

**THE EFFECT OF SELECTED BOARD STRUCTURE DETERMINANTS ON INTELLECTUAL CAPITAL DISCLOSURE: A STUDY OF NON-FINANCIAL LISTED COMPANIES IN SRI LANKA**

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**INTRODUCTION**

The worldwide economy is currently transforming from an industrial to a knowledge-based economy. According to this transition, the economy must depend on knowledge-based capital, or Intellectual Capital (IC), including knowledge workers, employee-related measurements, patents, trademarks, organizational systems, and business strategies. In today's market, the essential competitive value of IC emphasizes the requirement for high-performance systems to manage. In 2012, the Organization for Economic Co-operation and Development conducted a study showing that creating and using intangible assets such as IC drives many publicly traded companies. Further, Whiting and Birch (2016) indicated that the Corporate Governance (CG) structure establishes the processes for making corporate affairs decisions and the various stakeholders' rights and obligations, including the board of directors, managers, shareholders, and other stakeholders. Information disclosure differs from company to company for multiple reasons. Suganya (2021) has argued that the board of directors controls the disclosure of information in annual reports. According to the World Bank in 2006, effective board structures offer advantages, including value addition, performance enhancement, lower capital costs, and improved risk control. This vital asset dramatically enhances a company's competitiveness (Suganya, 2021). In a competitive global environment, IC disclosure (ICD) becomes essential to inform investors about the affairs of business operations. Chandraratne et al. (2021) suggested that disclosing IC information to stakeholders promotes transparency and facilitates comparisons, reducing knowledge gaps between owners and managers. However, the findings in this research area are inconclusive.

Furthermore, only a few studies were conducted in Sri Lanka, indicating that additional research has to be done in this context. These justifications show that the subject of the current research still requires discussion and more study. Accordingly, this study aimed to narrow the empirical gap between the chosen board characteristics and ICD.

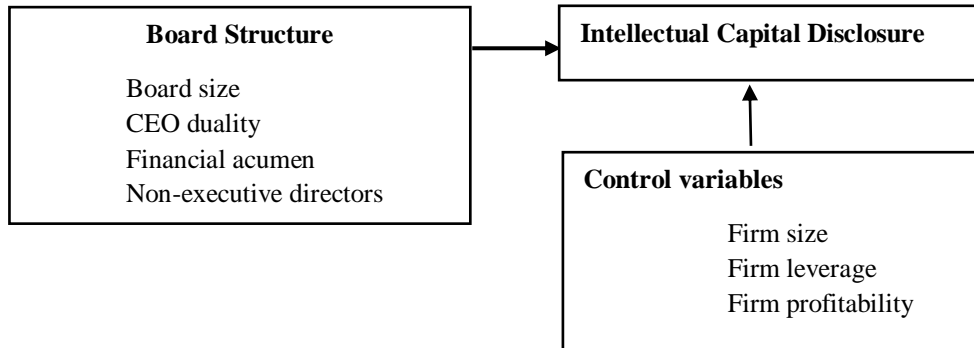
**METHODOLOGY**

The conceptual framework visually illustrates the relationships among independent, dependent, and controlled variables, as depicted in Figure 1. The independent variable consists of six measures where a disclosure index was used as the proxy of the dependent variable.

The study population was non-financial companies listed on the Colombo Stock Exchange (CSE), where the sample was confined to 160 companies, where 60 were excluded due to data unavailability. Consequently, the final sample consisted of 640 firm-year observations from 2018 to 2021. Based on the literature, six independent variable-related hypotheses were developed and tested in the current study. The study used the secondary data collected from annual reports and employed descriptive, Pearson correlation, and panel regression analysis statistical techniques.

**Figure 1**

*Conceptual Framework of the Study*



Two regression models were employed to achieve the research objectives where the first model only included independent variables, whereas the second included both independent and control variables.

$$ICD_{it} = \beta_0 + \beta_1 BS_{it} + \beta_2 CEOD_{it} + \beta_3 FA_{it} + \beta_4 NED_{it} + \beta_5 WD_{it} + \beta_6 FD_{it} + \varepsilon \dots \dots \dots (1)$$

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**RESULTS AND DISCUSSION**

Table 1 summarizes the result of the descriptive analysis of the study. Accordingly, the sample firms have an average of 2 members on the board of directors, with CEO duality (CEOD) observed in 7.8% of sample firms. Additionally, 92% of firms have a financial expert, and the non-executive directors (NED) count ranges from 100% to 69.8%. The highest number of women directors (WD) is 28%, with an average ratio of 7%. Further, 25% of the listed firms in the non-financial sector have foreign directors (FD). Firm size (FS), firm leverage (FL), and firm profitability (FP) are control variables; their respective means are 15.783, 0.909, and 0.035.

**Table 1**  
*Result of the Descriptive Analysis*

Variable	Mean	Std. Dev.	Min	Max	Kurtosis	Skewness
ICD	0.509	0.194	0.054	0.892	2.101	-0.314
BS	2.050	0.250	1.610	2.640	2.499	0.090
CEOD	0.078	0.269	0.000	1.000	10.884	3.144
FA	0.916	0.278	0.000	1.000	9.444	-2.990
NED	0.698	0.175	0.250	1.000	2.397	-0.207
WD	0.071	0.069	0.000	0.286	1.812	0.291
FD	0.256	0.437	0.000	1.000	2.247	1.116
FS	15.783	1.522	12.520	19.350	2.789	0.265
FL	0.909	0.500	0.310	1.567	1.396	0.174
FP	0.035	0.073	-0.114	0.189	2.895	-0.006

Pearson correlation analysis was used to examine the relationships among variables in the study. As per Table 2, board size (BS), financial acumen (FA), NED, FD, FS, FL, and FP

show positive correlations with the dependent variable. However, CEOD and WD do not indicate a significant relationship with the dependent variable.

**Table 2**  
*Result of Correlation Analysis*

	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
(1) ICD	1.000									
(2) BS	0.251*	1.000								
(3) CEOD	0.005	-0.045	1.000							
(4) FA	0.317*	0.057	0.005	1.000						
(5) NED	0.612*	0.425*	-0.058	0.201*	1.000					
(6) WD	0.040	0.178*	-0.115*	0.068	0.039	1.000				
(7) FD	0.118*	0.135*	-0.171*	0.023	0.144*	0.025	1.000			
(8) FS	0.366*	0.244*	0.022	0.079*	0.277*	0.091*	0.226*	1.000		
(9) FL	0.134*	0.077	0.119*	-0.062	0.108*	-0.152*	0.052	0.354*	1.000	
(10) FP	0.240*	0.097	-0.050	0.1695*	0.134*	0.018	0.029	0.068	-0.253*	1.000

N = 640, \*\* p<0.01 \*p<0.05.

After addressing the autocorrelation issue and performing diagnostic tests, such as outlier tests and multicollinearity assessment, the regression models' results are shown in Table 3. The choice between the fixed-effects and random-effects models was made using the Hausman test.

**Table 3**  
*Result of Panel Regression Analysis*

	Model I (Fixed Effect)		Model II (Fixed Effect)	
	Coef	Std.Err.	Coef	Std.Err.
BS	-0.015	0.023	-0.018	0.230
CEOD	0.031	0.017	0.028	0.017
FA	0.024*	0.008	0.023*	0.008
NED	0.021*	0.002	0.021*	0.002
WD	0.008	0.011	0.006	0.011
FD	0.002	0.180	0.001	0.017
FS			0.000	0.010
FL			0.001	0.010
FP			0.111*	0.043
Cons	0.391		0.388	0.165
		0.45		
		9		
R <sup>2</sup> Overall		0.397		0.423
F		14.41		10.41
Hausman Test				
Chi- Square		374.49		297.75
P-Value		0.000		0.000

According to the Hausman test result in Table 3, the Fixed Effect Model was appropriate for both models. The R<sup>2</sup> value for models I and II is 39% and 42%, respectively. The result related

to the BS revealed no significant impact of BS on ICD. The current finding is consistent with a recent study conducted by Chandraratne et al. (2021), although it contrasts with some previous scholars' findings (Alfraih, 2018; Vitolla et al., 2020). The effect of CEO on ICD indicated an insignificant impact, which goes hand in hand with the finding of Alfraih (2018). This finding aligns with a study conducted by Dias and Manawaduge (2021) in the same geographical context. The result related to the FA in the two models indicated a significant effect. Thus, FA significantly affects the ICD in the selected companies. Krishnan and Lee (2009) highlighted that board members with financial expertise improve a company's decision-making quality. According to them, financial experts in the board members can contribute valuable insights to the decision-making process, enhancing decision quality in areas like investment appraisal, financial health assessment, and strategic financial planning. Further, board members with financial knowledge offer a deep understanding of financial concepts, tools, and frameworks, enabling them to identify risks and opportunities overlooked by others. Accordingly, considering the Sri Lankan economic and social context, this situation dramatically affects ICD due to the high level of voluntary disclosure. Both models consistently indicate that NED significantly affects ICD, aligning with prior research findings (Asare et al., 2021; Vitolla et al., 2020). Further, research conducted by Puwanenthiren (2018) supports the significant effect of NED on ICD within the same regional context. The proportion of WD has no impact on ICD. This result was consistent with Oba et al. (2013), although it contrasts with the finding of Vitolla et al. (2020). According to the results of both models, FD has no significant impact on ICD, which contradicts the conclusion reached by Oba et al. (2013).

## CONCLUSION AND IMPLICATIONS

The study aimed to ascertain how the board structure affected ICD in Sri Lankan-listed non-financial companies. The mean ICD of the sample companies is lower (50.09%) than that of Chandraratne et al. (2021) research conducted in the same research setting (63.19%). In line with earlier research, the data showed that neither CEO nor BS impacted ICD. However, ICD was considerably affected by the board's FA and NED. FD and WD had no discernible effects. Overall, the results indicate that the impact of board characteristics on ICD in Sri Lanka is only partially supported, possibly due to Sri Lanka's weak CG regulations and inadequate disclosure frameworks. The research has limits because it only examined non-financial companies listed on the CSE, which may impact how generalizable the results are. Companies in the financial sector were excluded due to regulatory variations. Concerns regarding possible window dressing arise from the reliance on secondary sources, particularly annual reports. The ICD index was created by considering the chosen items revealed in the sample companies' annual reports. There might have been additional factors that the current study should have considered.

**Keywords:** Corporate governance, intellectual capital disclosure, non-financial listed companies

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