Abstract

The purpose of this research is to examine the influence of corporate governance characteristics on the corporate failure of listed companies in Sri Lanka. This study utilized publicly available data from annual reports of a sample of 70 failed firms and a sample of matched 70 non failed firms listed on Colombo stock market for a period covering the 2002 to 2008 financial years with logistic regression analysis. Corporate governance characteristics comprise with board size, CEO duality, outside directors, outsiders’ ownership, audit opinion, presence of an audit committee and remuneration of board members. Outside director ratio, presence of an audit committee and remuneration of board members turn out to be negatively associated with the probability of corporate failure, While CEO duality is positively related with the likelihood of corporate failure. Board size, auditor’s opinion and outside ownership do not appear to be significant determinants. The paper offers evidence on the extent to which corporate failure associated with corporate governance. It would be educational to investors, financial analysts, accounting professionals, management and be helpful for regulatory authorities in making decisions, evaluations and policies.

1. Introduction

Concept of corporate governance is most important for today business. Corporate governance refers to the rules, procedures, and administration of the firm's contracts with its shareholders, creditors, employees, suppliers, customers, and government. Governance is legally vested in a board of directors who have a fiduciary duty to serve the interests of the corporation rather than their own interests or those of the firm's management. Many studies have explored the relationship between corporate governance and corporate performance. In contrast, only a few studies have looked at corporate governance and corporate failure. To
the author’s best knowledge, no research carried out in Sri Lanka which examines the relationship between corporate governance and corporate failure. Even though interest in corporate governance has grown rapidly in recent years with the global increase in the number of corporate failures such as Enron, WorldCom, HealthSouth and Arthur Anderson; the role of corporate governance in corporate failure has been largely neglected. A study of above failed companies indicated that there was a lack of consistence policies, control procedures, guidelines and mechanisms to ensure accountability and fiduciary duty. Poor corporate governance can increase the probability of corporate failure even for firms with good financial performances.

2. Corporate governance in Sri Lanka

The Institute of Chartered Accountants of Sri Lanka (ICASL) and the Securities and Exchange Commission of Sri Lanka (SEC) in consultation with the Colombo Stock Exchange have spearheaded a joint initiative with a view to formulating standards on corporate governance for mandatory compliance by companies listed on the Colombo Stock Exchange. In 1997, The Institute of Chartered Accountants of Sri Lanka published a voluntary code of corporate governance conduct and financial management with the intention of promoting transparency in corporate earnings in order to facilitate socio-economic developments. This was primarily based on the Cadbury Committee Report. Thereafter certain revisions were made to the code by The Institute of Chartered Accountants of Sri Lanka and the Securities and Exchange Commission of Sri Lanka to include the latest global developments in corporate governance practices. With effect from financial year commencing 1 April 2008, listed companies in Sri Lanka have been subject to rules on corporate governance as statutorily required by the Securities and Exchange Commission of Sri Lanka (Colombo Stock Exchange 2008). Section 7.10 of the Listing Rules (2009) states the corporate governance compliance. It has been evident that many companies were failed in Sri Lanka due to bad corporate governance mechanism. This led to study the influence of corporate governance practices on corporate failure.

3. Methodology and sample selection

3.1. Sample selection

All the listed companies in Colombo Stock Exchange (CSE) that had been failed during the period 2002 to 2008 were taken for the study and the matched sample design method was applied for this analysis. Each failed company has a non failed partner in the sample. The failed companies will be paired to the non failed companies using criteria: same industry, same failure year and closest asset size. This matching design is consistent with the vast variety of prior corporate failure studies Altman, 1968; Aziz and Lawson, 1989; Beaver, 1968; Casey and Bartczak, 1985; Charitou et al., 2004; Wilcox, 1973. Based on reviewing literature, the present study employs a failure definition adapted from Hopwood et al., 1988, Lee et al., 2003, Sori and Jalil, 2009 and Abou EI Sood, 2008. A company is considered among the failing companies if and only if one of the following conditions is satisfied. (1)The companies that had been incurring losses for three years continuously or more, (2) The companies that had illustrated negative position in cash flow for three years continuously or more. A total of 70 failed companies were identified during the years of determination and with the match sample criteria, total sample consist with 140 companies; 70 failed and 70 non-failed.

3.2. Methodology

We use logistic regression analysis to test the impact of corporate governance characteristics on the risk of corporate failure. The dependent variable equals one for failed companies and zero for non failed companies. The data were collected one, two and three years prior to the occurrence of corporate failure, respectively.

3.3. Proxies and hypothesis development

- Outside directors

Outsiders are seen to be independent, and therefore impartial, as well as benefiting a company by representing alternative perspectives and enhancing the expertise of directors in general (Zahra and Pearce, 1989). Miller, 1990 found that firm’s inability to respond to change is one of the major causes of corporate decline. It therefore appears reasonable to propose that corporations having fewer outside directors will be less able to perceive and respond to change in the external environment, and therefore be more likely to fail. Hence, boards dominated by many outsiders may be superior to other boards in contributing to managerial effectiveness (Wagner et al., 1998) and reducing the probability of corporate
failure. It is measured by number of outside directors in the board as a percentage of total board members. In this context, we hypothesize that; H1: Outside directors are negatively related to corporate failure.

- **CEO duality**

An effective board should be truly independent from the CEO (Fama and Jensen, 1983). To be independent, the chairman of board should not be the same person as the CEO, implying that decision control and decision management functions are separated (Jensen, 1993). It is reasonable to believe that the probability of corporate failure tends to increase with the presence of CEO duality. This is a dummy variable and we assign 1 for CEO duality and 0 for otherwise. We assume that; H2: CEO duality is positively related to corporate failure.

- **Outside ownership**

The share ownership of outsiders, such as outside directors, institutions, affects the firm’s performance through the effective monitoring. Evidence shows that a substantial increase of shareholdings by outside directors provide greater incentives for monitoring management (Jensen, 1993) and diminishes the likelihood of financial fraud (Beaver, 1966). Outside director’s ownership can be determined as the important internal governance tool to reduce the agency costs and lessen the probability of failure. It is taken as a percentage of shares owned by outside directors, institutions and public. In this context, we hypothesize that; H3: Outside ownership is negatively related to corporate failure.

- **Audit opinion**

Audit opinions are supposed to provide information concerning both financial and managerial qualities of the firms. Thus, audit opinions might be used as one indicator of the possibility of the failure of the firms. The receipt of other than unqualified audit opinions appears to be associated with a negative side of a firm’s status. Empirically, various studies have examined the explanatory power of audit opinions. Typically, evidence supports a relationship between audit opinions and event of financial distress. For example, Altman and McGough, 1974 and Menon and Schwartz, 1986 found that about 50 percent of their samples received a going-concern qualification opinion before the distress really occurred. In our study, we use binary variable, where we assign 1 for qualified opinion and 0 for otherwise. In this context, we hypothesize that; H4: Audit opinion is positively related to corporate failure.

- **Remuneration of directors**

The issue of directors’ remuneration is tied closely to the issue of corporate governance. Good and sound corporate governance should constrain excessive payments being made to directors and remuneration should be largely determined by the firm’s performance. Main et al., 1996 showed a positive and significant relation between the total board remuneration and the firm’s performance. Conyon and Peck, 1998 also documented evidence of a positive and significant correlation between performance and remuneration. In Malaysia, Hassan et al., 2003 who examine the link between directors’ remuneration and corporate performance involving firms pre- and during the Asian financial crisis period (i.e. 1996-1998) find only a weak relation, though it is positive. We measure it as a ratio of directors’ remuneration to profit and loss. In this context, we hypothesize that; H5: Remuneration of directors positively related to corporate failure.

- **Presence of an audit committee**

Presence of an audit committee is also a significant corporate governance variable in past literature. Audit committee is a sub-committee of the board of directors that provides a formal communication between the board, the internal monitoring system, and the external auditor. Kinney and Martin, 1994 showed that auditors detect and reduce overstatements of earnings and assets. In our study, this is a binary variable, where we assign 1 for presence of an audit committee and 0 for otherwise. In this context, we hypothesize that; H6: Audit committee is negatively related with the likelihood of corporate failure.
3.4. Test of hypothesis

We use following logistic regression model to test the hypothesized relationships.

\[ P(Y=1) = \frac{1}{1+e^{-z}} \]  

\[ = \frac{1}{1+\exp[-(\beta_0 + \beta_1G_1 + \beta_2G_2 + \ldots + \beta_7G_7)]} \]

Where,

- \( P_i(Y = 1) \) = Probability of failure for firm i;
- \( \exp \) = exponential function;
- \( \beta_1, \beta_2, \ldots \) = slope coefficients;
- \( G_1, G_2, \ldots \) = corporate governance variables

4. Results and discussion

4.1. Descriptive statistics

Table 1 presents the summary statistics and paired sample t tests for the independent variables. It is found that the mean difference of the outside director ratio (OUDR) is significantly negative. Mean values of OUDR for failed and non failed companies are 49% and 69% respectively. This means that there exists the difference between the failed and non failed companies in terms of number of outside directors in the board of directors. Failed companies have less number of outside directors in their board of directors than the non failed companies. Further, it is evident that the mean difference of the CEO duality (CEODUL), where the CEO also holds the board chairman position, is significantly positive. This means that there is significant difference exist between two groups in terms of a leadership structure in which the CEO duality are more practiced in the failed companies than the non failed companies. Moreover, the mean difference of the board size (BOSIZE) is significantly negative. Therefore, this initial evidence demonstrates that the failed companies establish smaller board than the non failed companies. Further, it can be seen that there is a significant difference between two groups in terms of having an audit committee. Average mean values for failed and non failed companies are .33 and .66 respectively. This is a dummy variable and 1 is assigned if the company has an audit committee. Therefore, it is evident that most of the failed companies did not have an audit committee. Finally, the mean difference of the board members remuneration as a percentage of profit and loss (REBMPL) is significantly negative.
Table 1. Descriptive statistics for corporate governance variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Non failed companies</th>
<th>Failed companies</th>
<th>t-stat</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>Standard dev.</td>
<td>Mean</td>
</tr>
<tr>
<td>OUDR</td>
<td>0.692</td>
<td>0.147</td>
<td>0.470</td>
</tr>
<tr>
<td>CEODUL</td>
<td>0.070</td>
<td>0.259</td>
<td>0.440</td>
</tr>
<tr>
<td>BOSIZE</td>
<td>7.730</td>
<td>2.455</td>
<td>6.570</td>
</tr>
<tr>
<td>OUTOWN</td>
<td>30.370</td>
<td>17.838</td>
<td>31.990</td>
</tr>
<tr>
<td>AUR</td>
<td>0.610</td>
<td>0.490</td>
<td>0.230</td>
</tr>
<tr>
<td>COAUCOM</td>
<td>9.356</td>
<td>33.938</td>
<td>-2.096</td>
</tr>
<tr>
<td>REBMPL</td>
<td>9.356</td>
<td>33.938</td>
<td>-2.096</td>
</tr>
</tbody>
</table>

**Denotes 5% significant level; ***Denotes 1% significant level

OUDR=Outside director ratio; CEODUL=CEO duality; BOSIZE=Board size; OUTOWN=Outside ownership; AUR=Audit opinion; COAUCOM=Company audit committee; REBMPL=Remuneration of board members to profit and loss.

4.2. Logistic analysis results

Table 2 shows results of logistic regression analysis for corporate governance variables. Based on the result of 140 complete observations, 4 corporate governance variables were deemed to be significant as given by their z-statistic. The variables deemed statistically significant were; outside director ratio (OUDR), CEO duality (CEODUL), company audit committee (COAUCOM) and remuneration of board members to profit and loss (REBMPL). OUDR and REBMPL are statistically significant at 1% level. Further, CEODUL and COAUCOM are statistically significant at 5% level. Parameter estimate of CEODUL indicates that CEO duality has a significant positive effect on the corporate failure. Log likelihood ratio of the model is 82.280 and it is statistically significant at 1% level. Further, McFadden R squared of the model is 42%.

Table 2. Corporate governance variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>z-Stat</th>
<th>Prob.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>6.400</td>
<td>4.349</td>
<td>0.000</td>
</tr>
<tr>
<td>OUDR</td>
<td>-8.363***</td>
<td>-4.833</td>
<td><strong>0.000</strong></td>
</tr>
<tr>
<td>CEODUL</td>
<td>1.511**</td>
<td>2.130</td>
<td>0.033</td>
</tr>
<tr>
<td>BOSIZE</td>
<td>-0.073</td>
<td>-0.754</td>
<td>0.450</td>
</tr>
<tr>
<td>OUTOWN</td>
<td>-0.022</td>
<td>-1.518</td>
<td>0.128</td>
</tr>
<tr>
<td>AUR</td>
<td>0.861</td>
<td>1.308</td>
<td>0.190</td>
</tr>
<tr>
<td>COAUCOM</td>
<td>-0.974**</td>
<td>-1.998</td>
<td>0.045</td>
</tr>
<tr>
<td>REBMPL</td>
<td>-0.093***</td>
<td>-2.649</td>
<td><strong>0.008</strong></td>
</tr>
</tbody>
</table>

McFadden R-squared 0.423
LR statistic 82.280
Prob(LR statistic) 0.000
**Denotes 5% significant level; ***Denotes 1% significant level

OUDR=Outside director ratio; CEODUL=CEO duality; BOSIZE=Board size; OUTOWN=Outside ownership; AUR=Audit opinion; COAUCOM=Company audit committee; REBMPL=Remuneration of board members to profit and loss.

5. Discussion

5.1. Outside directors

According to the findings of the research, the outside director ratio is negatively related with the probability of corporate failure. Boards of failed companies have significantly fewer outside members than the non failed companies. The coefficient of outside director ratio is negative and statistically significant. This is consistent with hypothesis H1. As previously noted, the prevailing belief is that inside directors are lack objective and less independent from management. This lack of independence may be critical for the board of directors, which is designed as a means to protect shareholders from managerial self interest. This is consistent with the findings of Hambrick and D’Aveni, 1992. They found that for each of the four years immediately preceding bankruptcy, that failed companies had significantly fewer outside directors than their matched pairs of surviving companies. Further, this has been confirmed by Wagner, Stimpert, and Fubara, 1998.

5.2. CEO duality

CEO duality is positively related to corporate failure. These results are consistent with hypothesis H2. There is significant difference exist between two groups in terms of a leadership structure in which the CEO duality are more practiced in the failed companies than the non failed companies.

5.3. Outside ownership

Outside ownership variable is insignificant. Results from logistic regressions provide no support to hypothesis H3. This implies there is no influence of outside ownership on the occurrence of corporate failure.

5.4. Audit opinion

Audit opinion variable is insignificant in identifying failed companies from non failed companies. This implies that audit opinion may not be a useful external regulation mechanism in reducing the possibility of corporate failure. Therefore, finding of this research does not support the hypothesis H4.

5.5. Remuneration of directors

Results in table 2 reveals that failed firms pay to their directors less than non failed firms do as evident by the negative and significant association between director’s remuneration and corporate failure status. Hence, H5 which states that the directors’ remuneration is positively related to corporate failure cannot be supported by the findings of the research. It can be seen that the sign of this variable is not positive as expected. It was expected that directors’ remuneration as a percentage of profit and loss for failed companies are significantly higher than their non failed companies. However, results revealed that directors’ remuneration as a percentage of profit and loss for non failed companies are significantly higher than failed companies. Most of the failed companies under study were unable to generate sufficient profits and cash flows to pay remuneration to their board members. As a result, board members of many of those companies were not paid remuneration during the period under study. This is consistent with research findings of Main et al., 1996.
5.6. Presence of an audit committee

Presence of an audit committee is negatively related to the probability of corporate failure. This is consistent with hypothesis H6. It can be seen that there is a significant difference between two groups in terms of having an audit committee (COAUCOM). Average mean values for failed and non failed companies are .33 and .66 respectively. These findings are consistent with the idea that the chances of a firm getting into a serious accounting problem are reduced by the presence of an audit committee as revealed by DeFond and Jiambalvo, 1991. Therefore, with the absence of an audit committee in failed companies emphasize that there is no such a monitoring mechanism to oversight the firm’s financial reporting process and credibility of audited financial statements. Thereby, firms are vulnerable to creative accounting practices and window-dressings.

5.7. Board size

Board size variable is not significant in differentiating failed companies from non failed companies. Hence, it cannot be stated that the larger board can decrease the probability of corporate failure, whereas the smaller board can increase the probability of corporate failure. Therefore this finding does not support the hypothesis H7.

6. Conclusion

Our results suggest that the Outside director ratio, presence of an audit committee and remuneration of board members have negative effects on the probability of corporate failure. Board size, auditor’s opinion and outside ownership appear to be unrelated with the failure status. CEO duality is positively related with the likelihood of corporate failure. However, existing corporate governance codes, e.g. the Cadbury Code, 1992; the Hampel Report, 1998; the Sri Lankan Code of Best practice on Corporate Governance, 2008, do not prohibit the practice of combining the board chairman and CEO roles, provided that companies disclosed in the annual reports the reason for the departure, findings of the research revealed that it is a significant variable in identifying failed companies from non failed companies. As the corporate governance reformations are vigorously advocated in Sri Lanka, our study provides insights into the roles of corporate governance in financial healthiness. Findings of this research will benefit financial analysts, investors, regulatory bodies and accounting professionals. These practitioners can enhance their decision, evaluation and reformation process. However, all our findings are based on Sri Lankan stock market, so there may be limitations in extending to other countries. Future research on this area could investigate the period after the adoption of the Sri Lankan Code of best practice on corporate governance in 2008.

References