CORPORATE GOVERNANCE AND EARNINGS MANAGEMENT: BOARD CHARACTERISTICS IN A SRI LANKAN PERSPECTIVE

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Abstract

With the increasing status of the topics of Corporate governance and earning management in the field of accounting research, this literature explores whether good corporate governance practices can lead to minimize the earnings management practices and improve the quality of earnings. It analysed the association between earnings management and board characteristics because board of directors is an integral part of corporate governance. Out of the 289 companies listed in the Colombo Stock Exchange, 60 companies have been selected from three sectors, for three years as our sample. CEO duality, board independence, board members with financial expertise, number of board meetings and board size were considered as corporate governance variables. Firm Size, return on assets (ROA), leverage and auditor type were used as control variables. Our cross-sectional study shows that CEO duality and board size are negatively associated with earnings management while board independence, board size, board members with financial expertise are positively associated with earnings management practices. Data collection was carried out through secondary data available in annual reports published by the selected companies.

Keywords: Corporate Governance, Earnings Management, Board of Directors
1. Introduction

Major business failures and accounting scandals which happened all over the world during the past few decades have dented investor confidence and have raised several questions on the effectiveness of a firm’s internal control system, enterprise risk management and governance structures. Corporate governance has come into action in order to address above mentioned business failures. Agency conflict, one of underlying concept of corporate governance has been there for centuries and is old as trade. Broadly corporate governance system is the governance of company by the Board of directors and shareholders. Corporate governance is sometimes viewed as a business culture fostering economic growth by building up confidence of investors. (Robert et al. 2013)

According to Hypo (2004), earnings management can be described as using judgments and provisions by the management in financial reporting and in structuring transactions to alter financial reports to either mislead some stakeholders about the underlying performance of the company or to motivate or influence stakeholders based on outcomes that depend on reported accounting numbers.

Earnings management has three modes namely ‘White’, ‘Grey’ and ‘Black’; but it is difficult to differentiate between each other. However, generally white earnings management is accepted since sometimes it is towards entity’s goodness. Grey earnings management is opportunistic only to management and black earnings management gathers misrepresentations, mal-practices which lead to manipulations and ultimate collapses (Xue & Hong 2016). However, the integrity of financial reporting has been a consistent concern among regulators and practitioners. Within the Sri Lankan context there are number of financial reporting standards, rules and regulations, compliance requirements, publishing requirements in order to address earnings manipulation practices. However, it should be noted that although there are above mentioned systems to mitigate earnings manipulation within the company, there are still possibilities for management to influence the financial results. In order to mitigate those loopholes, organizations should develop sound control environment within the company.
The broad aim of this research is to tap the actual compliance with the corporate governance provisions by selected listed companies in Sri Lanka, and more importantly to examine the relationship between corporate governance practices and its effect on earnings management. We used the corporate governance provisions established by the code of best practice issued by Institute of Chartered Accountants of Sri Lanka as benchmark practices. For the evaluation purposes, we selected a sample of 60 listed companies from Colombo stock exchange based on industry categorization. Our study depicts how the CEO duality, board independence, board members with financial expertise, number of board meetings and board size affect for the earnings management.

**Background for development of corporate governance practices in Sri Lanka**

The scandals, corporate failures, growth in capital markets highlighted the need for guidance to tackle the various risks and problems that can arise in organisations’ systems of governance in the Sri Lanka and this can further elaborate as follows.

During the past period of times Board of directors of certain companies (Pramuka bank, Seylan bank, Golden key) that have failed to manage companies effectively have been a key aspect of governance scandals. Those different scandals have highlighted certain key weaknesses. Another feature of many corporate governance scandals has been boards dominated by a single senior executive with other board members merely acting as a rubber stamp. Sometimes the single individual may bypass the board to action his own interests.

Even if an organisation is not dominated by a single individual, there may be other weaknesses. The organisation may be run by a small group centred round the chief executive and chief financial officer, and appointments may be made by personal recommendation rather than a formal, objective process.

And on the other hand, Boards that meet irregularly or fail to consider systematically the organisation's activities and risks are clearly weak. Sometimes the failure to carry out proper oversight is due to a lack of information being provided, or the directors lacking the knowledge or skills necessary to contribute effectively.
The Sri Lanka Code was originally published in 1997 with a number of further editions since. The most recent update was published in 2013. The Message by the Chairman of the Securities and Exchange Commission in Sri Lanka in the foreword to the Code stressed its importance in convincing providers of capital to invest in Sri Lanka and hence for the country to achieve desired levels of growth.

Based on the research question, our study addresses the following research objectives.

- To identify the level of earnings management practices in listed companies in Sri Lanka.
- To investigate how Board aspects of corporate governance, impact on the earnings management.
- To examine whether there is a sector-wise difference of the impact of corporate governance practices on earnings management.

Accounting scandals related to earnings management are being reported around the corporate world resulting severe negative impacts on corporate entities. There were some of the high profile corporate collapses of the past decade, which have undermined the integrity of financial reporting. E.g.- Enron (2001), One.tel (2001), WorldCom (2001). Most of the studies on earnings management for managerial incentives have been conducted in USA, UK, Australia and New Zealand. However, very few studies have taken place in emerging economies like Sri Lanka, but it’s worthwhile to conduct. Prior studies on corporate collapses have strongly suggested that earnings management is becoming a common business practice in corporate world and that should be examined by contemporary academics. Since the corporations can minimize earnings management practices by adopting good corporate governance practices and it leads to the betterment of all the stakeholders, this study examined the effect of corporate governance practices in Board perspective. It could be able to recommend the reasons and the ways of mitigating mal-practices. Further the study demonstrates the usefulness of identifying and minimizing earnings management practices, thereby contributing to the well-being of government- non-government organizations and development plans.
2. Literature Review

Although corporate governance is an old concept, the need of corporate governance practices getting renewed due to different growing managerial practices in the world. ‘Corporate governance can be defined as a mechanism that is employed to reduce the agency cost that arises as a result of the conflict of interest between managers and shareholders’ (Uwuigbe et al. 2014, p. 161). Also, Man and Wong (2013) explained corporate governance as an internal system encompassing policies, processes, and people that serve the needs of shareholders and other stakeholders by directing and controlling management.

On the other hand, Gelderen (2013) pointed out that earnings management as a situation when managers use judgement in financial reporting and in structuring transactions to alter financial report to either mislead some stakeholders about the underlying performance of the company or to influence contractual outcomes that depend on reported accounting numbers. In another perspective, Lee and Yeh (2006) have identified earnings management as the choice by a manager of accounting policies, or actions affecting earnings, so as to achieve some specific reported earnings objective.

According to La Porta et al. (2007), in recent year’s large accounting frauds uncovered in the stock markets have once again confirmed the existence of ethical failures and the importance of transparency and reliability of the financial information provided to markets. On the other hand, a weak governance structure may provide an opportunity for those charged with governance to engage in behaviour that would eventually result in a lower quality of reported earnings, which is a strong indication of a serious decay in business ethics. Therefore previous researchers have conducted researches to identify reasons for these problems by assessing the relationship between corporate governance aspects and earnings management.

Kang et al. (2013) have done a research to identify the effects on earnings management practices with regard to pre-and post-adaptation of corporate governance recommendations by incorporating corporate governance variables such as existence of audit committee, level of director ownership, existence of remuneration committee and board independence. Though it was identified that corporate governance recommendations create a beneficial impact on earnings.
management, cross-sectional results have shown that the existence of an audit committee was associated with lower levels of earnings management prior to recommendation but not after the recommendations. Similarly, lower director ownership was associated with higher levels of earnings management prior to recommendation but not after the recommendations. But, the existence of remuneration committee was associated with lower levels of earnings management both prior and after recommendation. However, Board independence was not associated with earnings management both pre-and post-recommendations. Though the results of longitudinal analysis, it was shown that only governance mechanism that could reduce earnings management was the remuneration committee.

Another research conducted by Amer and Abdelkarim (2010) in Palestinian context, have examined the relationship between corporate governance characteristics and earnings management among the listed companies at the Palestine Stock Exchange (PSE) for the two years; 2009 and 2010. This study examined the impact of independent variables such as board independence, board size, ownership concentration, CEO duality and audit quality, on earnings management. Researchers have concluded that Board independence was positively related with earnings management in both years. However, Board size was found to have a negatively significant relationship with earnings management in 2009, but in 2010 board size had a positively significant relationship with earnings management. Companies audited by Big 4 audit firms had a negatively significant impact on earnings management in 2009 where as there was no significant impact in 2010. In 2009, ownership concentration had an insignificant impact on earnings management, however, in year 2010 ownership concentration had negative significant influence on earnings management.

Iraya et al. (2015) have conducted a research in Kenya by using companies listed and actively trading in Nairobi Security Exchange for a period of two years from 2010 to 2012. They have incorporated five corporate governance variables as independent variables, which are ownership concentration, board size, board independence, board activities and CEO duality. The study results have found that earnings management is negatively related with ownership concentration, board size and board independence whereas positively related with Board activities and CEO duality. Finally, the study recommended the need of effective corporate governance
practices in order to reduce earnings management and prevent possible corporate collapse of listed companies in Kenya.

According to Uwuigbe et al. (2014), earnings management practices can be very common managerial practices in developing countries such as Nigeria where the research concluded that larger board of directors with diverse knowledge can mitigate the earnings management practices effectively than smaller boards as they are more likely to have independent directors with more corporate and financial expertise. As a supporting to the above finding Abed et al. (2012) emphasize that size of the board of directors is the only variable that had a significant relationship with the earnings management practices.

In the study of Ahmed (2013), he has studied the relationship between characteristics of board of directors and earnings management in the Malaysian scenario. Variables such as no. of board meetings, board independence, financial expertise of the board and CEO duality have been used as a corporate governance variable. The results of the study demonstrated that financial expertise is positively related to earnings management in the Malaysian context. But there was no significant relationship between the number of board meetings and discretionary accruals.

The above literature emphasizes that many researchers had observed that board of directors have a significant influence over earnings management practices. Therefore, our study was focused on Board characteristics such as CEO duality, Board independence, Board members with financial expertise, frequency of Board meetings and Board size, which we expected to create an impact on the level of earnings management practices of listed companies in Colombo Stock Exchange.

3. Research Method and Hypotheses Development
As previously discussed in the literature review section, many studies have used cross sectional and longitudinal design in identifying association between corporate governance and earnings management. Most of the studies which have used longitudinal design have documented the post and prior effects of implementing corporate governance code on the magnitude of the earnings management practices (Kang et al. 2013). However, in our study we used the cross-sectional
approach to identify the relationship between corporate governance and earnings management from a sample of listed companies in Colombo Stock Exchange (CSE).

Conceptual Diagram

Corporate Governance Variables
- CEO Duality
- Board Independence
- Board members with financial expertise
- No. of Board Meetings
- Board size

Earnings Management
(Discretionary Accruals)

Control Variables
- Firm size
- Return on Assets
- Leverage
- Audit Type

Sample
Population of our study is 289 companies listed in Colombo Stock Exchange in Sri Lanka which are categorized under 20 sectors and among that our research was carried on 3 sectors on a sample of 60 companies. The selected 3 sectors are Hotel and Travels; Beverage, Food and Tobacco; and Manufacturing, which consisted the highest number of companies reflecting the attractiveness of those sectors. Though the Bank, Finance and Insurance sector comprises of more than 20 companies (74 listed companies), we excluded it from our sample because this industry is strictly regulated and is likely to have fundamentally different cash flows and accrual processes (Roodposhti & Chamshmi 2011). Also, it is impracticable to measure accruals using the Jones model in the Bank, Finance and Insurance sector. In order to eliminate the biasness, we selected the top 10 and bottom 10 companies from each sector according to the market capitalization.
Therefore, we selected 20 listed companies from each of the above-mentioned sectors, which was summed up to 60 companies. Annual reports of selected listed companies were taken as the primary source of data collection.

**Independent Variables**

Corporate governance variables are shown in other studies, which associate with earnings management practices in firms. Such variables include CEO duality (Gelderen 2013; Roodposhti & Chamshmi 2011; Iqbal et al. 2015), Board independence (Gelderen 2013; Roodposhti & Chamshmi 2011; Kim & Yoon 2008; Kang et al. 2013), Board members with financial expertise (Davidson et al. 2001; Uwuigbe et al. 2014), Board meetings (Abbadi et al. 2016) and Board size (Amer and Abdelkarim 2010). So, we selected the above-mentioned variables as independent variables for the corporate governance aspect.

**CEO Duality**

CEO duality is where the chairperson of the board and the CEO of the company being held by separate persons. We identified this variable by referring to the section of Governance in the particular annual reports.

It is clear that there is attentiveness on power in a company when the same person is holding the role of Chief Executive Officer and President of the board (Gonzalez and Meca, 2013). One of the main roles of the chairperson of the board is to monitor the CEO’s responsibilities and tasks (Jenson, 1993). And also, Anderson et al. (2003) have found that the separation between CEO and Board Chair positions appear to positively influence the information content of accounting earnings. Further, Dechow et al. (1996) have also observed that firms whose CEO is also the chair of the board of directors are more likely to be subjected to accounting enforcement actions.

Therefore, we hypothesize that:

**H1: There is a negative association between earnings management and CEO duality where chairperson and CEO are two separate persons.**
Board Independence
According to Chen et al. (2007), the most fundamental notions in corporate governance is that the board of directors should be independent of management and the company. As in the Code of best practice on corporate governance in Sri Lanka, it is specifically recommended that the number of non-executive directors in the board should be at least two or one third of total number of directors whichever is higher. This variable was measured by considering the number of independent directors as a proportion of total number of directors.

Independence of the board from management can be identified as one of the best internal governance conditions (Chandler, 1975; Beasley, 1996) and they execute an important monitoring function in public organizations. And also, they have the ability to mitigate the agency problem between shareholders and management. Therefore, it is preferable to have directors, independent from the management to secure the board independence properly. Prior researches suggest that there is a relationship between board independence and better monitoring. Beasley (1996) and Dechow et al. (1996) have found that the percentage of independent directors on the board is negatively associated with the possibility of frauds in financial statements.

Based on the results demonstrated in prior studies, we expect that having a greater number of independent directors is more likely to be an effective monitoring mechanism and hence, more likely to confine earnings management. Thus, we hypothesize the following:

**H2: There is a negative association between board independence and earnings management.**

Board members with Financial Expertise
In our study, if a Board member has obtained at least one accounting or finance qualification, that person was considered as a financial expertise. This was measured by taking the number of directors with an accounting qualification as a percentage to the total number of directors of the board. We collected data on this variable by referring to the Board of Directors section in the annual reports.
According to Code of Best Practice on Corporate Governance, the board should ensure the availability within it of those with sufficient financial acumen and knowledge to offer guidance on matters of finance. Xie et al. (2003) have found that firms having board members with financial expertise have lower discretionary current accruals.

As an opposing view, according to a study carried out in Malaysia, has found that there is a positive relationship between financial expertise and earnings management (Ahmed, 2013). Directors with financial expertise can use their knowledge to commit frauds and they can window dress the financial statements easily as they are responsible for the preparation and presentation of financial reports. Based on this perspective, we hypothesize the following:

**H3:** Firms with more directors in the board having financial expertise will be positively associated with earnings management.

**Board Meetings**

Number of board meetings which is used to measure board activity can be identified as a good alternative for the directors’ monitoring effort (Adams, 2003). Also, it is required by the Code of best practice on Corporate Governance to hold the Board meetings at least once in every quarter of a financial year in order to effectively execute board’s responsibilities.

According to Menon and Willioms (1994), boards that do not meet or meet only a few times are not likely to be effective monitors. As an opposing view, it is argued that Board meetings are not essentially useful because routine tasks take much of limited time that directors and CEO waste together to set the agenda for Board meetings (Lorca et al, 2011).

However, in Sri Lankan context we can identify that board members meeting frequently may also lead to frauds or collusions in the organizations. In that perspective, we can hypothesize that;

**H4:** A greater number of Board meetings influences earnings management positively.
Board Size
Board size was measured by the number of Board of Directors of the company. Xie et al. (2003) have observed that earnings management is less likely to take place in firms with boards having a larger number of directors. And also, a larger size of Board assumes a superior supervision of the management team and a higher quality of corporate decisions (Pearce and Zahra, 1992). However, fast and efficient decision making may be avoided because of excessive size, due to problems of coordination and communication (Gonzalez and Meca, 2013).
Based on the results of previous studies, we hypothesize that:

**H5: Board size negatively affects earnings management.**

Measurement of the Dependent Variable
The magnitude of Discretionary Accruals (DA) is used as the proxy for earnings management. Dechow et al. (1995) depict that the modified Jones model is the most powerful model to identify earnings management among the alternative models to measure discretionary accruals. Also, as previous researches have used the modified Jones model in measuring accruals (Kang et al. 2013; Patrick et al. 2015; Uwuigbe et al. 2014), we chose the cross-sectional modified Jones model to measure discretionary accruals.

The discretionary accruals are calculated as follows. First, total accruals are measured as net income minus cash flows from operations.

\[ TA_{i,t} = NI_{i,t} - CFO_{i,t} \]

Then discretionary accruals are estimated by deducting non-discretionary accruals from total accruals, where all accrual variables are scaled by lagged total assets to control for potential scale bias.

\[ \frac{TA_{i,t}}{A_{i,t-1}} = \alpha_1 \left( \frac{1}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right) + \varepsilon_{i,t} \]
\[
\frac{NDA_{i,t}}{A_{i,t-1}} = \alpha_1 \left( \frac{1}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right)
\]

\[
\frac{DA_{i,t}}{A_{i,t-1}} = \frac{TA_{i,t}}{A_{i,t-1}} - \left\{ \alpha_1 \left( \frac{1}{A_{i,t-1}} \right) + \alpha_2 \left( \frac{\Delta REV_{i,t} - \Delta REC_{i,t}}{A_{i,t-1}} \right) + \alpha_3 \left( \frac{PPE_{i,t}}{A_{i,t-1}} \right) \right\}
\]

The discretionary accruals will be calculated by the following formula.

\[
DA_{i,t} = TA_{i,t} - NDA_{i,t}
\]

**Abbreviations**

- \(TA_{i,t}\) = total accruals for company \(i\) in year \(t\)
- \(NI_{i,t}\) = net income before discontinued segments and extraordinary items
- \(CFO_{i,t}\) = Cash flows from operations
- \(A_{i,t-1}\) = total assets for company \(i\) in year \(t - 1\)
- \(\Delta REV_{i,t}\) = change in revenue for company \(i\) in year \(t\)
- \(PPE_{i,t}\) = net property, plant and equipment for company \(i\) in year \(t\)
- \(NDA_{i,t}\) = non-discretionary accruals for company \(i\) in year \(t\)
- \(\Delta REC_{i,t}\) = change in receivables for company \(i\) in year \(t\)
- \(DA_{i,t}\) = discretionary accruals for company in year \(t\)
- \(\varepsilon_{i,t}\) = residual for company \(i\) in year \(t\)

**Control variables**

In the multiple regression analysis, we controlled for other governance variables examined in prior studies that may potentially affect the level of earnings management in order to decrease the bias of the independent variables (Amer & Abdelkarim 2010). Therefore, control variables identified
for our research are firm size, return on assets, leverage and auditor type which had been used by most of the prior researchers. (Kang et al. 2013; Chen et al. 2007).

In our study, firm size is measured by the natural log of total assets. The firm size hypothesis provides that due to large political visibility of large firms, they are more likely to manage earnings to decrease their political visibility (Watts and Zimmerman, 1986). On the other hand, large companies may have lower incentives to manage earnings because they are subject to more analysis from investors and financial analysts. So, there is no specific prediction on the relationship between firm size and discretionary accruals.

When Return on Assets (ROA) increases, earnings management practices have increased illustrating a significant positive relationship (Amer & Abdelkarim 2010; Chen et al. 2007). Thus, ROA is incorporated in to our research as rate of return on total lagged assets ratio.

DeFond and Jiambalvo (1994) and Sweeney (1994) have reported that managers use discretionary accruals to achieve debt covenant requirements. Because highly leveraged firms have greater incentives to upturn earnings. Managers in more levered firms are more likely to implement aggressive earnings management practices to prevent violation of debt agreements (Watts and Zimmerman, 1986). In order to gain more concessions from creditors, financially distressed companies might manage earnings downward (DeAngelo et al., 1994). So, we control for leverage by ratio of total debt to total asset ratio.

Prior studies have found that firms where financial statements are audited by one of Big 5 auditors are associated with low earnings management (Kim et al., 2003; Amer and Abdelkarim 2010). Therefore, we add an indicator variable BIG3 to capture the effect of a Big 3 auditor on earnings management.

**Model Specification**
Following regression model was used in order to test the relationship between corporate governance variables and earnings management of the 60 listed companies after incorporating the control variables identified by previous researchers.
\[ ADA = \alpha + \beta_1 CD + \beta_2 BDIN + \beta_3 BDSIZE + \beta_4 BDMEET + \beta_5 BDFX + \beta_6 SIZE + \beta_7 ROA \\
+ \beta_8 LEV + \beta_9 BIG3 \]

Where:

- \( ADA \) = the absolute value of discretionary accruals calculated by cross sectional modified Jones model
- \( CD \) = indicator variable coded 1 if the positions of CEO and Board chair person is held by two person, 0 if otherwise
- \( BDIN \) = percentage of independent directors of the board
- \( BDSIZE \) = the number of board of directors
- \( BDMEET \) = the number of board of directors’ meetings
- \( BDFX \) = the number of directors with a financial and accounting qualification as a percentage to the total number of directors of the board
- \( SIZE \) = the natural log of total assets
- \( ROA \) = rate of return on lagged total assets ratio
- \( LEV \) = ratio of total debt to total asset
- \( BIG3 \) = indicator variable coded 1 if the firm is audited by a Big3 auditor; 0 if the firm is audited by non- Big3 auditor

In the regression model, the proxy for earnings management calculates the absolute value of discretionary accruals from the modified cross-sectional Jones model which is used to test the hypotheses. Chen et al. (2007), it is expected to identify that corporate governance variables are significantly and negatively related to absolute discretionary accruals.

### 4. Empirical Results

**Descriptive statistics**

Table 1 provides descriptive statistics for the full sample of the research. The average of discretionary accruals for the absolute value is 0.011 and the median of absolute discretionary accruals is 0.003. It is noted that on average 4% of directors are independent in the sample taken for the study and on average 4% of the director board is with financial expertise. It is also clear that 88% of the companies considered for the sample, appoint two personnel for CEO and
Chairman of the board. As per the descriptive statistics, on average, director boards of the companies meet 5 times a year in absolute terms, median being 4 times a year. As the average, there are 8 members in the board of the companies selected for the sample.

Descriptive statistics for the control variables demonstrate that about 89% of the firms are audited by BIG 3 audit firms in Sri Lanka. The mean lagged ROA is 0.081 for the full sample of companies. On average, companies taken as the sample have a leverage of 72.4%.

Table 1. Descriptive Statistic*

<table>
<thead>
<tr>
<th></th>
<th>N</th>
<th>Mean</th>
<th>Median</th>
<th>SD</th>
<th>Lower Quartile</th>
<th>Upper Quartile</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADA</td>
<td>180</td>
<td>0.011</td>
<td>0.003</td>
<td>0.024</td>
<td>0.001</td>
<td>0.012</td>
</tr>
<tr>
<td>CD</td>
<td>180</td>
<td>0.883</td>
<td>1.000</td>
<td>0.322</td>
<td>1.000</td>
<td>1.000</td>
</tr>
<tr>
<td>BDIN</td>
<td>180</td>
<td>0.385</td>
<td>0.375</td>
<td>0.111</td>
<td>0.300</td>
<td>0.444</td>
</tr>
<tr>
<td>BDSIZE</td>
<td>180</td>
<td>8.033</td>
<td>8.000</td>
<td>1.610</td>
<td>7.000</td>
<td>9.000</td>
</tr>
<tr>
<td>BDMEET</td>
<td>180</td>
<td>5.100</td>
<td>4.000</td>
<td>2.539</td>
<td>4.000</td>
<td>6.000</td>
</tr>
<tr>
<td>BDFX</td>
<td>180</td>
<td>0.402</td>
<td>0.375</td>
<td>0.234</td>
<td>0.229</td>
<td>0.556</td>
</tr>
<tr>
<td>SIZE</td>
<td>180</td>
<td>22.194</td>
<td>22.125</td>
<td>2.419</td>
<td>20.686</td>
<td>23.223</td>
</tr>
<tr>
<td>ROA</td>
<td>180</td>
<td>0.081</td>
<td>0.064</td>
<td>0.129</td>
<td>0.017</td>
<td>0.100</td>
</tr>
<tr>
<td>LEV</td>
<td>180</td>
<td>0.724</td>
<td>0.480</td>
<td>0.814</td>
<td>0.180</td>
<td>0.986</td>
</tr>
<tr>
<td>BIG3</td>
<td>180</td>
<td>0.894</td>
<td>1.000</td>
<td>0.308</td>
<td>1.000</td>
<td>1.000</td>
</tr>
</tbody>
</table>

* Descriptive statistics are based on 180 firm-year observations

Table 2 presents the Pearson correlation matrix for the dependent and independent variables for the sample. Several hypotheses are supported by the correlations, but the testing is based on the regression analysis.

CEO duality (CD) and Board size (BDSIZE) are negatively and insignificantly correlated with absolute discretionary accruals (ADA), whereas the relationships for Board independence (BDIN) and Board meetings (BDMEET) are positively and insignificantly related. Although variable of Board members with financial expertise (BDFX) is positively and significantly correlated with absolute discretionary accruals (ADA).
In the context of control variables, all the variables (Firm size, return on assets, Leverage, being audited by Big3 firms) are negatively correlated with absolute discretionary accruals (ADA) while Big3 has significant relationship with absolute discretionary accruals (ADA).

Other correlation coefficients between variables are small, with small VIF values. Therefore, independent and dependent variables are relatively free from multicollinearity problems as well the regression models.

**Regression results**

**Table 3. Multiple Regression Analysis**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Predicted sign</th>
<th>Coefficient</th>
<th>Sig.</th>
<th>Skewness</th>
<th>VIF</th>
</tr>
</thead>
<tbody>
<tr>
<td>Intercept</td>
<td></td>
<td>0.055</td>
<td>0.019</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CD</td>
<td>-</td>
<td>-0.004</td>
<td>0.515</td>
<td>-2.408</td>
<td>1.102</td>
</tr>
<tr>
<td>BDIN</td>
<td>-</td>
<td>0.014</td>
<td>0.413</td>
<td>0.256</td>
<td>1.162</td>
</tr>
</tbody>
</table>
Main purpose of CEO duality (CD) is to reduce the power concentration on one person and to enhance the board independence. From an agency theory perspective, under CEO duality, the board considerably weakens its ability to monitor management objectively. Jensen et al. (1993) raises an objection to such a structure and suggests a complete separation between the two functions. As expected, firms who have established two separate positions for Chief executive officer and Chairman are associated with the lower level of discretionary accruals.

Board independence (BDIN) can be taken as a critical factor that affects the faithful representation and reliability of financial reporting. This variable (BDIN) examines the structure of the board by directors who possess independence and how it affects earnings management. Non-executive directors are focused on duties and responsibilities to monitor top management activities, provide business insights to strategy making, coordinate with personal activities and those would result to reduce the agency costs that occur due to the separation of ownership. Among them, independent directors provide greater transparency to the above activities. Further as per the Cadbury Committee, (1992) Independence of Board is an important aspect of effective corporate governance.

As per general rule, when board consists with majority of independent directors, it is expected to influence over more effective supervising and monitoring function which would lead to reliable preparation of financial statements. On the other hand, Board of directors is responsible for design and implementation of internal control systems and being led to establish sound internal control environment. Therefore, the more independent members in the board are expected to
reduce earnings management and accounting manipulation and to enhance the faithful
representation of financial statements. However, contrary to our expectations, a higher proportion
of independent directors on the board (BDIN) seem to have a positive relationship with earnings
management which have increased the level of discretionary accruals.

The number of directors in the board is also an important factor in determining the
effectiveness of the decision making. This variable, board size is measured by the total number of
directors in the board (BDSIZE). However, in most of the previous studies revealed that small
board seem to be more effective because each director’s reactions are significant and they enhance
the quality of communications. Also, it is easy to manage the business in its normal course. As per
our expectation, research outcome showed a negative relationship between the board size and
earnings management. It could be predicted that firm size being large or small have a significant
impact on the level of earnings management practices in listed companies in our sample according
to 0.1 level significance.

According to the Code of Best Practice on Corporate Governance, it is a necessity for the
boards to meet regularly. Further as per the Code, at least once in every quarter of a financial year
board meetings should be held. According to Adams (2003), number of board meetings
(BDMEET) can be regarded as a mechanism for the directors’ monitoring process. In contradictory
to the above view, we can assume that boards meeting regularly may lead to frauds or collusions
as well. In that perspective, we have predicted that there is a positive association between the
number of board meetings and earnings management. As expected, the results of our study
indicated that greater the number of board meetings influence earnings management in a positive
manner. The results of the study are in consistent with the results of the Lorca et al. (2011) that
emphasize that board meetings are merely time-wasting task and they do not add value for the
organization. The findings of the study depicted a significant positive relationship between
frequency of board meetings and earnings management according to 0.1 significance level.

As per the Code of Best Practice on Corporate Governance, the board should ensure the
availability of those with sufficient financial acumen and knowledge within the board to offer
guidance on matters of finance. According to a research carried out by Ahmed (2013) in Malaysia,
he has experienced that there is a positive relationship between board members with financial expertise (BDFX) and earnings management, because members can use their skills and knowledge to window dress the financial statements and commit frauds. We have hypothesized based on that view and we predicted that firms with more directors having financial expertise positively associate with earnings management. The results of the study are in consistent with the predictions. But the results of the study conducted by Xie et al. (2003) provides a contradictory view that firms having board members with financial expertise have lower discretionary current accruals.

With respect to the control variables, firm size has a negative coefficient, depicting that larger the size of the firm, will less likely to manage earnings because they may subject to more analysis from investors and financial analysts which is contradicting with the findings of Watts and Zimmerman (1986). The negative coefficient of ROA may suggest that firms with higher return on assets are associated with lower earnings management which is contradictory to the findings of Chen et al. (2007). The positive coefficient of the leverage variable, which is consistent with the results of DeFond and Jiambalvo (1994) and Sweeney (1994), suggested that earnings are managed to achieve debt covenant requirements. Results of the study depict a significant negative relationship between firms where financial statements are audited by one of the Big 3 audit firms and earnings management. BIG3 variable has a 0.05 level significant and a negative relationship with discretionary accruals, where most of the prior researchers including Kim et al. (2003), Amer and Abdelkarim (2010) have gained the same result.

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<th>Table 4. Model Summary</th>
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a. Predictors: (Constant), BIG3, BDSIZE, LEV, BDMEET, CD, BDIN, SIZE, BDFX, VAR00001
b. Dependent Variable: ADA

According to the Model summary (Table.4) regression model is valid for the sample used for the study.

5. Conclusion, Limitations and Suggestions for Further Research
This study examined association between earnings management and board characteristic based on the 60 companies listed in the Colombo Stock Exchange. We investigated whether CEO duality, larger board size and board independence would reduce the level of absolute discretionary accruals. We further examined whether board members with financial expertise and number of board meetings would increase the level of discretionary accruals.

Our cross-sectional analysis showed that CEO duality and board size are negatively and insignificantly associated with earnings management. That depict firms which have two separate positions for Chief Executive Officer and Chairman are more effective in reducing earning management than firms which do not. Also, firms with large number of directors have lessor amount of earnings management than firms with small board size.

On the other hand, findings showed that board independence is positively and insignificantly linked with earnings management. It is a contradiction with our hypothesis which expected a negative relationship between board independence and earning management. Therefore, the findings suggest that a higher proportion of independent directors on the board would tempt to engage in higher amount of earnings management practices.

We further found that board size, board members with financial expertise are positively and insignificantly connected with earnings management. Control variables (Firm size, return on assets, being audited by Big3 firms) are negatively associated with earning management except the leverage variable which is positively related with earnings management.

This paper reviews board characteristic of listed firms in Colombo stock exchange and their relationship with earnings management. Therefore, this study contributes to the prevailing literature related to corporate governance and earnings management.

However, this study is subject to several limitations. First, we only consider board characteristics as the corporate governance variables. Second, only three sectors were used to collect data which may be unable to generalize for other sector companies. Third, our results show an association between earnings management and corporate governance instead of explaining
causation between corporate governance characteristics and earnings management. Fourth, our study does not consider the quality of accruals.

Therefore, future research may need to investigate how other aspects of corporate governance impact on earnings management.

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