



The Journal of **ARSYM**

A Publication of Students' Research of the
Annual Research Symposium in Management

Published by
Faculty of Business Studies and Finance
Wayamba University of Sri Lanka

The Journal of ARSYM

*A Publication of Students' Research of the
Annual Research Symposium in Management*

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The Journal of ARSYM (JARSYM) is a refereed journal published bi-annually by the Faculty of Business Studies & Finance, Wayamba University of Sri Lanka. The aim of the JARSYM is to disseminate high-quality research findings on a variety of timely topics generated by the undergraduate and postgraduate researchers in the Wayamba University of Sri Lanka. Furthermore, it opens up avenues for the undergraduates involved in the industry to share their inventions, state-of-the-art discoveries and novel ideas. The main philosophy behind the JARSYM is to enhance the research culture within the faculty, thereby within the Wayamba University. All research articles submitted are double blind reviewed prior to publishing. Views expressed in the research articles are not the views of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka or the Editorial Board.

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The Journal of ARSYM (JARSYM) is a refereed bi-annual journal committed to publish undergraduate research papers of the Faculty of Business Studies and Finance, Wayamba University of Sri Lanka. The JARSYM publishes theoretical and empirical papers spanning all the major research fields in business studies and finance. The aim of the JARSYM is to facilitate and encourage undergraduates by providing a platform to impart and share knowledge in the form of high quality and unique research papers.

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- Priority is given for novelty, originality, and to the extent of contribution that would make to the particular field.

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FIRM FAILURES IN SRI LANKA: A SUBSTANCE OF CORPORATE GOVERNANCE

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ABSTRACT

Global corporate scandals that have evidenced a clear link between Corporate Governance (CG) and business failures upsurges CG to be key concern. Thus, this study investigates corporate governance characteristics' influence on the corporate failure likelihood of quoted firms in Sri Lanka. It follows the positivist paradigm to empirically observe the impact of CG practices on corporate failure. The CG characteristics are proxied by CEO duality, CEO tenure, directors' independence, average director remuneration, director ownership, ownership concentration, and board size. Besides, some control variables such as interest coverage ratio, liquidity, and capital structure, which can potentially influence the failure possibilities are added. Data from 132 quoted firms representing 19 industrial sectors over a period from 2015 to 2019 were gathered for the study. Finally, it creates a balanced panel of 660 firm-year observations. Results are generated through panel logistic and panel linear regressions with standard errors adjusted for heteroscedasticity. The results portray that the variables, CEO tenure, average director remuneration, ownership concentration, and board size negatively and significantly influence the corporate failure while CEO Duality positively and significantly influence the likelihood of corporate failure. Thus, this study provides new insights into the existing literature, especially in the context of a developing country, and the findings can be beneficial for stakeholders, practitioners, and regulators in their decision-making practices and policy implications.

Keywords: *Corporate Governance, Corporate failure, Sri Lanka*

1. INTRODUCTION

“Corporate Governance(CG) is a system by which organizations are directed and controlled” (Cadbury Report, 1992). It is also defined as the relationship between various participants in determining performance and the direction of corporations where the primary participants are the shareholders, management, and board of

directors. It provides a structure through which the organizational objectives are set, and the means of attaining objectives and monitoring performance are determined (OECD, 2019). The maximization of shareholders' wealth is the prime objective of firms. Therefore, they tend to develop new measures to mitigate agency costs. CG is one of the ethical concerns that are far beyond the financial aspects. A board should be free to drive companies ahead while exercising their freedom within the framework of accountability. This is the essence of any system of good CG (Cadbury Report, 1992). The proliferation of CG concerns emerged due to business scandals that took place worldwide, such as Enron, WorldCom, Allied Irish Bank, etc. They evidence a clear link between CG and business failures.

A corporate failure relates to significant events in firms' lives where its survival ends by creating losses to stakeholders. (Jenkins & McKelvie, 2016). The theorists and empiricists have extensively explored the grounds of failures in different contexts. Their major findings are confined to the lack of financial self-sufficiency. Achieving long-term success is absurd for the organizations which focus on the narrow interests of a few stakeholders at the expense of others (Sheth, Jagdish, and Sisodia, 2005). They argue that long-run success generally requires both in a material sense- and on an emotional basis- of the organizational key stakeholders.

The recent increase in business shutdowns emphasizes the importance of predicting failures in advance. At the same time, arguments are on the lapses of financial indicators in the failure prediction. Therefore, Li *et al.* (2020) propose to analyze root cause problems of failure incidents. Though many studies focus on the collapse in the developed context, the studies in the developing nations are still lacking. Therefore, the study addresses the research question: "Does corporate governance explain the failure likelihood of Sri Lankan firms?". The results will make a contextually different contribution to the literature.

In Sri Lanka, the three-decade ethnic conflict hampered every aspect of the economy. Mainly, it created unstable economic and financial systems. At that time, disregarding the good governance, firm survival was even uncertain. After the ethnic war, the economy is now gradually recovering. However, the uncertain political environment limits international capital flows. Whereas unnecessary political interference and firms' political connections interrupt the smooth functioning of the corporate sector. With the CG standards in 1997, firms tended to adhere to the compliances of regulators. The inclusion of CG codes into the listing rules was a milestone in CG history. Accordingly, publishing a CG compliance report was mandatory for all the listed companies. Since firms are considered in a peaceful situation, they could be free from some external shocks. Therefore, the results will provide some good insights compared to the similar studies undertaken in Sri Lanka.

2. LITERATURE REVIEW

2.1 Theoretical Background

Following Beaver, (1966) and Altman, (1968), numerous studies bring forth that prediction of corporate failure is theoretically explainable and empirically feasible. Failure prediction has been an imperative topic among researchers, and they have recognized a variety of mechanisms through which the firms are inclined to fail. Traditional ratio analysis was initially considered in the failure prediction. But it has been argued that the ratio analysis is no longer an important technique in the academic environment due to its unsophisticated presentation styles. Therefore, to assess the potential rigorously, a set of financial ratios was combined in a discriminant analysis approach known as "Altman Z score". The theory expounds that if ratios are analyzed in a multivariate framework, it will present a greater statistical significance than the technique of sequential ratio comparison (Altman, 1968).

If financial ratios were considered as predictors of failure, they could be delayed in disclosure. Thus, to receive an early warning, the root-the governance of the company should also be analyzed (Li et al., 2020). CG emerged as a major arena of discussion throughout the past decade following the accounting scandals such as Enron, WorldCom, and Adelphia, which caused to change and development of laws, accounting rules, and more transparency in reporting financial data for the stakeholders (Gaughan, 2010). The best measure of governance generally differentiates in the background for which it ought to be used, because acceptable standards of good governance are often correlated with distinct performance measures (Bhagat et al., 2010). Firms with weaker corporate governance practices such as ownership concentration, low financial transparency and disclosure, board ineffectiveness, and higher shareholder rights present a higher default correlation within the crisis periods (Fernando et al., 2020). Organizations with large accruals rooted in their earnings structure were less inclined to consist of audit committees or independent boards (Klein, 2002). Therefore, this study extended its attention toward certain corporate governance theories.

An agency relationship is a contractual relationship where an individual (agent) performs a service on behalf of someone else (the principal). The theory consists of two major propositions. First, it is assumed that the agents will act in their self-interest and maximize personal benefits instead of acting in the best interest of the principal. Second, the principal has to incur costs to limit undesirable behavior and to promote behavior that achieves the goals of the principal (Jensen & Meckling, 1976). When the pay-off to the agent differs from the principal, the agent would not take actions as per the expectations of the principal. Hence the employees may not adjust their actions as per the requirements, and would engage in too much or little risk-taking

(Sah & Stiglitz, 1984). As the agent will not make decisions that maximize the principal's interest, the agency costs arise. It comprises monitoring expenses by the principal, bonding expenditure of the agent, and the residual loss (Jensen & Meckling, 1976)

Managerial entrenchment could be defined as the managerial power to expropriate wealth (Florackis and Ozkan, 2009). Accordingly, the growth of entrenchment to attenuate the effects of external controls lead to lower investment in innovation. Therefore, the increase of managerial entrenchment has an inverse effect on shareholder value (Chakraborty et al., 2014). The agency cost-based "managerial entrenchment hypothesis" predicts/ explains/proposes that protecting managers from the takeover market for corporate control causes the managers to be more entrenched while misaligning their interests with those of shareholders (Jensen & Ruback, 1983). Banko *et al.* (2013) state that the lack of supervision enables entrenched managers to act in their own best interest and perform earnings management more freely.

Upper echelon theory (1984) delineates that top executives view their threats, opportunities, and alternatives through their own highly personalized lenses. The factors such as age, tenure in the organization, functional background, socio-economic roots are considered as observable characteristics of the top board. Therefore, the organizations become reflections of their top executives (Hambrick & Mason, 1984). Accordingly, the top management team is the key resource for organizational decision-making and development, and their background and characteristics extensively affect corporate competitiveness and performance (Xu et al., 2019).

Resource dependency theory suggests that the directors are viewed as resource providers to a firm, and a board with high level of links with the external environment is expected to provide access to a variety of resources to the organization (Nicholson and Kiel, 2007). As an organization becomes more dependent on its environment, it may adapt through the acquisition of additional access or control to resources. Henceforth one means of control is to enhance linkages with the environment. It is stated that the directors secure the existing resources of the organization with external links to the environment (Boyd, 1990).

The theory of convergence of interest portrays that higher the managerial ownership, higher the firm value and lower the agency cost. When the high equity stake of insiders causes them to be less diversified, the maximization of shareholder value will be the only option left to them. Therefore, the firm value hinges on allotting shares to the directors because it spreads the proprietorship with directors and other investors

of the company. This motivates the directors to act as shareholders (Jensen & Meckling, 1976). On the other hand, when the managerial share ownership is too high, it would lead to managerial entrenchment, and it will generate few constraints on managerial behavior such as an increase of managerial opportunism and managerial debt levels.

1.2.1 2.2 Empirical Evidence

Chief Executive Officer (CEO) Duality

In the context of multiple member boards, a conspiracy among top-level management and control agents appears to be more challenging, and the distinction of management and control acknowledges the issue. Therefore, a board should be independent from the CEO, and the posts of CEO and chairmanship should be held by two distinct individuals (Fama & Jensen, 1983). Kholeif (2008) has concluded that in companies with large boards and low top management ownership, the firm performance is negatively impacted by CEO duality. In contrast, Boyd (1995) has identified that CEO duality has a positive impact on firm performance on certain industry conditions and a negative impact on other conditions. However, it has been clarified that CEO duality has been practiced in failed companies other than non-failed companies (Lakshan & Wijekoon, 2012). With these interpretations, we develop the following hypothesis.

H₁: CEO duality has a positive impact on corporate failure

CEO Tenure

The entrenchment theory states that when CEOs gain experience, they tend to obtain personal benefits specified in the form of job security (Pascal et al., 2018). The integrative model by Long-tenured CEOs are committed to their paradigm and avoids information and lose interest in their jobs which leads to ignoring the needs of strategic changes (Fukutomi, 1991). As the CEO tenure increases, CEOs would look for more opportunities, increase the leverage, and make further expansions. The literature on the CEO tenure and the debt level emphasizes that when the CEOs being entrenched with time, they try to shy away from debt (Pascal et al., 2018). Debt financing is generally associated with a high risk of bankruptcy which is risky to the job of the CEO. This causes the CEO to be less reluctant in obtaining debt financing, which reduces the risk of insolvency (Jensen & Meckling, 1976). Considering these facts, it is equitable to develop the following hypothesis.

H₂: CEO tenure has a negative impact on corporate failure

Board Independence

Presence of an independent element in the form of a non-executive director has consequentially benefited the firm in performing its role (Annuar, 2014). In contrary, it was proved that independent directors had a significant role in the board, but a claim was not made on independence having a significant influence on firm performance (McCabe & Nowak, 2008). But, through deeper analysis into independent directors and the likelihood of failure, a study on politically connected independent directors to corporate fraud in China concluded that through hiring politically connected independent directors such as government ex officials, firms obtain favorable treatment (Kong et al., 2019). Therefore, we generated the hypothesis,

H₃: Board independence has a negative impact on corporate failure

Director remuneration

When the agent's interests are distinct from the principal, it leads them to act in a way that does not serve in the best interest of their principal. This motivates institutional investors to encourage pay packages which are quite large to enable the provision of strong incentives and bridge the principal-agent gap (Bebchuk et al., 2010). In contrast, it is noted that a high pay package could encourage managerial entrenchment and moral hazard as it breakdowns corporate governance and build up greed (Bebchuk & Fried, 2009). Jahan (2017) states that an unsuitable incentive structure does not furnish long-lasting results in business decisions and consequently increases the financial crisis which reinforces the likelihood of corporate failure. Considering these facts, we develop the hypothesis,

H₄: Average director remuneration has a positive impact on corporate failure

Director ownership

The convergence of interest theory plays a crucial role in the context of director ownership. The managerial share ownership can reduce the incentives of managers to consume prerequisites, expropriate shareholder wealth and engage in other non-maximizing behavior which facilitates aligning the interests between shareholders and managers (SC Myers, 1977). Managerial share ownerships entrenches the incumbent management team and increases managerial opportunism (Fama & Jensen, 1983). When the managerial ownership reaches a certain level, the entrenchment dominates the convergence of interest and increases the opportunistic behavior of managers (Brailsford et al., 2005). On the other hand, Jahamani and Ansari (2010) proved that there is no relationship between managerial ownership, corporate performance and risk-taking. However, many studies (Han & Suk, 1998; Javaid et al., 2017; Parker et al., 2002) concluded that ownership structures play a significant role as director ownership contributes to a higher likelihood of survival. Hence, we developed the following hypothesis,

H₅: Director Ownership has a negative impact on corporate failure

Ownership Concentration

Ownership concentration consists of two offsetting effects: substitution effect and expropriation effect. Therefore, as per the substitution effect, in firms with high ownership concentration, the dominant shareholder gradually plays a critical role in the process of monitoring and control of the managers. In terms of the expropriation effect, the dominant shareholder may behave opportunistically at the expense of minority shareholders. It is also called the principal-principal problem. The literature (Madhani, (2016); Morck, Shleifer and Vishny, (1989)) has concluded that ownership concentration is higher in less developed countries as well as countries where propriety rights are not legally protected. However, the concentrated ownership mitigates the conflicts of interest between the managers and shareholders since large shareholders always effectively monitor the actions of managers. Concentrated ownership in terms of large promoter shareholding is assumed to be possessing private information which leads to information asymmetry. As a result, it increases the adverse selection costs, which threaten firm survival (La Porta et al., 1999). Thus, we developed the following hypothesis.

H₆: Ownership concentration has a positive impact on corporate failure

Board Size

As per the resource dependency theory, larger boards could bring more expertise and resources; thus, ameliorating the performance of the firm (Zahra & Pearce, 1989). In the context of developing countries, according to Pfeffer (2019), due to uncertain economic conditions and volatility, large boards assist in the establishment of better relationships. In contrast, a study on Japanese companies has proved that larger boards are linked to lower performance volatility and bankruptcy risk (Nakano & Nguyen, 2012). Diversely, bad projects have a higher likelihood to be rejected because of higher number of board members and good projects too require the same convergence of views among group members which concludes that large groups end up selecting average projects whose performance is stable. (Sah & Stiglitz, 1984). Companies with larger board sizes are expected to be less likely to fail on the grounds of greater accountability of the directors (Lamberto and Rath, 2010). So, it is reasonable to generate the following hypothesis.

H₇: Board size has a negative impact on corporate failure

3. METHODOLOGY

The sample consists of 132 non-financial firms listed in the Colombo Stock Exchange (CSE). They represent 19 industrial sectors. So, the sample is drawn based on the stratified sampling technique. Within each stratum, firms are selected randomly. The sampling frame is accessed through the listed company directory. Data is collected

manually for five years starting from 2015 from annual reports which are available in the database of the CSE. It generates a balanced panel data with 660 firm-year observations.

Two proxies are used for recognizing failure incidents. The Altman Z-score is the base model, and a dummy variable is also created upon the value of the Z-score. A firm is treated as "Fail" when the Z- score is less than 1.81. If a firm reflects failure status, the value "1" is assigned, and "0" otherwise. Independent variables compose of CEO duality (CEODL), CEO tenure (CEOYRS), board independence (INDD), directors' remuneration (AVGREM) board ownership (DIROWN), ownership concentration (OWNCON) and board size (BDSZ). Some control variables are also used that can potentially influence firm failure. They include interest coverage ratio, liquidity, and capital structure.

CEO duality indicates that whether the same person holds both titles of "chairman" and "CEO", and if it is true, we assign value one and zero otherwise. CEO tenure is CEO's years in the firm, and it is measured using the natural logarithm of years in the firm as the CEO. Board independence is the total number of independent non-executive directors in the board and is measured as a proportion of independent non-executive directors in the board. Directors' remuneration is the annual average remuneration of directors. It is measured as the natural logarithm of annual average remuneration of directors. Director ownership is proxied by the proportions of shares held by the directors. Ownership concentration is the number of shares held by the large owners who hold more than 3% of the total shareholding. Board size is the natural logarithm of the total directors on the board. The interest coverage ratio divides earnings before interest and taxes by the interest payment. Liquidity is the ease with which an asset or security can be converted into ready cash without affecting its market price. It is calculated by dividing the current assets from current liabilities. Capital structure is the combination of debt and equity used to finance its overall operations and growth. It is calculated by dividing the liabilities from equity.

We propose the following econometric models to be tested separately:

$$Fail_{it} = \beta_0 + \beta_1 CEODL_{it} + \beta_2 CEOYRS_{it} + \beta_3 INDD_{it} + \beta_4 AVGREM_{it} + \beta_5 DIROWN_{it} + \beta_6 OWNCON_{it} + \beta_7 BDSZ_{it} + \sum_{i=1}^n \beta_i CONTROLS + \varepsilon_{it} \quad (1)$$

$$Zscore_{it} = \beta_0 + \beta_1 CEODL_{it} + \beta_2 CEOYRS_{it} + \beta_3 INDD_{it} + \beta_4 AVGREM_{it} + \beta_5 DIROWN_{it} + \beta_6 OWNCON_{it} + \beta_7 BDSZ_{it} + \sum_{i=1}^n \beta_i CONTROLS + \varepsilon_{it} \quad (2)$$

The regression analysis is used to understand the impact of CG on firm failures. Concerning the failure dummy, a logistic regression analysis (LOGIT) is implemented. For the Z-score, it is simultaneously applied fixed effect (FE) model, which controls time-invariant unobserved characteristics that can be correlated with the observed independent variables. The random effect (RE) model controls unobserved heterogeneity when heterogeneity is constant over and not correlated with independent variables. We use the Hausman test to select the best-fitted model. Also, the study employs the fixed effect model with standard errors adjusted for heteroscedasticity (VCE). Moreover, Panel Corrected Standard Errors (PCSE) generate fitted regressions. Furthermore, as an additional test, we consider a performance measure, i.e., Return on Assets (ROA) to assure that the main results are robust.

4. FINDINGS AND DISCUSSION

Table 01: Descriptive Statistics

Variable	Observations	Mean	S.D.	Minimum	Maximum
Dependent variable					
Zscore	660	21.5409	92.3435	-4.208	1402.032
Independent variable					
CEOYRS	660	8.2984	6.86353	1	45
INDD	660	0.3899	0.1173	0	0.8
AVGREM	660	3086948	4917244	0	3.41E+07
DIROWN	660	0.104	0.1948	0	0.8395
OWNCON	660	0.7893	0.1183	0.3113	0.9995
BDSZ	660	7.9424	2.1279	3	15
Control variable					
INTCOV	660	1.49E+08	1.65E+09	2.23E+07	2.31E+10
LIQD	660	8.16E+00	4.23E+01	1.05E-02	7.96E+02
CAPST	660	0.3192	0.8586	7.45E-11	16.5524
Dependent variable (dummy)	Status	Frequency		Percentage	
Z score dummy	Non-fail:0	483		73	
	Fail:1	177		27	

Independent variable (dummy)			
CEO duality dummy	Non-duality:	491	74
	0		
	Duality: 1	169	26

Source: Authors' own

The summary analysis (Table 1) reveals that 27% of observations encounter failure incidents. The mean of the Z-score stands at 21.54, while its minimum is -4.21. CEO Duality is represented in 26% of observations. The maximum CEO Tenure is reported as 45 years. An average CEO holds its office for 8 years. The minimum number of independent directors accounts for zero. It indicates that some firms deviate from the governance compliance of a minimum of two independent directors. However, such firms have already justified the deviations. In particular, the maximum board independence stands at 80% taking its average as 39%. The directors' equity ownership is about 10%. Even though the highest ownership is 84%, some firms without managerial ownership exist there. The ownership concentration is 79% reaching a maximum of 99.95%. This proves that the ownership is highly concentrated in Sri Lankan firms. This aligns with the findings of Morck, Shleifer and Vishny, (1989) which state that the ownership is highly concentrated in less developed countries. The average board size is 8 members, but it ranges from 3 to 15 members.

Table 2: Correlation Matrix

	1	2	3	4	5	6	7	8	9	10	11	12
Fail	1											
ZScore	-0.136	1										
CEODL	0.146	0.099	1									
CEOYRS	-0.046	-0.080	0.151	1								
INDD	0.027	0.018	0.026	-0.010	1							

AVGRE	-	-	0.11	0.13	0.11	1						
M	0.04	0.07	4	6	3							
	6	3										
DIROWN	-	-	0.06	0.25	0.01	0.11	1					
	0.02	0.01	5	9	6	4						
	1	9										
OWNCO	-	0.07	-	-	-	-	-	1				
N	0.16	7	0.17	0.02	0.06	0.17	0.00					
	0		2	9	5	9	9					
BDSZ	-	-	-	0.06	-	0.34	0.04	-	1			
	0.04	0.05	0.07	5	0.19	9	5	0.07				
	5	8	4		9			7				
INTCOV	-	-	-	-	-	-	-	0.09	-	1		
	0.05	0.00	0.04	0.07	0.01	0.04	0.04	7	0.02			
	4	6	3	7	5	4	8		8			
LIQD	-	0.47	0.07	-	0.10	-	0.09	0.02	-	-0.013	1	
	0.10	5	7	0.04	1	0.03	2	1	0.06			
	1			5		1			8			
CAPST	0.35	-	0.11	0.00	0.03	0.09	-	-	0.05	-0.022	-	1
	0	0.08	9	8	8	5	0.00	0.00	1		0.06	
		0					6	9			0	

Source: Authors' own

The correlation matrix (Table 2) interprets the association between CG variables and the failure occurrence. Thus, it is examined that CEO tenure, directors' remuneration, board ownership, ownership concentration, and board size display a negative relationship with corporate failure while the relationship for CEO duality and independent directors are positive. The strongest correlation is reported between CEO duality and failure likelihood.

Table 3: Regression Analysis

Variable	Dependent Variable				
	Z-Score Dummy	Z-Score			
	LOGIT	FE	RE	VCE	PCSE
CEODL	0.6949*	-23.9923	13.2366	13.2366	16.3434
	(0.4219)	(21.083)	(9.6993)	(13.6678)	(16.8151)
CEOYRS	-0.0518**	-3.2836**	-0.8664	-0.8664	-0.8522

	(0.0260)	(1.6472)	(0.6421)	(0.5466)	(0.5984)
INDD	-1.0759	45.9009	1.5852	1.5852	-4.3856
	(1.2424)	(48.739)	(32.6625)	(50.4116)	(54.6129)
AVGREM	0.0017	-0.713	-2.4312**	-2.4312	-2.1483**
	(0.0461)	(2.0294)	(1.0969)	(2.0432)	(0.9856)
DIROWN	-0.0262	-37.2566	-14.4352	-14.4352	-4.261
	(0.9469)	(70.9882)	(22.7244)	(9.0575)	(24.3868)
OWNCON	-4.1973**	91.2313	56.9233	56.9233*	55.296
	(1.6586)	(86.0316)	(36.0568)	(31.4348)	(30.7757)
BDSZ	-0.1995**	-1.4915	0.5465	0.5465	-0.136
	(0.0876)	(4.1483)	(2.0549)	(1.5950)	(2.6832)
Control Variable					
INTCOV	-2.05E-09	-9.53E-11	-5.99E-10	-5.99E-10	-6.92E-10
LIQD	-0.491**	0.8209***	0.9208***	0.9208***	0.6982**
CAPST	3.3158***	0.1241	-3.2664	-3.2664	-1.9861
Years					
2016	0.1906	1.4661	0.9741	0.9741	-0.7125
2017	0.5949**	-7.8262	-8.7877	-8.7877	-10.3243***
2018	0.8235***	-5.9647	-8.5319	-8.5319	-10.3832***
2019	1.5518***	0.5557	-2.3988	-2.3988	-5.1338
Constant	3.7464**	-14.3859	5.8224	5.8224	12.2032
R-Square	0.3741	0.5148	0.2587	0.2587	0.1554
Groups	132	132	132	132	132
Observations					
	660	660	660	660	660

Note: *, **, *** indicate statistical significance at 10%, 5% and 1% levels.

Source: Authors' own

Table 3 provides regression results for different model specifications. It figures out the impact of CG on firm failures. Concerning the Z-score dummy, a logistic regression analysis (LOGIT) is implemented. For the Z-score, it is simultaneously applied the fixed effect (FE) model, which controls for time-invariant unobserved characteristics that can be correlated with observed independent variables and the random effect (RE) model which controls unobserved heterogeneity when heterogeneity is constant over and not correlated with independent variables. We also use the Hausman test to select the best-fitted model. In addition, the study employs the fixed effect model with standard errors adjusted for heteroscedasticity (VCE). Whereas Panel Corrected Standard Errors (PCSE) generate fitted regressions.

Standard errors are provided within parentheses. The results reveal that certain corporate governance characteristics have become substance for the corporate failure. The variables, CEO tenure, ownership concentration, board size and director remuneration negatively and significantly influence corporate failure at the 5% level. CEO duality is positively significant under the level of 10% board independence and board ownership do not provide any significance.

Table 4: Robustness Test

Variable	Dependent Variable: ROA				
	FE	RE	VCE	PCSE	
CEODL	-0.0152 (0.0356)	-0.0232 (0.0176)	-0.0232** (0.0113)	-0.018 (0.0134)	
CEOYRS	-0.0003 (0.0028)	0.0017 (0.0012)	0.0017 (0.0013)	0.0015 (0.0017)	
INDD	0.0248 (0.0824)	0.0252 (0.0582)	0.0252 (0.0415)	-0.022 (0.0563)	
AVGREM	0.002 (0.0034)	0.0041** (0.002)	0.0041** (0.0018)	0.0034** (0.0017)	** , ***
DIROWN	-0.004 (0.12)	-0.0382 (0.0415)	-0.0382 (0.0307)	-0.0152 (0.0463)	
OWNCON	0.1773 (0.1454)	0.1535** (0.0655)	0.1535 (0.0912)	0.1519*** (0.0442)	
BDSZ	-0.0067 (0.007)	-0.0034 (0.0037)	-0.0034 (0.0034)	-0.0028 (0.0026)	
Control Variables					
INTCOV	-9.72E-13	2.78E-11***	2.78E-11***	3.00E-11**	
LIQD	5.75E-05	3.40E-06	3.40E-06	4.04E-07	
CAPST	-1.35E-02*	-1.50E-02**	-0.0149*	-0.0123**	
Year					
2016	0.0186	0.0121	0.0121	0.0122***	
2017	0.0314**	0.0226	0.0226	0.0230***	
2018	0.0362**	0.0278*	0.0278	0.0279***	
2019	0.0029	-0.0054	-0.0054	-0.0049	
Constant	-0.053	-0.0954	-0.0954	-0.0759	
R-Square	0.033	0.2151	0.2151	0.0854	
Groups	132	132	132	132	
Observations	660	660	660	660	

statistical significance at 10%, 5% and 1% levels.

Source: Authors' own

The robustness of the main results is tested by running an additional test as indicated in Table 4/ (see Table 4). It uses Return on assets (ROA) as the dependent variable to measure corporate performance which is the reciprocal of corporate failure. It is calculated by dividing net income by total assets. An opposite result is expected compared to the results reported in Table 3. Accordingly, CEO duality reflects a negative impact on corporate performance. CEO tenure and directors' average remuneration display a positive influence on corporate performance. Even though these results are consistent, our main regression results are robust.

The study brings new insights into the existing literature in the Sri Lankan context. CEO duality representing a positive effect on failure aligns with the findings of Lakshan and Wijekoon, (2012) This could be justified by the argument of Fama and Jensen (1983), which states that CEO duality disrupts the segregation of decision management and control it limits board's ability to monitor the CEO's decisions. This in turn advances CEO's ability to act in their own personal interest. For instance, the negative relationship between CEO tenure and the corporate failure does not support the theory of entrenchment (Pascal et al., 2018), and brings forth that as the CEOs are long-tenured, they become reluctant to obtain debt and take risks which support the survival of the firm. Therefore our results align with the findings of Jensen & Meckling, (1976). Average director remuneration represents a negative relationship with corporate failure which proves that the directors act in the best interest of shareholders due to the director pay-performance sensitivity. Generally, institutional investors are motivated to encourage large pay packages with strong incentives. It supports to fill the principal-agent gap (Jensen & Meckling, 1976). The results present a significant negative relationship between ownership concentration and corporate failure. It deviates from our expected result. In Sri Lanka, ownership concentration should increase the likelihood of firm survival. It is stated by AL-Khoury, (2006) that block-holders add value to the firm, and small ownership, in general, would not give management incentives to add value to the security holders. This could also be justified as institutional owners possess the ability of monitoring, and the management at lower costs it aids in limiting their earnings management behavior. The board size indicates a significant negative relationship with corporate failure. This could be an effect of upper echelons theory because when the firms are enriched with an effective board with a variety of skills and socio-economic characteristics their backgrounds extensively affect organizational competitiveness and performance (Xu et al., 2019). Furthermore, our findings align with the resource dependency theory (Daily & Dalton, 1994) as large boards could provide critical links to its external environment. Thus, it could be supported by the findings of Pfeffer (2019) which states that in developing countries economic volatility and uncertainty lead large boards to establish better relationships for the provision of valuable

resources. When the decisions are made by a large board, the likelihood of accepting inefficient and unsuccessful projects would be reduced to a greater extent, and the survival of organizations would be sustained.

5. CONCLUSIONS

The purpose of this study is to determine how corporate governance variables influence corporate failure in quoted companies of Sri Lanka. As per the results

obtained, CEO tenure, average director remuneration, ownership concentration and board size decrease the likelihood of corporate failure and CEO duality increase the likelihood of failure. On the other hand, CEO tenure decreases the failure occurrence because CEOs tend to shy away from debts to secure their jobs when they are long tenured. Similarly, higher director remuneration forces directors to act in the best interest of shareholders increasing the likelihood of firm survival. Higher ownership concentration also decreases the failure occurrence in Sri Lankan firms because large block holders possess the ability of limiting the earnings management behavior of the directors. Furthermore, large boards increase firm survival as they provide valuable resources through the linkages with the external environment. CEO duality evinces a positive relationship with failure as CEO duality violates the decision management from decision control. The variables such as board independence and directors' ownership fail to provide any significance on firm collapse.

there are potentials to study the failures of unquoted companies in Sri Lanka in future studies. This study has considered only the accounting implications to assess the failure. Hence, considering the market implications in future studies would add value. Since the corporate governance codes are originated in developed countries, the appropriateness of such codes in the local setting is questionable. Therefore, how a model developed in developed countries could be commuted to a developing context is an important criterion to be concerned in future research.

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