

AN EMPIRICAL STUDY BETWEEN CORPORATE GOVERNANCE AND CORPORATE FAILURE IN SRI LANKA

W.A.M.F Jayasooriya

A.L.P.W Ravihara

K.M.S.K Kulathunga

N.D Liyanage

T.A Hapuarachchi

Department of Accounting, University of Sri Jayewardenepura

ABSTRACT

The study examines the relationship between corporate governance characteristics and the corporate failure of 35 listed firms in Colombo Stock Exchange for the period of 2012 to 2017. The data analysis has employed independent variables that represents board structure and internal controls of corporate governance while dependent variable denoted by probability of financial distress firms. Descriptive statistics is used to estimate the comparative analysis of failed and non-failed firms. A logistic regression analysis is conducted to identify the impact of corporate governance on the corporate failure of listed firms. Accordingly, the results have found board size, CEO Duality, Remuneration of directors, presence of audit committee and outside directors' ratio have negative effect on the corporate failure of listed firms while audit opinion has positive effect. This research provides an in depth understanding on the degree of effectiveness in corporate governance variables on the corporate failure in the context of Sri Lanka. The findings of the study provide important implications for policy makers, analysts in decision making and policy formulation.

Key Words: Corporate Governance, Board, CEO, Financial Distress

1. INTRODUCTION

1.0. Background of the Study

Financial distress is an early notification for corporates to control the credit risk in order to mitigate the probability of bankruptcy or significant changes in the control bodies. The corporate governance mechanism plays an important role in the financial distress situations. It has been witnessed during the failures of well-known international companies that the

government has changed the corporate governance practices as response to overcome risk in future (OECD 2009).

Corporate governance provides framework that contains certain rules and practices which objectives of the company are set and methods of achieving those objectives and monitoring the overall performance. The effectiveness of corporate governance mechanism depend on how well the set rules and practices are adhered by controlling bodies of the company. Predominantly, the governance structure of a corporate vested in the board of directors who have fiduciary responsibility to act in the best interest of the company. However, due to the conflicting interest of board of directors and corporate management, many firms have been confronted severe failures. Essentially, a best corporate governance balances the trade-off between these interests. Board is the key element of corporate governance while board membership, its characteristics and functions significantly effect on the corporate performance (Monks & Minow 2004).

The corporate governance structure varies from developed economies to emerging economies. Emerging markets are considerably different from the legal system and institutional environment of developed economies. Sri Lanka is an emerging economy which focused on economic growth. The ownership structure of companies is highly concentrated and there is a controlling shareholder in each company (Samarakoon 1999). During the year 2008, the standards for corporate governance have been formulated as a mandatory compliance for listed companies in Sri Lanka (Colombo Stock Exchange 2008). This has created an awareness among Sri Lankan companies on the best practices for maximize the shareholder's wealth. However, in recent years the importance of corporate governance has been awakened due to the collapsed in many high profile companies in Sri Lanka caused. This indicates there was inconsistent policies and procedures to ensure fiduciary duties held by board members and corporate management. The empirical question is whether effectiveness of board members and their functions reduce the corporate failures or not?

Effect of globalization and financial liberalization policies have given substantial significance on the issue of corporate governance and corporate failures in Sri Lanka. Since the domestic economy has began to nourish with the end of civil war in 2009, the integration of international competitiveness heightened. Therefore, the study attempts to re-visit the corporate governance mechanism in Sri Lanka and to identify the impact of its characteristics and functions on the corporate failures.

1.1. Research Objectives

Based on the above discussed research questions, there are three main objectives that intend to achieve through this study.

1. To assess the degree of corporate governance, degree of corporate failure.
2. To assess how the corporate governance could lead to occur corporate failure as well as corporate success.
3. To examine the direct relationship between corporate governance and failure in Sri Lankan context.

The study is structured as follows. The second chapter discusses the previous works conducted on the context of corporate failure and governance. Third chapter explains the methods and approach used to test the research objectives. Fourth chapter outlines the findings derived from the statistical estimation. Fifth chapter highlight the key findings and contribution of the study.

2. LITREATURE REVIEW

2.0. Introduction

This chapter describes the theoretical framework and the empirical work survey on the context of research questions. Accordingly, initially the chapter focus on the concepts and theories behind the corporate governance and corporate failure. Following the key theories, previous empirical studies are surveyed to identify existence of these theories in the corporate sector. The empirical works are investigated on the basis of developed and developing economies. Particularly, findings derived from developing economies are investigated against the Sri Lankan context to identify how far these studies are acceptable. Finally, research gap is illustrated based on previous empirical study review.

2.1. Theoretical Background

2.1.1. Corporate governance concept and Agency theory

Corporate governance defines as the system that controls and directs the company (Cadbury 1992). This system consists of set of rules, regulations, procedures and practices to be followed by the corporate in order to maintain the healthier relationship among board members, management and other stakeholders (OECD 1999). Different views have discussed on the context of corporate governance. Talamo (2011) shown that most of the definitions with regard to corporate governance are considered on the duty of control and supervision or

the management and managerial conduct of the company. The basic foundation for the corporate governance given by the separation of management and ownership control in the organizations. According to Monks and Minow (1992), corporate governance identifies as the relationship between different participants in determining an organization's direction. It has evolved from a way of thinking about how a given board can better serve the shareholders' interests to a philosophy of how that board can better meet with all the interests and needs of all the stake holders (Siebens 2002). Jensen (2002) described a special relation between shareholder value maximization and stakeholder theory, which is known as enlightened value maximization. This concept outlines the stakeholder theory, that defines the firm objective of long-run value maximization make a trade-off among its stakeholders. This theory has failed to describe a clear description on the duties of stakeholders resulting to an unaccountable for managers' and directors' stewardship of the firm's resources (Jensen 2002).

OECD specifies the corporate governance from holistic perceptive with reference to the rights of shareholders; the equitable treatment of shareholders; the role of stakeholders; disclosure and transparency; and, the responsibilities of the board (OECD 1999, cited in Manawaduge 2012). There is a consequence of a dominant view of corporate governance which deals with the relationship between manager and shareholders and in particular the structure and functioning of the boards of directors (Talamo 2011).

Thus, the key perception is vested on the relationship between board and the shareholders. Board of directors accountable to act in the best interest of the corporate objectives to maximize the shareholders' return rather than their personal interest. The agency theory explains this relationship as the conflict of interest between principals and agents. Accordingly, board of directors are agents while shareholders represents as principals. Fama and Jensen (1983) have depicted that the interests of shareholders are conflicting with the interests of managers. The principal agent problem is reflected in the management and direction related problems due to the differential interests of firm's stakeholders (Jensen & Meckling 1976). Since the ownership of the corporate has been separated from control, shareholders not involved in the management and it is consigned to board of directors to act on behalf the shareholders' interest. Nevertheless, there has no standard agreement to believe that board will always perform in the best of interest of shareholders (Jensen & Meckling 1976). If the directors focus on their own interest at the expense of company's profitability, shareholders' interest could be scarified. According to the agency perspective, shareholders' do not trust the board (agents) of directors which requires appropriate control mechanisms to

mitigate the conflicts of interest between directors and shareholders. Hence, it is important to have independent board of directors has no management influence to accomplish the corporate objectives in order to enhance the shareholders' return (Muth & Donaldson 1998).

Consequently, the corporate governance concept has become a widely discussed topic in the current corporate world due to the constant occurrence of mis-use of managerial power, frauds and social irresponsibility. It has recognized as an important component in the corporate management. However, pursuing a good corporate governance turn out to be critical concern in today (Senaratne 2011).

2.2. Concept of Financial Distress

Corporate failure is a subsequent result of the financial distress situation. As to Fehle and Tsyplakov (2005) firm that exceeds the above standard leverage position and the cashflow level is not sufficient to repay the obligations considered to be in a financial distress situation. Baldwin and Mason (1983) define the state of financial distress as the point which company assets are deteriorates that unable to meet the financial obligations. Pinado (2005) and Ward (1997) found that if the company has negative cumulative profits across consecutive periods of time reflecting the significant cumulative losses, that company is subject to financially distress condition.

While there are several causes that affect the financial distress condition of a corporate, the poor management consider as one of substantial reason. Whitaker (1999) has identified that 77% companies confronted financial distress due to poor management and 47% companies faced economically distressed before the financial distress situation. The main determinants of financial distress can be categorized into financial and non-financial. As to financial factors, debt has the highest impact which consists of increase in doubtful debts and bad debts, investment losses, impairment, write-offs and finance cost. On the other hand, non-financial determinants are fraud, non-compliance, poor internal control, product failure and potential breaches (Swandi et al. 2005). It has been witnessed that the major reasons contributed for the Asian financial crisis in 1997 were poor corporate system, internal control mechanism and corporate governance process.

Most of the largest companies collapsed due to the unreported indebtedness and dubious corporate governance attitudes among the executive directors. In USA, companies such as Enron, Waste Management, WorldCom and Tyco failed due to the lack of corporate governance practices and unethical behaviours. Jensen (1993) argued that most of the

corporate failures happened because of the inefficiencies in Regulatory reforms with respect to governance requirements or guidelines appear to emerge as direct responses and reactions to failed governance structures in certain economies, sectors or companies.

Accordingly, corporate governance practices play a significant role in the corporate failure. The main characteristics of corporate governance and the corporate failure have been discussed by several empirical studies. Predominantly, it contains the board structure, internal control system and ownership control. The literature survey has segregated the impact of these characteristics and the performance of corporate sector.

2.3. Board Structure and Corporate Performance

The effective board monitors the management on behalf of the shareholders that contains the appointment of managers, dismissal and rewards. Management of the corporate is regulated by the structure and decisions held by the board. Barnhart et al. (1994) explains that internal governance system of the board control and remove the ineffective management. Therefore, board decisions significantly affect to improve the quality of management decisions (Monks and Minow 2004).

Predominantly, board of directors of corporate plays three major roles. Firstly, they supervise the behavior of management. Secondly, serve as an institution to associate between company and its environment. Finally, to ensure that there is adequate reporting for compliance. Therefore, the characteristics of the board have impact on the financial performance. Amidst these characteristics, major characteristics can be identified as board size, CEO duality and independence. CEO Duality describes the dual role performed by Chief Executive Officer (CEO). Accordingly, CEO serves as the chairman in the board. Since the focus is vested on company goals and objectives, the quality of decision making will be enhanced which lead to prompt implementation of strategies. Board independence explains the outside members or the independent directors in the board. It is suggested that outside members increases the performance because of the effective monitoring system of managers. Other category is total number of board of directors in the board. Larger number of directors means reduction in the dominating power and increases the accountability. Jensen (1993) describes that board members consists of seven to eight members effectively corporate and supervise the functions of the company. Lamberto and Rath (2008) explained that larger board size reduces the corporate failure due to the higher accountability of the directors and their wide range of opinions and external relations.

2.4. Internal Controls

One of major reason for the corporate failure is lack of internal control mechanism (Sulaiman & Ali 2005). Thus, board of directors failed to evaluate the operations which have led to increase the mis-use of resources and frauds. The board of directors has the fiduciary duty to monitor the activities conducted by management to safeguard the shareholders' wealth. The root cause for the Enron's collapse was the ineffective internal control system resulted by the board inability to supervise the operations of management (Samad 2005).

Accordingly, US government has introduced audit committee as a principal implementation of internal control mechanism in order to overcome the fraudulent activities. The audit committee comprises three major components as independence and expertise. Thus, independent audit committee provides major impact on the internal control procedures. Also, the reviews and expertise of audit committee is essential to effective and smooth functioning. Dezoort et al. (2001) shows that audit committee believes all the members in must have sufficient knowledge and expertise in accounting, auditing and law. Further it explains that it is significant to improve the measures of independence, expertise, integrity and objectivity of audit committee to enhance its effectiveness.

2.5. Corporate Governance in Sri Lanka

The fundamental initiatives of corporate governance have been established during the colonial period. Predominantly, commercial and company law, accounting practices and regulations, education system and business practices were inherited from the British era. The introduction of English company law and the share trading activities are major contributory factors to the development of corporate governance in colonial era (Manawaduge 2012). In the period of 1997 corporate governance practices has incorporated with the collaboration of Institute of Chartered Accountants of Sri Lanka (ICASL) and Securities and Exchange Commission of Sri Lanka (SEC) under the guidance of Colombo Stock Exchange (CSE) as of compulsory requirement to be fulfilled by companies listed on the CSE. Accordingly, ICASL has published a voluntary code in relation to formulating standards for corporate governance conduct and financial management with an aim of promoting the transparency of financial performance of corporates. This was mainly driven by the Cadbury Committee Report. Subsequently, certain revisions have been made to the code by the ICASL and the SEC to incorporate recent global development in corporate governance practices (Lakshan & Wijekoon 2012). The figure 02 illustrates the mandatory and voluntary rules that should adhered by the corporates in Sri Lanka.

	Mandatory Regulations	Voluntary Regulations
01	Companies Act of 2007	Code of best practice on corporate governance - ICASL, 2007
02	<i>For Public Listed Companies:</i> *CSE Listing Rules *SEC Directives and Codes	
03	CBSL Directive for corporate governance for banking and financing companies	

Figure 1. Existing Corporate Governance (CG) Framework in Sri Lanka

In Sri Lanka, there were many corporate failures due to bad corporate governance practices. Poor corporate governance can increase the probability of corporate failure even for firms with good financial performances (Lakshan & Wijekoon 2012). Golden Key case and the Pramukha Bank cases are the best examples for the poor corporate governance practices in Sri Lanka. . 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.

2.6. Empirical Analysis on corporate governance and corporate failure

Many studies have been carried out to investigate the impact of corporate governance characteristics on the corporate failure. Susan, Gray and Turetsky (2002) studied the relationship between corporate governance attributes and firm likelihood of financial distress for 176 listed companies. The major focuss is on the board independence and the percentage of outside directors in the board. The study has found that firms that replace their CEO with an outside director is tend to experience bankruptcy. As shown in the theoretical framework, board independence determined by the number of external directors in the board. Adam and Meheran (2003) found that large number of outside directors increases the company performance since they have the ability to conduct effective supervision on the management. Byrd et al. (2004) shows that during the financial crisis corporate survived due to the greater proportion of directors in the board.

The CEO duality role has been tested by several studies. Abdullah (2004) revealed the positions of CEO and board directors held by different people in the Malaysian listed companies, Further, it has identified board characteristics have no significant impact on the corporate performance. Abdul and Rahman (2009) have found the similar findings. Also, Zong-Jun and Xiao-Lan (2006) attempt to identify the relationship between corporate

governance characteristics and financial distress risk for Chinese transitional economy. Results have indicated that large shareholder ownership, ownership structure and independent directors has a negative relationship with the probability financial distress. On the other hand, degree of balanced ownership, managerial ownership, CEO duality and board size has no impact on the probability of default. Mohamad, Darus and Jusoh (2011) conducted a study for Malaysian public listed companies for a three years period from 2004 to 2006 to identify the impact of corporate governance attributes on the poor performance of companies. The findings have indicated that there is significant negative relationship between CEO Duality and financial distress status implying the leadership structure affects the performance of the firms. Also, the results of the study argue that CEO Duality reduces the agency problems since agents act on the basis of his best interest to achieve the company goals and objectives.

With regard to the emerging market, Lakshan and Wijekoon (2012) carried out a study to examine the effect of corporate governance practices on the corporate failures of listed firms in CSE Sri Lanka. The study has used 70 failed companies and 70 non-failed companies for the analysis. As the methodology, a logistic regression model has been used to examine the probability of corporate failure. The findings indicated that Outside director ratio, presence of audit committee and remuneration of directors have a negative relationship with corporate failure whereas CEO Duality positively related. However, the board size, auditors' opinion and outside ownership has no relationship with corporate failure.

Overall, the study has outlined the theoretical framework for corporate governance system and financial distress status of corporates. The empirical research investigation is carried out on the basis of board characteristics and its impact on the corporate failure. The study has found there are limited works have contributed in the Sri Lankan market. Accordingly, the study attempt to fill the gap identified in the Sri Lankan market and to analyze how far the findings of other parts of world acceptable in Sri Lanka.

3. METHODOLOGY

3.0 Introduction

This chapter contributes to outline the methods that are used to analyze the research questions of the study. Initially, it elaborates the conceptual framework based on the research objective and identifies the key independent and dependent variables. Following the conceptual

framework, hypothesis is developed to examine the statistical relationship between these variables. Then, the research operationalization is conduct to explain the importance of chosen variables in the light of research objectives. Further, it consists of statistical methods adopt for the analysis. Finally, research design is discussed to provide the framework for population, sample selection, data types and techniques used for data collection.

3.1. Conceptual Framework

The main objective of the study is to examine the impact of corporate governance on the corporate failures of listed firms in Sri Lanka. With regard to the research objective, the conceptual design is structured by the study to identify the variables for the investigation. It provides a complete picture of the research and support is estimating the statistical relationship between independent and dependent variables.

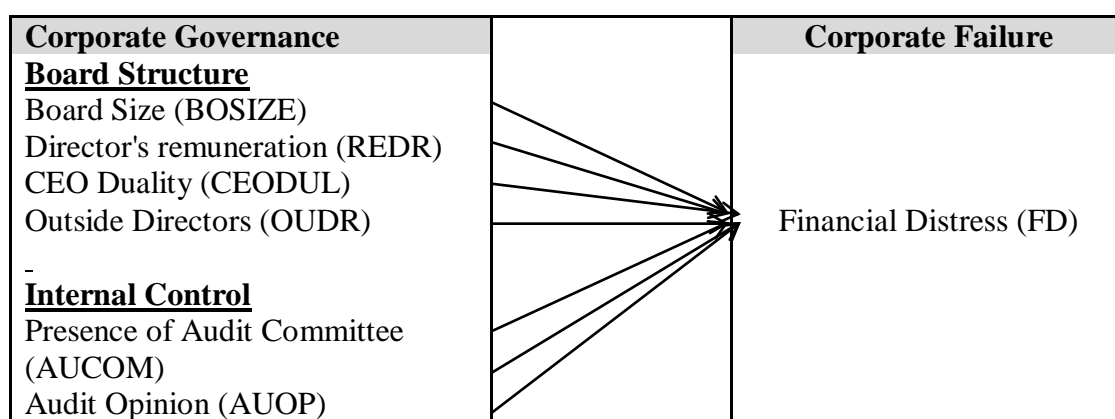


Figure 2. Conceptual Framework of the Study

The figure 01 depicts the conceptual framework to identify the relationship between corporate governance and corporate failure of selected listed companies in Sri Lanka. The corporate governance determined by two sections as board structure and internal control while corporate failure represented by financial distress. Accordingly, board structure measures board size, director's remuneration, CEO duality and outside directors. The internal control shown through the presence of audit committee and audit opinion.

3.2. Hypothesis Development

Based on the conceptual design, the below hypothesis developed by the study.

H₁= Firms which likelihood to be corporate failure has a relationship with CEO Board size.

H₂= Firms which likelihood to be corporate failure has a relationship with remuneration of directors.

H1₃= Firms which likelihood to be corporate failure has a relationship with CEO duality.

H1₄= Firms which likelihood to be corporate failure has a relationship with outside directors.

H1₅= Firms which likelihood to be corporate failure has a relationship with presence of audit committee.

H1₆= Firms which likelihood to be corporate failure has a relationship with audit opinion.

3.3. Research Operationalization

The variables of the study have selected on the basis of research questions. Previous empirical works have used several variables to investigate the impact of corporate governance characteristics on the corporate failure. The study considered the similar variables that has been adopted by Lakshan and Wijekoon (2012). The corporate governance characteristics have segregated into two categories as board structure and internal control. The board structure is denoted by CEO duality, Outside directors, remuneration of directors and board size whereas internal control measured by presence of audit committee and audit opinion. These variables represent both categorical and non-categorical variables. For the categorical variables the quantitative statistical measures are conducted using the binary values. Thus, binary value 1 and 0 is used to measure each categorical variable.

The variable CEO Duality (CEODUL) is categorical variable and represents the governing authority of the company. Accordingly, board of directors needs to be effective in order to survive in the dynamic business environment. The chairperson and the CEO of the company should be separated on behalf of the best performance of the company (Fama & Jensen 1983). Thus, if the company having CEO Duality denoted as “1” whereas company does not have CEO Duality recognized as “0”. The second categorical variable is Audit Opinion (AUOP). It provides some assurance regarding the financial reporting and the performance of the company. Auditors are independent outside parties which provide services of the request made by the shareholders of the company. Most of the researchers believe that, there is a strong positive relationship between a going-concern qualification opinion made by the auditor and the financial distress of the company. As to the binary values, adverse Audit Opinion on company financials denoted by “1” whereas other than to Adverse Audit Opinion

on company financials represented by “0”. The variable Presence of the Audit Committee (AUCOM) is another measure which estimate the internal controls of the company. Most of the scholars and researchers believe that the presence of the audit committee is the best indicator of the adoption of corporate governance practices by the directors. The audit committee is the link which makes the communication path between the board of directors and the auditors which reduces the conflicts among the auditor and the board of directors and the misunderstandings of the director board about the audit procedures. This variable is represented in binary values as “1” for the presence of the Audit Committee while “0” for otherwise.

The study has considered the Outside Directors (OUDR) to measure the impact of board structure. The directors on the company board seems to be biased towards the company. Due to the biasness, some decisions may be altered or amended rather than considering the business wellbeing and only focusing on the personal interest. Outsiders are physically and mentally outside of the company and they are impartial and independent in the decision making (Zahra & Pearce 1989). As to Wagner *et al.* (1998) fewer outside directors less impact on the probability of corporate failure. Also, Remuneration of the Directors (REDR) is another measure for the corporate governance effectiveness. The Corporate Governance practices of the directors and the Remuneration for the directors are like two sides of the same coin. The good corporate governance practices tide up the excessive payment which made by the directors and made them accountable for their actions. The most notorious incident that took place in the local context which is known as golden key credit card company ltd is a classic example. The final variable is Board size of the company (BOSIZE). The researchers highlight that, a company which has a greater number of directors compared to having fewer number of directors is more favored. The main reason for claims that is the degree of fail is reduced due to greater accountability which is derived from the directors. The dependent variable of the study is Financial Distress (FD) which measures the probability of corporate failure. The study has used this variable as categorical and estimated by “1” for failed for listed companies while “0” for non-failed companies.

The structure of calculation and expected sign of independent variables on the corporate failure used for the analysis is illustrated as follows.

Variable	Estimation	Expected Sign
OU DR	$\frac{\text{No of Outside Directors}}{\text{Total Directors in the Board}}$	Negative
REDR	$\frac{\text{Remuneration of the directors}}{\text{Profit or Loss of the Company}}$	Positive
BOSIZE	No of members in the board	Negative
CEODUL	CEO and Chairman is same in the company or not	Positive
AUCOM	Presence of audit committee as a sub-committee in the board	Negative
AUOP	Independent audit Opinion in the financial report	Positive

Table 1. Independent and Dependent Variable Analysis

3.4. Research Approach

The study has used quantitative approach to conduct the investigation on independent and dependent variables. This includes the analysis of descriptive statistics and empirical model estimation. The data analysis is conducted through the SPSS statistical software.

3.4.1. Descriptive Statistics

The descriptive statistical analysis measures the nature and behavior of study variables. Predominantly, it estimates arithmetic mean, maximum, minimum, standard deviation and observations. The results of the descriptive study provide fundamental guide to the empirical model estimation. The study analyses the descriptive statistics for failed and non-failed companies which is a comparative investigation on the mean values and standard deviation values. The major purpose of this analysis is to provide an in-depth understanding on the behavior and association of failed and non-failed corporates with regard to the corporate governance characteristics. Basically, descriptive statics identifies the rationale of using the variables in the regression model estimation.

3.4.2. Empirical Model Estimation

The descriptive study provides basic understanding on data pattern and behavior of independent and dependent variables. However, in order to further investigate the research objectives, study has incorporated logistic regression model to examine the impact of corporate governance characteristics on the financial distress situation of companies. The logistic regression model is different from the liner regression model. Since the study has

employed dummy variable as dependent variable, a linear regression cannot be estimated. It includes a probability measurement of occurrence and not occurrence. Therefore, the probability of financial distress is estimated by using binary values. The empirical model is based on the study carried out by Lakshan and Wijekoon (2012). Accordingly, logistic regression for binary values used as the regression estimation

$$P_i(FD = 1) = 1/(1 + e^{-z})$$

$$= 1/\{1 + \exp[-(\alpha + \beta_1 OUDR_{it} + \beta_2 CEODUL_{it} + \beta_3 REDR_{it} + \beta_4 AUCOM_{it} + \beta_5 BOSIZE_{it} + \beta_6 AUOP_{it})]\}$$

Where; $FD = 1$, probability of financial distress company i , \exp means exponential function, $OUDR$ denotes probability of outside directors for company i , $CEODUL$ shows probability of CEO duality for company i , $REDR$ denotes directors' remuneration for company i for the time t , $AUCOM$ represents probability of presence of audit committee for company i , $BOSIZE$ shows number of board members in the board for company i for the time t , $AUOP$ denotes probability of adverse audit opinion for company i , ϵ denotes error term of the model.

The statistical significance relationship measured under the confidence intervals of 5%, 1% and 10% significance level.

3.5. Research Design

3.5.1. Population and Sample Plan

As the population of the study, all the listed companies in Colombo Stock Exchange (CSE) has considered for the analysis. Thus, population of the study contains 238 listed companies that represents all the sectors as of 31st December 2017 (CSE 2017). The sampling plan is conducted as follows. The companies which tended to be a corporate failure were recognized if and only if one of the following conditions is satisfied.

- A company which practising net losses for continuous three years or more.
- A company which practising negative operating cash flow position for continuous three years or more.

If one or both criteria were satisfied, that company is taken as a company which has a likelihood of corporate failure. Each company which tend to fail has a no tend to fail partner in the sample. The company which tend to corporate fail will be paired by companies which were not having tend of corporate failure, using criteria of the same year and the closet asset size. Accordingly, the sample size contains 35 listed companies that denotes all the sectors of CSE. The period of 2012 to 2017 considered for gathering the sample for the study. The

reason for selecting that period is the world financial crisis has arisen in that period. Therefore, this study shows how world financial crisis impacted to the economy of Sri Lanka.

3.5.2. Sources and Collection of Data

The annual reports of the listed companies which were published to the general public within the period of 2012 to 2017 which represents 06 years have used for the data collection. The annual reports are obtained through the official website of the CSE.

4. DATA ANALYSIS AND DISCUSSION OF FINDINGS

4.0. Introduction

The chapter present and analyze the findings of data estimation and carried out a rigorous discussion with previous research results. Initially, it contributes to explain the findings of descriptive statistics. This analysis provides a fundamental understanding on the variables behaviour while delivering a rationale background for the research objectives. The main objective of this study is to identify the impact of corporate governance characteristics on the corporate failure. Thus, in order to examine the statistical relevance, results of the empirical model are illustrated. The study has used a logistic regression model to estimate the organized data. Finally, a comprehensive discussion is conducted with regard to the previous research works in order to investigate the validity of the findings.

Accordingly, the study has used a fundamental investigation of selected variables based on descriptive statistics. This examines the nature, strength and pattern of the study variables.

4.1. Results of the Descriptive Statistics

The descriptive statistics provides a comprehensive summary on the statistical measures of mean, median, maximum, minimum, standard deviation and number of observations for study variables over the sample period. The study has used the mean and standard deviation statistical measures for six (06) categorical variables as OUDR, CEODUL, REDR, AUCOM, BOSIZE and AUOP which in total 210 observations across the period of 2012 to 2017.

	OU DR	CEODU L	REDR	AUCOM	BOSIZE	AUOP	FD
Observations	210	210	210	210	210	210	210
Mean	.7036	.16	.144	.96	7.32	.33	.66
Std. Deviation	.2459	.369	2.82	.192	2.269	.473	.476

Table 2. Results of Descriptive Statistics

The table 01 represents the findings of descriptive statistics analysis. The variable OU DR reflect mean value of 70 percent for the sample of 35 companies. This indicates on average, 70 percent of the board represents by outside directors and remaining 30 percent dominated by internal directors. The standard deviation 0.24 reflecting the degree of deviation of mean value. A comparative investigation is carried out for failed and non-failed companies. The table 02 represents the findings for non-failed corporates while table 03 shows results for failed companies. Accordingly, there is a difference in the mean value of OU DR for failed and non-failed corporates. It can be seen that failed corporates show 66 percent while non-failed corporates consist 78 percent outside directors in the board.

The mean value for CEODUL is 16 percent. This shows the chairman that holds CEO position in the corporate is 16 percent for sample companies. Thus, CEO position of the 84 percent of corporates does not act as chairman in the board. Therefore, there is a difference in the leadership structure of sample companies. The degree of dispersion of the mean value 0.369. According to the comparative analysis of failed and non-failed companies, the CEO duality is high for failed companies rather than non-failed recording 17 percent and 14 percent respectively. The REDR variable denotes a mean value of 14 percent. In this case, board of directors' remuneration as a percentage of profit or loss is 14 percent on average across the 2012-2017. However, it is worthwhile to study this remuneration percentage with failed and non-failed corporates.

	OU DR	CEODUL	REDR	AUCOM	BOSIZE	AUOP
Mean	0.78	0.14	0.79	0.96	8.00	0.21
Standard Deviation	0.20	0.35	4.40	0.19	2.67	0.41
Observations	72	72	72	72	72	72

Table 3. Descriptive Statistics for non-failed corporates

	OU DR	CEODUL	REDR	AUCOM	BOSIZE	AUOP
Mean	0.66	0.17	0.19	0.64	6.96	0.40
Standard Deviation	0.26	0.38	1.34	0.23	1.94	0.49
Observations	138	138	138	138	138	138

Table 4. Descriptive Statistics for failed Corporates

On average, the REDR for failed companies is 19 percent whereas non-failed companies' 79 percent. This shows non-financially distressed companies contributes more proportion for the directors' remuneration than financially distressed companies. The variable AUCOM identifies the presence of audit committee in the board. As to the estimated findings, the mean value is 96 percent indicating that 96 percent of corporates have audit committee in the board. The comparative analysis represents a difference between the mean values of failed and non-failed companies. Thus, failed companies have 64% whereas non-failed companies reported 96%. In this case, even though both categories consist an audit committee, the substantial impact is low in failed companies than non-failed corporates. The BOSIZE is another variable which measures the effectiveness in the board. Hence, on average it denotes 7.32 indicating the average board members in the sample companies are 7-8 members. The degree of dispersion from the average value reported as 2.2. according to the analysis of failed and non-failed companies, non-failed companies have 8 members whereas failed corporates consists 6 to 7 members reflecting a difference between these two categories. The variable AUOP examine the adequate quality of financial reporting and performance of the corporate for each financial year end. This is an important component in the internal control mechanism at the corporate governance. As to the statistical measures, the mean value records as 33 percent. Thus, on average 33 percent have reported non-qualified or adverse opinion for the financial reporting while remaining 77 percent maintained good reporting mechanism. The standard deviation of the variable is 0.47. Thus, among the non-failed companies' 21 percent have recorded adverse opinion whereas failed companies' composition 40 percent.

The study has employed financial distress as categorical variable to examine the probability of failed or non-failed within the sample 35 companies for the period of 2012-2017. Accordingly, descriptive analysis has found 66 percent in the sample have risk of financial distress. The degree of dispersion from the mean value is 0.47.

Overall, the descriptive results indicate that there is association with board characteristics and the risk of financial distress of corporates. It has been witnessed in the comparative analysis of failed and non-failed corporates and the difference of their mean values. Thus, in order to

identify the statistical impact of board characteristics on the corporate failure, logistic regression model have incorporated by the study.

4.2. Results of the Logistic Regression Model

The table 04 represents the results of empirical model estimation which has incorporated to examine the statistical association of corporate governance variables and corporate failure for the period of 2012 to 2017. The model has estimated the Chi-square test to validate the accuracy of the model. The probability value of the chi-square test is 0.00 which is less than 5% significance level indicating the model is statistically significant.

According to the results, the coefficient OUDR has shown a negative sign and statistical significant relationship with probability of financial distress. Thus, outside directors have statistically significant at 5% significance level implying that increase in outside directors reduce the risk of financial distress. The coefficient CEODUL shows a negative sign and it is statistically significant with probability with financial distress. The CEODUL is statistically significant at 5% significance level. However, the proportion of directors' remuneration from the profitability of the corporate has a significant impact on the corporate failure. The variable REDR is statistically significant at 5% significance level.

Variable	Coefficient	Wald	p-value	exp(b)
OUDR	-2.059	5.390	0.020**	0.128
CEODUL	-0.552	2.205	0.032**	0.576
REDR	-0.254	3.991	0.046**	0.776
AUCOM	-18.248	4.000	0.099*	0.000
AUOP	0.727	3.890	0.049**	2.069
BOSIZE	-0.149	3.719	0.054*	0.862
R-Sq (L)	0.1177		Chi-Sq	31.7701
R-Sq (CS)	0.1404		Df	6.0000
R-Sq (N)	0.1940		p-value	0.0000

Table 5. Results of Logistic Regression Model

Significant at 1%=***, 5%=** and 10%=* significance level.

The presence of audit committee shows a negative coefficient implying the audit committee has a negative impact on the corporate failure. Thus, coefficient AUCOM shows statistically significant relationship with probability of financial distress at 1% significance level.

Also, audit opinion denoted by AUOP and it is statistically significant at 5% significance level implying the statistical impact of audit opinion.

The BOSIZE measures the effect of number of directors in the board on corporate failure. Accordingly, the variable is statistically significant at 5% significance level.

4.3. Discussion of Findings

The study has attempted to examine the statistical relationship between corporate governance variables on the corporate failure in the context of listed firm of CSE in Sri Lanka. The descriptive statistics have identified the nature of each board characteristics with regard to failed and non-failed corporates in the sample. This has indicated that increases or decrease the percentage or allocation of these variables have a considerable impact on the probability of financial distress situation. Therefore, an in-depth empirical model investigation is conducted to examine statistical significance of these variables. According to the results of the model, it has concluded that outside directors have statistically significant negative impact on the corporate failure of listed firms in Sri Lanka. This result is consistent with the expected hypothesis. The fundamental idea is that internal directors are less independent and less objective and this lack of independence may have a severe conflict between shareholders' and managers' self-interest. Similar finding has derived by Lakshan and Wijekoon (2012) for 140 listed firms in Sri Lanka. Also, Hambrick and D'aveni (1992), Wagner, Stimpert and Fubara (1998) have found the same finding. They have identified that four years before the bankruptcy, failed firms have few outside directors than the non-failed corporates. The coefficient CEO duality have shown a statistically significant negative relationship. This indicates the dual roles performed by CEO negatively affect the corporate failure. This is because the less focus on the firm objectives and shareholder's return maximization. The negative sign is not consistent with the hypothesis sign. Further, findings of descriptive analysis denoted that failed companies have practiced more CEO duality than non-failed companies. However, the negative relationship is contradicted with the findings of Lakshan and Wijekoon (2012). Also, the studies conducted by Abdullah (2006) and Elloumie and Gueyie (2001) found insignificant results between CEO duality and financial distress.

As an internal control mechanism, the impact of audit committee and audit opinion has tested in the logistic model estimation. Thus, audit committee shows a statistically significant negative relationship with corporate failure. This is consistent with the expected sign at hypothesis test. Also, the descriptive statistics reflect the mean differences for AUCOM for failed and non-failed corporates. Thus, non-failed companies recorded 96 percent whereas

failed companies have 64 percent. This explains the severe accounting problems confronted by corporates can be reduced by the presence of audit committee. It is consistent with the research carried out DeFond and Jiambalvo (1991), Uzun (2004) and Abbott (2000). On the hand, the absence of audit committee in failed corporates indicate lack of supervision in financial reporting which lead to increase the malfunctions in the accounting practices. The opinion given by the independent audit committee is another important indicator of measuring the internal control system of corporate governance. The study has found position statistically significant relationship between audit opinion and corporate failure. Thus adverse opinion indicates the high probability of financial distress and vice-versa. This result is consistent with the expected sign of hypothesis testing. However, empirically not consistent with the previous studies of Lakshan and Wijekoon (2012) and Mohamad, Darus and Jusoh (2011). They have found insignificant results with respect to the internal control mechanism in the corporate governance practices.

The general perspective is that larger board members reduce the probability of financial distress due to power of impact on the managerial functions. Accordingly, the study has found negative statistically significant relationship between board size and corporate failure. This is consistent with the expected sign of hypothesis. However, the results contradicted with Lakshan and Wijekoon (2012).

Further, remuneration of directors as a percentage of corporate profitability has been tested to estimate the impact of corporate failure in Sri Lankan firms. The study has identified negative statistically significant relationship between remuneration of directors and corporate failure. The results of descriptive analysis reflected that failed firms have paid less amount for directors than non-failed firms. This is not consistent with hypothesis relationship which has expected a positive sign. This means directors' remuneration as a percentage of profitability for failed corporates should be higher than the non-failed corporates. However, results of the study indicate the percentage of directors' remuneration from profitability is higher for non-failed corporates. The study argues that many failed firms are unable to generate sufficient cash flow to pay remuneration to their board members. Therefore, board of directors of many failed companies have not received the remuneration during the financial distress period. Similar results have been shown by Lakshan and Wijekoon (2012) and Mohamad, Darus and Jusoh (2011).

5. CONCLUSION AND RECOMMENDATION

5.0. Introduction

The main objective of this chapter is to provide a valuable summary on the research problem, objectives, methods used, sampling plan and findings derived from the data analysis. The key findings are highlighted at the conclusion section of this chapter. Also, the chapter describes the important policy implications for regulators, managers and policy makers. Further, it follows the limitations of study and resources required to conduct further research.

5.1. Summary of the Study

Recent developments including the globalization and liberalization policies have complicated the market and operational practices followed by companies. Thus, the occurrence of financial crisis further signifies the importance of maintaining an adequate system of control in the leadership structure in order to safeguard the shareholders' wealth. Corporate governance refers to the rules, regulations and practices that need to be adhered by board of directors in the company. Boards of directors have ultimate accountability to protect the shareholders' interest and monitor the behaviour of management. However, due to the Ineffective management policies, mal-practices and frauds most of the major companies in the world have been collapsed. Therefore, many countries have identified the importance of the corporate governance as a best practice to maximize the firm performance while protecting the shareholders' return. The main objective of this study is to identify the impact of corporate governance practices on the corporate failure of listed firms in Sri Lanka. The study has analyzed the previous works that have been carried out in developed economies and developing economies. Since there is a considerable difference in the empirical studies of developed and developing economies, this study attempt fills the gap in the context of Sri Lankan market.

As to the research objectives, the study has developed a conceptual framework in order to examine the key independent and dependent variables. The independent variables represented under two sections board structure and internal control. The board structure consists variables of CEO Duality, Board Size, Outside directors and remuneration of directors while internal controls denoted by presence of audit committee and audit opinion. Based on the chosen variables, hypothesis formulated to estimate the statistical relationship. Accordingly, the study has employed descriptive statistics and logistic regression model to investigate the

impact of corporate governance. This logistic regression model is inspired by the empirical work conducted by Lakshan and Wijekoon (2012). Data estimation is carried out using the SPSS statistical software. Population considered as all the companies listed on CSE while sampling plan is structured using 35 listed companies. The sample is determined based on negative operating cash flows and profitability for three consecutive years for the sample period of 2012-2017. Further, data availability has been considered when selecting the sample size. Data has been gathered from published annual reports on CSE website.

According to the empirical results, descriptive statistics have found nature and behaviour of study variables. This has comprised a comparative investigation of failed and non-failed corporates for the period of 2012-2017. Accordingly, board structure and internal control mechanism has shown different results between failed and non-failed companies. The results of the logistic regression model showed that corporate failure has negative statistically significant relationship with Outside directors, CEO Duality, Remuneration of directors, board size and presence of audit committee. The results have been supported by Lakshan and Wijekoon (2012), DeFond and Jiambalvo (1991), Uzun (2004) and Abbott (2000). The variable audit opinion has reflected positive statistically significant relationship and this has been consistent with the of Lakshan and Wijekoon (2012) and Mohamad, Darus and Jusoh (2011).

5.2. Conclusion

The study has revealed that ratio of outside directors, board size, presence of audit committee, CEO Duality and remuneration of directors have a negative relationship with the corporate failure for listed firms in Sri Lanka. On the other hand, audit opinion has a positive effect on the risk of corporate failure status. Thus, increase in independence in the board, large number of board members reduce the probability of firm adverse performance. Also, the dual role performed by CEO as a chairman have a negative impact on the corporate failure. However, the existing corporate governance practices in Sri Lanka such as Cadbury Code 1992, Sri Lankan Code of Best Practice for Corporate governance do not restrict of combining the roles of CEO and chairman. The major purpose is to present separation of duties of both roles at the financial reporting. CEO duality is significant when segregating the failed companies from non-failed companies. Further, as internal control mechanisms, the presence of audit committee reduces the risk of failure while audit opinion on adverse performance or financial reporting increases the risk.

5.3. Policy Implications and Suggestions for further research

This section discusses the importance of the findings of the study for policy makers, managers and regulators. The study provides in-depth understating on the board characteristics and its association to the corporate failure. The results of the study provide support in decision making for financial analysts, investors and regulatory bodies. Further, the findings assist in evaluation and reformation of corporate governance practices conducted by Sri Lanka. This provides guide to extend this work in future with regard to the shareholders risk and return trade-off the corporate.

5.4. Limitations of the Study

Data availability is the major limitation faced by the study conducting the analysis. The study is based on 35 listed firms in Sri Lanka based on the negative cash flows and profitability. Therefore, data for the sample period have been not covered by some companies. On the other hand, this research was completely based on secondary data (Annual Reports) where encountered difficulty in gathering all the information that is required as reporting formats and contents vary from company to company. Further, the results of the study are derived in the context of Sri Lankan stock market. Hence, there has a limitation when extending this work with other parts of the world. Also, in the literature survey, there were limited works have been contributed to Sri Lankan market which can be consider as major limitation when evaluating validity of findings.

References

1. Abbot, JL & Parker, S 2000, The effect of audit committee activity and independence on corporate fraud, *Journal of Managerial Finance*, 26(11), pp. 55-67.
2. Abdul Rahman, R 2009, Effective corporate governance. Shah Alam, Malaysia: UiTM University Publication Centre (UPENA).
3. Abdullah, SN 2004, Board composition, CEO duality and performance among Malaysian listed companies. *Corporate Governance*, 4(4), pp. 47-61.
4. Banhart, S, Marr, M & Rosentein, S 1994, Firm performance and board composition: Some new evidence. *Managerial & Decision Economics*, 15(4), pp. 329-340.
5. Cadbury Code 1992, *The Report of the committee on the financial aspects of corporate governance: The code of best practice*. London: Gee Professional Publishing.
6. CSE (2018). Daily Report, Colombo Stock Exchange of Sri Lanka, Colombo.
7. DeFond, ML, Jiambalvo, J 1991, Incidence and circumstances of accounting errors. *Accounting Review*, p.66, 643–655.

8. DeZoort, FT & Salterio, SE 2001, Auditing. *Journal of Practice & Theory*, 20(2), pp. 31-50.
9. Elloumi, F & Gueyie, JP 2001, Financial distress and corporate governance: An empirical analysis. *Corporate Governance*. 1(1), pp. 15-23.
10. Fehle, F & Tsyplakov, S 2005, Dynamic Risk Management: Theory and Evidence. *Journal of Finance* (Article in Press).
11. Fama, EF, Jensen, MN 1983, Separation of ownership and control, *Journal of Law and Economics*, p.26, 301- 325.
12. Hambrick, DC, D'Aveni, RA 1992, Top team deterioration as part of the downward spiral of large corporate bankruptcies. *Journal of Management Science*, 38(10), p.1445-1466.
13. Hassan, S, Christopher, T & Evans, R 2003, Directors' remuneration and firm performance: Malaysian evidence. *Malaysian Accounting Review*, 2(1), p.57-67.
14. Hopwood, W, Mckeown, J, & Mutchler, J 1988 The Sensitivity of Financial Distress Prediction Models to Departures from Normality. *Contemporary Accounting Research*, 5 (1), p.284-298.
15. Jensen, MC 1993, The modern industrial revolution, exit, and the failure of internal control systems. *The Journal of Finance*, p.48, 83188.
16. Jensen, CM & Meckling, WH 1976, Theory of the firm: managerial behaviour, agency costs and ownership structure, *Journal of Financial Economics*, 3, pp. 305-360.
17. Lakshan, AMI & Wijekoon, WMH N 2012, Corporate Governance and Corporate Failure, 02nd Annual International Conference on Accounting and Finance, *Procedia Economics and Finance*, 2. Pp. 191-198.
18. Lamberto, AP & Rath, S 2008, The survival of initial public offerings in Australia, Working Paper, Curtin University of Technology.
19. Monks, RAG & Minow, N 2004, *Corporate Governance*. Blackwell Business.
20. Mohamad, A, Darus, F & Jusoh, R 2011, Corporate Governance and Corporate Failure in the Context of Agency Theory, *Terengganu International Finance and Economic Journal*, 1(1), pp. 43-57.
21. Muth, MM & Donaldson, L 1998, Stewardship theory and board structure: A contingency approach. *Corporate Governance*, 6, pp. 5–28
22. OECD (1999) *OECD Principles of Corporate Governance*, OECD.
23. Samarakoon, P L 1999, The Ownership Structure of Sri Lankan Companies, *Sri Lankan Journal of Management*, 4(3 and 4), pp. 143-171.
24. Samad, A 2003, The Lesson of Enron: The duties of professional advisers. International Federation of Account (IFAC) Task Force's Report.
25. Sawandi, N, Ahmad, A and Saad, RA 2005, *Causes of financial distress: evidence from PN4, investigate audit findings*. Proceedings of the Accounting Faculty Conference. Kedah, Malaysia: University Utara Malaysia.
26. Sulaiman, M, Ali, R & Ganto, J (2005) Causes of decline and turnaround strategies of Kuala Lumpur Stock Exchange companies. *The Business Review*, 4(1), pp. 226-234.
27. Uzun, H, Szewczyk, SH & Varma, R 2004. Board composition and corporate fraud. *Financial Analyst Journal*, October, pp.33-45.

28. Wagner, JA, Stimpert, JL & Fubara, EI 1998, Board composition and organizational performance: Two studies of insider/outsider effects. *Journal of Management Studies*, 35, pp. 655-677.