, directors’ shareholdings held in the company has been recognised to the influence the earnings management practices in the companies. This is because the managers with larger interest in the company are more likely to increase the company’s value and reduce the likelihood of fraud. Based on the results of Table 7, there is a negative relation between directors’ shareholdings and earnings management practices. It shows that a higher proportion of director’s ownership means less likelihood of performing income manipulation among the companies. This result indicates that it is aligned with the study from Warfield et al., (1995), that directors or insiders with higher levels of company ownership have lower chances of engaging in aggressive reporting that will harm their direct ownership benefits. Furthermore, it could be a lack of separation of ownership and management in the companies which could reduce the need to resort to any earnings management affecting wealth transfers from shareholders to management (Shayan-Nia et al., 2017). This is because directors would not want to risk their wealth to perform any earnings manipulation.

Frequency of Audit Committee Meetings

Based on the literatures, the frequency of audit committee meetings has a significant effect on the earnings management practices of the companies. Therefore, the hypothesis in this study
examines the relationship between frequency of audit committee meetings and earnings management practices (H5). Conversely, the result of regression shown in Table 7 indicated there is a significant negative relationship between frequency of audit committee meetings being held in the year and earnings management practices. The result aligns with the study by Lin, Li, & Yang (2006), which explained that the number of audit committee meetings has been used in prior studies due to the fact that inactive audit committees are unlikely to monitor management activities effectively. The study also stated that audit committees of firms that are being charged by the authorities for financial reporting irregularities are likely to meet more frequently than non-fraudulent firms.

**Conclusion**

This study is useful for practitioners to identify the problems and issues in preventing the earnings management practices in financially distressed companies. Through this study, the practitioner can be beneficial towards the academicians, referring findings on the study and recommendations towards the research on the effect of corporate governance mechanisms on the earnings management practices in the companies. In addition, the results can be highly useful for policy makers to generate ideas and plans carried out by businesses and government bodies. It can also become their guideline to identify any problem areas in the current policy and amend them for a better code of corporate governance in Malaysia, as well as worldwide policies. Apart from that, this study would assist shareholders to identify the best companies for investment through identifying the factors that are available in the corporate governance structure of the firms that will lead to fraud and avoid the future loss.

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REFERENCES


