DETERMINANT FACTORS AFFECTING QUALITY OF REPORTING IN ANNUAL REPORT OF MALAYSIAN COMPANIES

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Annual report is one form of communication between managers and stakeholders. Therefore, quality of reporting in annual reports has to be taken into consideration to enable users to make informed decisions. This research investigates factors that influence the quality of reporting in annual reports for the year of 2004 by Malaysian companies. Specifically, this study examines the relationship between quality of reporting with quality of earnings and ownership structure. Agency theory is used as a basis for the study. Quality of reporting is measured using disclosure index, whilst earnings quality is measured by discretionary accrual. The three types of ownership studied are managerial ownership, block ownership and government ownership. The results show that ownership structures (managerial and government) affect quality of reporting in annual reports. Further analysis shows that companies that report lower earnings disclose more voluntary information in the annual report compared to companies that report higher earnings. This study provides further evidence on factors that affect quality of disclosure in the East Asian region and contributes to the development of disclosure index for Malaysian companies.

Keywords: quality of reporting, earnings quality, ownership structure.

Introduction

An efficient and effective capital market needs a transparent financial reporting system to boost investors’ confidence in making investment decisions (Shaw
Choi (1973) defines reporting of financial information as a publication of economic information which relate to businesses (quantitative or non-quantitative), that can help users in making economic decisions. McKinnon (1984) extends the definition by identifying reporting as a process where firms communicate with outside stakeholders.

The need for more complete, transparent and timely information is due to information asymmetry and agency cost between preparers and users of information (Healy & Palepu 2001). The separation between owners and managers of firms, and the urgency to reduce information asymmetry and agency cost, have provided an impetus for a good reporting practice. Information in financial statements provides an indication on how resources of firms have been managed and utilised. However, a good financial reporting system should not be limited to reporting of only financial information. Non-financial information such as information on the social and environmental performance of firms also needs to be considered since this information is relevant in investors' decisions making (Deegan & Rankin, 1997). Therefore, measuring quality of reporting should consider, not only information disclosed in the conventional financial statements but also other voluntary information disclosed in other sections in annual reports. Furthermore, information disclosed in financial statements is based on certain accounting standards, and this normally fulfils only the minimum requirements.

The quality of reporting can be explained in different ways. Singhvi & Desai (1971) suggest that quality of reporting is reporting that is complete, accurate and reliable, and prepared in a timely manner that leads to quality decision making. Naser and Nuseibeh (2003) contemplate that quality of financial reporting should be gauged based on the compliance of accounting standards of a particular country. Robinson & Munter (2004) refer quality financial reporting as an overall financial reporting, including disclosures, which results in a fair presentation of a company’s operation (including both earnings and cash flow) and financial position. This definition highlights the usefulness of disclosure quality as it helps in explaining the companies’ operation and financial position. From investors’ perspective, reporting quality can minimize transaction and capital cost by reducing the uncertainty of risk and return of their investment (Jensen & Meckling, 1976).

However, reporting of voluntary information need special attention as it is done not for compliance purposes and managers have complete discretion on the amount and type of information to be disclosed. Similarly, the amount of earnings to be reported, can also be within the discretion of the management, as managers can use certain accounting methods, allowable under the GAAP to report the level of earnings. Among these practices are the write-off assets, classification of exceptional items, and recognising discretionary types of accruals. These practices known as earnings management strategies are also known as income smoothing, big bath accounting and creative accounting (Stolow & Lebas, 2002). These diverse accounting practices, allowable under GAAP (e.g, capitalising or expensing R & D expenditure), cause the same business transactions or events to be reported differently by different companies. Such practices could lead to deterioration of the quality of financial information, and subsequently, reduce investors’ confidence on the financial reports. Therefore, companies need to provide additional information (prepared on
voluntary basis) to investors. The provision of voluntary information together with mandatory financial information should be considered as an indicator of quality reporting. In Malaysia, a number of measures have been taken by professional accountancy bodies to improve quality of reporting. For instance, the Malaysian Institute of Management (MIM), Malaysian Institute of Certified Public Accountants (MICPA) and Malaysian Institute of Accountants (MIA) are organizing the National Annual Corporate Report Awards (NACRA) to promote high quality and transparent financial reporting in Malaysia. More specifically, the objectives of the award are; a) to promote greater and more effective communication by organisations through the publication of timely, informative, factual and reader-friendly annual reports; and, b) to recognize and encourage excellence in the presentation of financial and business information. The Association of Chartered Certified Accountants (ACCA) Malaysia is also sponsoring Environmental and Social Reporting Awards (MESRA), previously known as the ACCA Malaysia Environmental Reporting Awards. The aims of the awards are to give recognition to those organisations which report and disclose environmental and social information, encourage the uptake of environmental and social reporting, and raise awareness of corporate transparency issues.

**Motivation of Study and Problem Statement**

The reporting of high quality, complete and transparent financial and non-financial information can reduce the information asymmetry and agency cost between internal and external stakeholders of a company (Healy and Palepu, 2001). High quality financial reporting could also minimize transaction and capital cost to investors by reducing the uncertainties regarding the risk and return from their investment. Reporting also fulfils the accountability role of managers towards shareholders.

Studies on factors that determine the quality of reporting especially in Malaysia are limited. Malaysia, with its unique business environment, provides a useful venue to investigate these factors. This study will examine whether quality of earnings influences quality of disclosure. It is imperative to investigate the two variables together (quality of reporting and quality of earnings) as they are within the discretion of management (Robinson and Munter, 2004; Ball & Shivakumar, 2005). Hossain, Tan and Adam (1994) investigate the ownership structure in Malaysia and contented that quality of reporting is weak in environments where the ownership of companies is concentrated in the hands of a few. Other studies have also documented evidence that the quality of reporting is low in Malaysia and other ASEAN countries due to institutional systems that are in place in these countries (Fan and Wong, 2002; Ball, Robin and Wu, 2003). This study will investigate whether ownership structure influence the quality of reporting by Malaysian firms. This study extends previous studies by investigating three different types of ownership, namely, ownership by the management, government and block ownership. Therefore, the objectives of the study are as follows:

i. to investigate the relationship between quality of disclosure and quality of earnings; and

ii. to investigate the relationship between quality of disclosure and ownership structures.
Literature Review and Hypothesis Development

There are a number of studies that investigate the quality of reporting, especially in the developed countries. These studies, however, differ in the concept and measurement of quality of reporting. Some studies equate quality of reporting as quantity of information disclosed, measured based on theme or number of words (Mohd Shatari, Muhd Kamil and Mustaffa, 2004; Norashikin, 2002; Haniffa and Cooke, 2002; Meek and Roberts, 1995). Others suggest that locations of disclosure should be the indicator of quality disclosure (Romlah, Takiah and Jusoh@Nordin, 2002). In general, researchers agree that detailed quantitative reporting is considered better reporting than a general qualitative reporting (Douglas, Doris and Johnson, 2004; Smith, Adhikari and Tondkar, 2005).

Quality of Reporting and Quality of Earnings

One important aspect in determining the quality of reporting is based on quality of earnings (Robinson and Munter, 2004; Ball and Shivakumar, 2005). However, there has been only a limited number of studies that investigate the relationship between these two variables (e.g., Shaw, 2003; Lobo and Zhou, 2001; Patten and Trompeter, 2003). Research on this issue is imperative since the two variables are within the discretion of the management. This study provides an insight on the relationship between the quality of reporting and quality of earnings. Investors’ understanding of the nature and extent of the relationship between the two variables would help them to make an appropriate investment decision.

Shaw (2003) studies the relationship between quality of reporting, income smoothing activities, and timing of earnings recognition. The initial finding shows that quality of disclosure is negatively related with discretionary accrual (a proxy for quality of earnings). However, additional analysis shows that higher disclosure quality firms, that are experiencing good news (experiencing positive share return and positive cash from operation), adopts more income-decreasing accrual compared to firms that have lower quality of reporting. The study concludes that higher disclosure quality firms smooth income more aggressively than firms with low quality of disclosure. Therefore, the reporting quality is negatively associated with the earnings quality.

Lobo and Zhou (2001) also postulate a negative relationship between disclosure quality and earnings management. They state that managers manage earnings and disclosure to reduce information asymmetry between managers and owners of corporation. Disclosure was measured using the disclosure rating by the Association for Investment Management. Results of their analysis reveal a negative relationship between the two variables as predicted.

Patten and Trompeter (2003) study the relationship between environmental disclosure and quality of earnings before and after the occurrence of chemical leakage in India in 1984. The findings of the study provide evidence that companies that have low level of disclosure have more negative accrual compared to companies that have high level of disclosure. Patten and Trompeter (2003) suggest that companies use environmental disclosure practices and earnings management as a strategy to identify future political cost.
In conclusion, the nature and the extent of reporting depends on how managers manage earnings. Earnings management practices, such as income smoothing and assets write-off, reduce the quality of earnings. Information asymmetry is high (therefore, the agency cost is also high) in companies that have poor earnings quality. Poor earnings quality companies increase the voluntary disclosures in the annual reports to reduce the information asymmetry and to conceal the earnings management practices (Jensen and Meckling, 1976). Shaw (2003) demonstrated that quality of reporting is high for those companies that are experiencing poor financial performance. Therefore, H1 is stated as follows.

H1: The quality of reporting is negatively associated with the quality of earnings.

Quality of Reporting and Management Ownership

Ideally, managers choose investment projects that will maximize the shareholders wealth (Davies, Hillier and McColgan, 2005; Jensen and Meckling, 1976). Sometimes, this is not the case as managers may have conflicting objectives and use companies’ resources to increase their own wealth at the expense of shareholders’ wealth. Therefore, the extent of managerial ownership affects the degree of congruence between the interests of owners and management (Jensen and Meckling, 1976). The fundamental problem lies in the fact that there exists imperfect information between managers and shareholders, which creates a moral hazard problem, since shareholders cannot verify whether the good performance is due to luck or hard work (Rose, 2005). Therefore, reporting of financial information is one way to monitor manager’s activities (Hossain et al., 1994). As noted earlier, reporting of voluntary information in annual reports is under the discretion of the management. There will be less need for detailed reporting if managers hold considerable percentage of ownership of the companies, as they can get the needed information directly from the organization. As stated by Jensen and Meckling (1976), the greater the percentage of stocks owned by top managers, the more likely they will make decisions consistent with maximizing shareholders’ wealth. Existing literature provides evidence of the negative relationship between ownership by managers and the quality of disclosure (Eng and Mak, 2003; Nazli and Weetman, 2006). Eng and Mak (2003) for instance, examine the relationship between ownership structure and board of director composition with the level of voluntary disclosure. The ownership structures are based on ownership by the management, block ownership and government ownership. The results of the study show that management ownership relates negatively with the level of disclosure. Nazli and Weetman (2006) also found that companies that have their executive directors holding a high proportion of shares disclose less voluntary information in their annual reports. Therefore, the H2 is stated as follows.

H2: The quality of reporting is negatively associated with the level of management ownership in firms.

Quality of Reporting and Block Ownership

Different classes of stakeholders demand different types of information (Hossain et al., 1994). Stakeholders also influence the level and quality of disclosure in the annual reports.
Smith et al. (2005) show that firms from countries that emphasise social issues will have a strong stakeholder orientation and thus, have a higher level and quality of corporate social disclosure compared to firms from countries that have less emphasis on social issues and weak stakeholder orientation. Chau and Gray (2002) investigate the relationship between the level of outside ownership and family ownership with the level of voluntary disclosure in Singapore and Hong Kong. The results show that the level of outside ownership associates positively with the level of disclosure. They suggest that as the ownership by outside parties increase the need to reduce agency cost have motivated the company to disclose more information. Moreover, the existence of block ownership (holding of more than 5%) by individuals, companies and other institutions, signals that agency cost is low since block holders normally have the expertise to monitor management’s activities (Short, Zhang and Keasey, 2002). Existing literature, however, shows conflicting results of the relationship between disclosure and ownership structure. For example, Lily and Takiah (2002), Alsaeed (2005), Eng and Mak (2003), and Haniffa and Cooke (2002) found no relationship between quality of reporting with diversity of ownership structure. However, Chau and Gray (2002), Lakhal (2005) and Norashikin (2002) found a positive relationship between the two variables. Fama and Jensen (1983) postulate that conflict increases when ownership of firms is diverse. Firms, therefore, will increase their disclosure of information in order to mitigate conflict, and to fulfil diverse information needs. On the other hand, if the ownership of firms is concentrated among a few (block) shareholders, the level of reporting will be low as shareholders can get information directly from the firm. Therefore, H3 is stated as follows:

H3: The quality of reporting is negatively associated with the level of block ownership in firms.

Quality of Reporting and Government Ownership

Government ownership in any business organizations will affect the development and implementation of business and social related policies in that organization. Their existence can be seen as a monitoring body that ensures the interest of the public will not be at risk by companies’ operations. They will also ensure that managers do not mismanage funds trusted to them. Therefore, conflict between managers and owners can be reduced (Gul, 1999). Gul (1999) found a positive relationship between corporate policy and government ownership. Nazli and Weetman (2006), however, found no relationship between government ownership and level of disclosure. This study predicts a significant and positive relationship between government ownership and quality of disclosure since such ownership will lead companies to disclose more information to outsiders. The government existence/ownership can also be seen as a control mechanism to reduce agency cost and information asymmetry problems between owners and managers of firm (Eng and Mak, 2003; Gul, 1999). Therefore, H4 is stated as follows:

H4: The quality of reporting is positively associated with government ownership in firms.
The regression model for the study is as follows:

\[ QD_j = \alpha + \beta_1 DA_j + \beta_2 MANAGEMENT_j + \beta_3 BLOCK_j + \beta_4 GOVERNMENT_j + \beta_5 SIZE_j + \beta_6 LEVERAGE_j + \beta_7 PROFIT_j + e_j \]

- **QD** = Quality of Disclosure
- **DA** = Discretionary Accrual – Absolute Amount (Modified Jones Model)
- **MANAGEMENT** = Management Ownership (direct and indirect ownership)
- **BLOCK** = Block Ownership – direct ownership of more than 5% by individual, institutions or companies
- **GOVERNMENT** = Ownership by the government, its agencies, or government link organization

**Control Variables:**
- **SIZE** = Size of assets
- **PROFIT** = Net income divided by sales
- **LEVERAGE** = Total debt divided by total assets
- **e** = Errors

**Methodology**

The sample of this study consists of 200 companies in six industries listed on the First Board of Bursa Malaysia for the year of 2004. The industries are consumer product, industrial product, construction, trade and services, property and plantation. Companies in financial, insurance, and trust unit sectors were excluded in the sample due to different reporting regulations and requirements (Haniffa and Cooke, 2002; Mohd Shatari et al. 2004; Nazli and Weetman, 2006). The study uses stratified sampling method to identify the sample. This method is seen to be appropriate as companies are considered quite homogenous within their industrial sectors but heterogeneous between other sectors (Haniffa and Cooke, 2002). This sampling method enables researchers to analyse the research findings separately between different industrial sectors. Specifically, the study selects one sample company from every three companies listed on the Bursa Malaysia directory. This is to make sure that every company in the directory has an equal chance to be selected as a sample of the study.

Annual reports of the sample companies were content analysed to determine the quality of disclosure. In order to ensure the reliability and consistency of measuring the quality of disclosure, a pilot study was carried out and only one research assistant was involved in the calculation of the disclosure index. Annual reports were also used as a source for other financial information such as information on the ownership structure and discretionary accrual. Discretionary accrual is used as a measure of earnings management.
Development of Research Instrument

The study uses a modified disclosure theme suggested by (Beattie, McInnes and Fearnley, 2004) since their themes are considered more comprehensive compared to other research themes (Haniffa and Cooke, 2002; Mohd Shatari et al. 2004; Chau and Gray, 2002). Beattie et al. (2004) proposed nine main themes that have 79 items. These disclosure themes are as follows.

i. Business description – 12 items
ii. Financial information – 13 items
iii. Management analysis – 14 items
iv. Management and shareholders information – 3 items
v. Operating data – 10 items
vi. Forward-looking information – 8 items
vii. Not Jenkins1 – 10 items
viii. Broad objectives and strategy – 3 items
ix. Industry structure – 3 items

Ten annual reports of companies short-listed for NACRA award were selected for the pilot study. These companies represent a wide range of industries in Malaysia. The pilot test was carried out to gauge the appropriateness of items suggested by Beattie et al., (2004). Items that are considered not appropriate or not relevant to be reported in Malaysian annual reports were deleted from the list. Further, mandatory items need to be disclosed, following the requirement for the listing purposes and accounting standards, were also eliminated. This is to ensure that only those items that are relevant and appropriate are considered in the measurement of quality disclosure for the Malaysian business environment. After considering the result of the pilot study, it was decided to eliminate the following three items.

i. Seasonality and cyclicality (item 13)
ii. Types and amount of director and executive management compensation and methods of compensation (item 44)
iii. Nature of disagreement with former business advisors (item 45)

Item 13, Seasonality and cyclicality, and item 45, Nature of disagreements with former business advisors, of the Beattie’s original list were dropped since these items were not mentioned in any of the 10 annual reports used in the pilot study. Item 44, Types and amount of director and executive management compensation and methods of computation, were also dropped because it is mandatory in nature. Companies listed on Bursa Malaysia are required to disclose this item in their annual reports. The 76 disclosure items that were left were used in this study to measure the quality of reporting. The complete list of items is reported in Appendix 1.

Measurement of Variables

Quality of disclosure is the dependent variable in this study. Past studies had used different methods to assess quality of disclosure including subjective ratings, disclosure
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indices, and thematic content analysis. This study uses modified disclosure index as suggested by Beattie et al. (2004) to measure quality of disclosure. A score of one (1) is given if an item is disclosed and score of zero (0) if an item is not disclosed. Accordingly, the maximum disclosure (MD), represents the total possible score and is equivalent to 76 items. Score of disclosure index is calculated based on the number of actual disclosure compared to maximum disclosure (Mohd Shatari et al. 2004, Haniffa & Cooke, 2002). Disclosure index (DI) is calculated as follows:

\[
DI = \frac{TD}{MD}
\]

Where:
- DI = Disclosure Index
- TD = Total Disclosure
- MD = Maximum Disclosure

The two independent variables are earnings quality and ownership structure. The earnings quality is based on the level of earnings management by firms. Quality of earnings is considered good if management do not manage the earnings (Shaw, 2003). Specifically, earnings management is calculated based on the level of discretionary accrual calculated using the Modified Jones Model. The formulation of earnings management, through the discretionary accrual (DA), is as follows.

\[
TA_{it} = NDA_{it} + DA_{it}
\]

Where:
- TA = Total Accrual
- NDA = Non-discretionary Accrual
- DA = Discretionary Accrual

The total accrual (TA) can be calculated based on two approaches: balance sheet approach or cash flow approach (Lobo and Zhou, 2001). This study utilizes the cash flow approach since this approach is more popular and equally reliable (Norman, Takiah and Mohd Mohid, 2004; Lobo and Zhou (2001). The TA is the difference between earnings before taxes and extraordinary item with cash flow from operation calculated as follows:

\[
TA_{it} = EBT_{it} - CFO_{it}
\]

Where:
- EBT_{it} = earnings before extraordinary items and taxes in the year t
- CFO_{it} = cash from operation in the year t.
- i = index for company

The discretionary accrual, proxy for earnings management or earnings quality, is the difference between total accrual and non-discretionary accrual, calculated as follows.

\[
NDA_{it} = \left[\beta_0 \left(1/A_{i_{t-1}}\right)\right] + \left[\beta_1 \left(\Delta REV_{it} - \Delta REC_{it}/A_{i_{t-1}}\right)\right] + \left[\beta_2 \left[PPE_{it}/A_{i_{t-1}}\right]\right]
\]
Where:

\[ \text{NDA}_t = \text{non-discretionary accrual at the year } t \]
\[ \Delta\text{REV}_t = \text{Revenue in year } t \text{ minus revenues in year } t-1 \]
\[ \Delta\text{REC}_t = \text{Receivables in year } t \text{ minus receivables in year } t-1 \]
\[ \text{PPE}_t = \text{Property, plant and equipment in year } t \]
\[ A_{t-1} = \text{Total assets in year } t-1 \]

The value for \( D_0, D_1 \) and \( D_2 \) were generated from this equation:

\[
\frac{TA}{A_{t-1}} = D_0\left(\frac{1}{A_{t-1}}\right) + D_1\left[\frac{(\Delta\text{REV}_t - \Delta\text{REC}_t)}{A_{t-1}}\right] + D_2\left[\frac{\text{PPE}_t}{A_{t-1}}\right] + \nu_t
\] (4)

Therefore, the discretionary accrual is eventually generated from this equation.

\[
\text{DA}_t = \text{TA}_t - \text{NDA}_t
\] (5)

This study will also investigate the influence of ownership structure on the quality of disclosure. Specifically, this study will examine ownership by the management, block ownership and ownership by the government.

Management ownership is measured based on the direct and indirect ownership by the board of directors and chief executive officer. Shareholdings of more than five percent is considered as block holdings (Eng and Mak, 2003). These block holders can be an individual, institution, or government. Government ownership is based on the direct ownership of government agencies such as Ministry of Finance and indirect ownership through its interest in organizations such as Lembaga Tabung Haji, Unit Trust, and Employer Provident Fund (EPF).

**Control Variables**

There are other variables that are expected to influence the quality of disclosure and have been frequently studied in the past. These variables are size, profitability and leverage. Previous studies have used a number of proxies for size. This study uses total assets as a measure of size (Mohd Shatari et al., 2004; Romlah et al., 2002). Profitability is based on the ratio between net income and total sales (Chau and Gray, 2002). Leverage is measured based on total liabilities over total assets (Mohd Shatari et al., 2004; Eng and Mak, 2003; Lobo and Zhou, 2001).

**Findings**

The distribution of 200 sample firms that represent about 37% of companies listed on the First Board of Bursa Malaysia is shown in Table 1. The majority of the sample comes from the industrial product sector as this sector is the largest sector listed in Bursa Malaysia. The smallest sample size is from the plantation sector, with 15 companies included in the sample.
Table 2 shows the frequency of disclosure level among sample firms. The highest possible disclosure is 1.00, which is equivalent to 100% of 76 items. The actual level of disclosure is from 0.1184 (8 items) to 0.6447 (49 items). The average level of disclosure is 0.3522 with the highest frequencies of disclosure is 0.3289 (25 items). These data indicate that, in general, the level of voluntary disclosure among Malaysian firms is still at the infancy stage, where many companies do not disclose information beyond what is required by regulations and standards.

**Table 1: Distribution of Sample Firms**

<table>
<thead>
<tr>
<th>Industry</th>
<th>Total firms</th>
<th>Selected Sample</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Product</td>
<td>76</td>
<td>28</td>
<td>13.9</td>
</tr>
<tr>
<td>Industrial Products</td>
<td>153</td>
<td>56</td>
<td>28.1</td>
</tr>
<tr>
<td>Construction</td>
<td>43</td>
<td>16</td>
<td>7.9</td>
</tr>
<tr>
<td>Trade &amp; Services</td>
<td>134</td>
<td>49</td>
<td>24.6</td>
</tr>
<tr>
<td>Property</td>
<td>99</td>
<td>36</td>
<td>18.2</td>
</tr>
<tr>
<td>Plantation</td>
<td>40</td>
<td>15</td>
<td>7.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>545</strong></td>
<td><strong>200</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

**Descriptive Information on Disclosure**

Table 2 shows the frequency of disclosure level among sample firms. The highest possible disclosure is 1.00, which is equivalent to 100% of 76 items. The actual level of disclosure is from 0.1184 (8 items) to 0.6447 (49 items). The average level of disclosure is 0.3522 with the highest frequencies of disclosure is 0.3289 (25 items). These data indicate that, in general, the level of voluntary disclosure among Malaysian firms is still at the infancy stage, where many companies do not disclose information beyond what is required by regulations and standards.

**Table 2: Frequency of Disclosure Level**

<table>
<thead>
<tr>
<th>Disclosure Index</th>
<th>No. of firms</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.1184</td>
<td>1</td>
</tr>
<tr>
<td>0.1447</td>
<td>2</td>
</tr>
<tr>
<td>0.1711</td>
<td>1</td>
</tr>
<tr>
<td>0.1974</td>
<td>3</td>
</tr>
<tr>
<td>0.2105</td>
<td>5</td>
</tr>
<tr>
<td>0.2237</td>
<td>4</td>
</tr>
<tr>
<td>0.2368</td>
<td>4</td>
</tr>
<tr>
<td>0.2500</td>
<td>6</td>
</tr>
<tr>
<td>0.2632</td>
<td>9</td>
</tr>
<tr>
<td>0.2763</td>
<td>12</td>
</tr>
<tr>
<td>0.2895</td>
<td>11</td>
</tr>
<tr>
<td>0.3026</td>
<td>10</td>
</tr>
<tr>
<td>0.3158</td>
<td>10</td>
</tr>
<tr>
<td>0.3289</td>
<td>19</td>
</tr>
<tr>
<td>0.3421</td>
<td>7</td>
</tr>
<tr>
<td>0.3553</td>
<td>10</td>
</tr>
<tr>
<td>0.3684</td>
<td>12</td>
</tr>
<tr>
<td>0.3816</td>
<td>9</td>
</tr>
<tr>
<td>0.3947</td>
<td>7</td>
</tr>
<tr>
<td>0.4079</td>
<td>10</td>
</tr>
<tr>
<td>0.4211</td>
<td>5</td>
</tr>
<tr>
<td>0.4342</td>
<td>5</td>
</tr>
<tr>
<td>0.4474</td>
<td>7</td>
</tr>
<tr>
<td>0.4605</td>
<td>8</td>
</tr>
<tr>
<td>0.4737</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 2: Frequency of Disclosure Level

<table>
<thead>
<tr>
<th>Level</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>0.4868</td>
<td>6</td>
</tr>
<tr>
<td>0.5000</td>
<td>3</td>
</tr>
<tr>
<td>0.5132</td>
<td>3</td>
</tr>
<tr>
<td>0.5263</td>
<td>2</td>
</tr>
<tr>
<td>0.5395</td>
<td>1</td>
</tr>
<tr>
<td>0.5658</td>
<td>2</td>
</tr>
<tr>
<td>0.6184</td>
<td>1</td>
</tr>
<tr>
<td>0.6447</td>
<td>1</td>
</tr>
</tbody>
</table>

Average = 0.3522  Total = 200 firms

Table 3 shows the level of disclosure by different types of industries classified by themes of disclosure. The level of disclosure is almost the same between different types of industries. The highest level is in the trade and services sector, followed by the plantation sector. The lowest level of disclosure is in the property sector with a score of 0.3263.

Table 3: Disclosure Level with Types of Industry and Disclosure Themes

<table>
<thead>
<tr>
<th>Industry</th>
<th>CP</th>
<th>IP</th>
<th>CT</th>
<th>T&amp;S</th>
<th>PP</th>
<th>PL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mean of Disclosure</td>
<td>0.3473</td>
<td>0.3684</td>
<td>0.3867</td>
<td>0.3263</td>
<td>0.3263</td>
<td>0.3553</td>
</tr>
</tbody>
</table>

Disclosure Themes:

| BD   | 0.4761 | 0.4807 | 0.5781 | 0.5204 | 0.3912 | 0.4611 |
| FI   | 0.3159 | 0.3118 | 0.2981 | 0.3563 | 0.3269 | 0.4359 |
| MA   | 0.1836 | 0.1556 | 0.1741 | 0.1793 | 0.1409 | 0.1714 |
| MSI  | 0.9524 | 0.9345 | 0.8958 | 0.9592 | 0.9722 | 0.9111 |
| OD   | 0.3571 | 0.3018 | 0.3750 | 0.4347 | 0.3000 | 0.3600 |
| FLI  | 0.3973 | 0.4665 | 0.5000 | 0.5000 | 0.5347 | 0.4583 |
| NJ   | 0.1893 | 0.1696 | 0.2750 | 0.2571 | 0.2000 | 0.2067 |
| O&S  | 0.5357 | 0.5774 | 0.3958 | 0.5714 | 0.4444 | 0.3556 |
| IS   | 0.2976 | 0.1964 | 0.1458 | 0.1564 | 0.1019 | 0.0667 |

Notes:

**Industrial Codes:**

- CP - Consumer Product
- IP - Industrial Product
- CT - Construction
- T&S - Trade and Services
- PP - Property
- PL - Plantation

**Disclosure Themes:**

- BD - Business description
- FI - Financial information
- MA - Management analysis
- MSI - Management and shareholders information
- OD - Operating data
- FLI - Forward-looking information
- NJ - Not Jenkins
- O&S - Broad objectives and strategy
- IS - Industry structure
Information on Management and Shareholders (MSI) is the highest reported information, where almost all companies (except one company) are disclosing this information in the annual reports. This provides an indication that management perceive shareholders as one of the important users of corporate information. The lowest level of disclosure is on Management Analysis (MA) at 0.1654.

Descriptive statistics of the sample are reported in Table 4. The average level of discretionary accrual is 7.94% of the total assets. The average level management, block and government ownership are at 48.67%, 51.87% and 11.50% respectively. The majority of sample companies (not shown in the table) use big-four audit firms to audit their company accounts (149 companies compared to 51 companies that use non big-four). On average, the level of disclosure by companies that used big-four is higher (0.3615) compared to the non big-four (0.3251).

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Std Dev.</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>DA</td>
<td>0.0794</td>
<td>0.1125</td>
<td>0.0001</td>
<td>0.7833</td>
</tr>
<tr>
<td>OMgt</td>
<td>48.67%</td>
<td>61.05%</td>
<td>0.00%</td>
<td>406.20%</td>
</tr>
<tr>
<td>OBlock</td>
<td>51.87%</td>
<td>19.55%</td>
<td>0.00%</td>
<td>98.26%</td>
</tr>
<tr>
<td>OGovernt</td>
<td>11.50%</td>
<td>17.70%</td>
<td>0.00%</td>
<td>95.13%</td>
</tr>
<tr>
<td>LnSize</td>
<td>20.1345</td>
<td>1.2296</td>
<td>17.6300</td>
<td>24.3500</td>
</tr>
<tr>
<td>Profit</td>
<td>0.4989</td>
<td>6.7692</td>
<td>-3.5249</td>
<td>95.2877</td>
</tr>
<tr>
<td>Leverage</td>
<td>0.4128</td>
<td>0.2379</td>
<td>0.0061</td>
<td>1.8485</td>
</tr>
</tbody>
</table>

Notes:
- DA = Discretionary Accrual – Absolute Amount (Modified Jones Model)
- OMgt = Management Ownership (direct and indirect ownership)
- OBlock = Block Ownership – direct ownership by individual, institutions or companies
- OGovernt = Ownership by the government, its agencies, or government link organization
- LnSize = log of size
- Profit = net income divided by sales
- Leverage = total debt divided by total assets

Hypothesis Testing

Ordinary Least Square (OLS) regression was used to test the hypothesis. OLS requires that data are normally distributed and the value of skewness and kurtosis are zero (Coakes and Steed, 2003). The analysis shows that profitability variable has skewness and kurtosis problems (value = 196.079). Following Tabachick and Fidell (1989) proposition, these problems would affect the standard error but not the result of the study. Multicollinearity test was carried out among independent variables. Pearson correlation test shows that there is no multicollinearity problems since the correlation among variables were less than 0.80 (Tabachick and Fidell, 1989). The Variance Inflation Factor (VIF) test confirms the results as no VIF value exceeded 2.
Table 5 reports the regression result with quality of disclosure as the dependent variable and quality of earnings and ownership structure (management, block, and government ownership) as independent variables. The results show that the adjusted $R^2$ is 31.4% ($F$ value = 14.041, $p = 0.000$). The ownership by the management and government are significant in explaining the quality of disclosure ($p < 10\%$). The quality of earnings and block ownership, are however, not significant.

Table 5: Results of Regression Analysis

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>$t$ value</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-34.599</td>
<td>-3.574</td>
<td>0.000</td>
</tr>
<tr>
<td>DA</td>
<td>0.060</td>
<td>1.148</td>
<td>0.253</td>
</tr>
<tr>
<td>OMgt</td>
<td>-0.018</td>
<td>-1.901</td>
<td>0.059*</td>
</tr>
<tr>
<td>OBlock</td>
<td>0.051</td>
<td>1.641</td>
<td>0.102</td>
</tr>
<tr>
<td>OGovernt</td>
<td>0.067</td>
<td>1.907</td>
<td>0.058*</td>
</tr>
</tbody>
</table>

Control Variables:

<table>
<thead>
<tr>
<th>Variables</th>
<th>Coefficient</th>
<th>$t$ value</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>LnSize</td>
<td>7.680</td>
<td>6.911</td>
<td>0.000**</td>
</tr>
<tr>
<td>Leverage</td>
<td>-0.005</td>
<td>-0.221</td>
<td>0.825</td>
</tr>
<tr>
<td>Profit</td>
<td>-0.002</td>
<td>-2.154</td>
<td>0.032**</td>
</tr>
</tbody>
</table>

Notes:

R$^2 = 0.339$

Adjusted $R^2 = 0.314$

$F$ Value = 14.041 ($p = 0.000$)

** Significant at 0.05
* Significant at 0.10

DA = Discretionary Accrual – Absolute Amount (Modified Jones Model)
OMgt = Management Ownership (direct and indirect ownership)
Oblock = Block Ownership – direct ownership by individual, institutions or companies
OGovernt = Ownership by the government, its agencies, or government link organization
LnSize = Log of total assets size
Profit = Net income divided by total sales
Leverage = Total debt divided by total assets

The negative significant relationship between management ownership and disclosure quality confirms the hypothesis that as management ownership increases, the quality (level) of disclosure decreases. The result is consistent with Eng and Mak (2003) and Nazli and Weetman (2006) which stated that the increase in management ownership reduces the need for an elaborate and additional voluntary disclosure as managers can obtain information directly from the company. This finding confirms Jensen and Meckling’s (1976) proposition that as management ownership increases, the management-shareholders conflict decreases, reducing the agency cost, therefore, reducing the need for additional voluntary disclosure in annual reports. Therefore, H2 cannot be rejected.

The results also indicate a positive relationship between the ownership by the government and the quality of disclosure ($t = 1.907$, $p = 0.058$). Companies increase the voluntary disclosure as government ownership increases. This may provide signal to the public
that ownership by the government has prompted companies to be more transparent and accountable to the public. This finding also confirms that the monitoring role played by the government leads to an increase in the level of disclosure. This finding is consistent with study by Eng and Mak (2003). Therefore, H4 cannot be rejected.

The insignificant result for the relationship between quality of earnings and quality of disclosure is not consistent with Lobo and Zhou (2001) which demonstrate a negative relationship between the two variables. Our results suggest that companies do not use disclosure strategy to conceal low quality of earnings. Therefore, H1 cannot be accepted. Shaw (2003) suggested that the significant relationship can exist in certain situations only. We will discuss this issue in the next section of this paper.

The results also show that block ownership does not explain the variation in the quality (level) of disclosure ($t = 1.641, p = 0.102$). Short et al. (2002) mentioned that this is due to the failure of block owners to monitor the operation and reporting activities of companies. This result is consistent with Eng and Mak (2003) and Haniffa and Cooke (2002) that find no relationship between the two variables.

As expected, size was positively and significantly associated with the level of disclosure ($t = 6.991, p = 0.000$). This result confirms the findings of previous studies (Mohd Shatari et al., 2004; Norashikin, 2002; Singhvi & Desai, 1971). Big companies have more resources to disclose more information. Moreover, the political cost of these companies is higher than for the smaller companies. Therefore, increasing the level of disclosure is one way to reduce the cost.

Contrary to what was expected, profitability shows a negative and significant relationship with the level of disclosure ($t = -2.219, p = 0.035$). This indicates that poorly performing companies have a tendency to disclose more information. These companies use the additional disclosure as a strategy to moderate the negative effect from the poor financial performance. The level of leverage does not show a significant relationship with the level of disclosure ($t = -0.221$ dan $p = 0.825$). This finding is consistent with Mohd Shatari et al. (2004) and Nooraisah (2002).

**Additional Analysis**

In the above analysis, we use absolute value of discretionary accrual (DA) to measure quality of earnings. However, managers of firms that have reported positive earnings (therefore, have positive discretionary accrual) could behave differently than those that have reported negative earnings (therefore, have negative discretionary accrual), (Shaw, 2003). In this section, we investigate the behaviour of managers that reported positive or negative earnings and relate that with the quality of disclosure. We separated the sample into two groups, one group that has positive discretionary accrual (DAPositive) and the other group that has negative discretionary accrual (DANegative), and tested whether this has an effect on quality of disclosure. The results of the regression analysis for DANegative are shown in Table 6.
Table 6 shows that DANegative influences the quality of disclosure \( t = -1.925, p = 0.059 \). However, the analysis showed that DAPositive does not influence the disclosure (not shown in the table). The contradictory results suggest that firms that are reporting negative earning disclose more information in their annual reports. This result supports Shaw’s (2003) suggestion that firms with ‘bad news’ (poor financial performance firms) provide more voluntary information in their annual reports to reduce information asymmetry between managers and stakeholders of firms. Companies that report positive earnings (DAPositive) are indifferent in terms of disclosure.

Table 6 also shows that management ownership is negatively and significantly associated with quality of disclosure \( t = 1.755, p = 0.084 \). This result is consistent with the result of earlier analysis as presented in Table 5. The increase share ownership by the management reduces the need for additional information as managers can obtain information directly from companies, regardless of whether the companies are reporting positive or negative earnings.

The results in Table 6 also show that block ownership is positively and significantly associated with quality of the disclosure. The result is contradictory with the results of earlier analysis (shown in Table 5) and results from previous studies that found a positive relationship (Chau and Gray, 2002; Lakhal, 2005; Norashikin, 2002). This finding suggests that negative earnings firms increase their reporting of voluntary information as block ownership increases.
Concluding Remarks and Future Research

This study investigates whether earnings quality and ownership structure influence the disclosure quality among Malaysian firms. Theoretically, firms manage the disclosure level by providing additional financial and non-financial information to reduce information asymmetry and agency cost between managers and outside stakeholders (Lobo and Zhou, 2001). In this study, the authors predict that firms manage the level of voluntary disclosure in order to conceal their earning management activities. The study hypothesizes that disclosure quality is negatively associated with the earnings quality, management ownership, and block ownership. The study also hypothesizes a positive association between disclosure quality and government ownership of firms.

The findings of this study show that managerial ownership and government ownership are significantly associated with the quality of disclosure. As postulated earlier, the increase in management ownership reduces the need for additional voluntary disclosure as managers can obtain information directly from the company. Also, as management ownership increases, the management-shareholders conflict decreases, therefore, reducing the agency cost and the need for additional voluntary disclosure in the annual reports (Jensen and Meckling, 1976). The results also indicate that ownership by the government has influenced companies to be more transparent and accountable to the public as companies with high government ownership disclose more information in the annual reports.

Additional analysis shows that companies that report negative earnings disclose more information in the annual reports compared to those that report positive earnings. This finding is consistent with the agency cost theory that predicts company will disclose more information to conceal the poor financial performance of the company.

This study has made two important contributions in the areas of accounting research. Firstly, this study is the first study in the East Asian region that investigates the relationship between earnings quality and ownership structure with disclosure quality. The findings of this study will provide further evidence on the relationship between these variables. Secondly, this study contributes in the development of disclosure index for the Malaysian companies. Beattie et al. (2004) have suggested a ‘comprehensive’ disclosure theme as an indicator of reporting quality. This study assesses the suitability of the themes and suggests ‘modified’ disclosure themes that can be considered more relevant and pertinent to the Malaysian firms’ reporting practice.

Future research may be carried out to concentrate on specific voluntary information (financial or non-financial) to determine whether these types of information can influence the quality of earnings. Additionally, the discourse analysis method can be employed to replace the content analysis method, as this method is able to capture the meaning of the disclosure information. Furthermore, issue of pyramid cross holding ownership among Malaysian listed companies can also be investigated in relation to the quality of reporting in annual reports.
Notes

1. Specifically, Not Jenkins refers to items no. 61-70 as reported in the Appendix 1.
2. There are two types of indeces, weighted and unweighted index. However, past studies provide evidence that the result using weighted and weighted index were not significantly different (Al-Razeen and Karbhari, 2004; Chau and Gray, 2002). Furthermore, Meek and Robert (1995) suggested that using unweighted reporting index induces the subjectivity in giving score when the priority and importance of certain information by users are unknown or users placed different priority on the same items.
3. All variables in the regression were not significant in influencing the quality of disclosure, except for control variables size and profitability.

References


APPENDIX 1

Business Description

1. General development of business
2. Principal products/services
3. Principal markets and market segment
4. Processes
5. Types of macroeconomic activity that management believes are closely correlated with business revenues or expenses
6. Description of important patents, trademarks, licenses, franchises, etc.
7. Location, nature, capacity and utilization of physical properties
8. Major contractual relationship
9. Key inputs
10. Existing and proposed laws and regulations that could impact business significantly
11. Distribution and delivery methods
12. Industry

Financial Information

13. Profit and profitability measures, including EPS
14. Sales
15. Cash flow
16. Others
17. Debt
18. Gearing
19. Interest
20. Tax
21. Capital expenditure
22. Working capital
23. Interest cover
24. Dividends
25. Pensions

Management and shareholders information

26. Reasons for change in market acceptance
27. Reasons for change in profitability
28. Identify and past effect of key macroeconomic trends
29. Reasons for change, others
30. Identify, effect of unusual or non-recurring
31. Reasons for change in ratio
32. Reasons for change in liquidity and financial flexibility
33. Identify and past effect of key regulatory trends
34. Reasons for change in financial position
35. Reasons for change in innovation
36. Identify and past effect of key social trends
37. Identify and past effect of key technological trends
38. Identify and past effect of key political trends
39. Identify and past effect of key demographic trends

**Management and shareholders information**

40. Identify and background of directors and executive management
41. Identify and number of shares owned by major owners; number of shares owned by directors, management and employees, each as a group
42. Transactions and relationships among related parties

**Operating data**

43. Revenues e.g. level and changes in units and prices, market share
44. Costs, e.g. number of employees, average compensation per employee.
45. Employee involvement and fulfilment, e.g. level and changes in employee satisfaction
46. Productivity, e.g. input/output ratio
47. Amount and quality of key resources, including human resources, e.g. average age
48. Volume and prices of materials used
49. Quality e.g. customer satisfaction, % defects backlog
50. Innovation e.g. % current production designed in period
51. Time required to perform key activities, e.g. production, delivery, new product development
52. Outlets

**Forward-looking information**

53. Activities and plans to meet broad objectives and business strategy
54. Nature and cause of risks
55. Nature and cause of opportunities
56. Factors that management believes must be present, occurring within the business
57. Non-specific evaluation of future outcomes/performance
58. Factors that management believes must be present, occurring outside the business
59. Identification of major differences between actual business performance and previously disclosed opportunities, risks and management plans
60. Effects of opportunities and risks on future core earnings and cash flows

**Not Jenkins**

61. Employees
62. Link to another part of the annual report or other source
63. Business and local community
64. Accounting standards and impact
65. Environmental  
66. Customers  
67. Thanks to/ recognition of support / expression of appreciation of stakeholder group/ director  
68. Accounting policies and impact  
69. Change in financial year-end  
70. Suppliers  

**Broad objectives and strategy**  
71. Broad objectives, quantified where practical  
72. Principal strategies to achieve objectives  
73. Discussion of consistency of strategy with key trends  

**Industry structure**  
74. Intensity of the industry competition, dispersion of competitors and identification of major competitors; measures of intensity of competition, e.g. relative price changes, customer switches  
75. Bargaining power of customers, extent of dispersion, including concentration measure, identification of dominant customers; measures of relative bargaining power, e.g. recent price changes  
76. Bargaining power of resources provides; identification of types of major resource and related suppliers; for each type, availability of supply; measures of relative bargaining power, e.g. recent price changes