IMPACT OF CORPORATE GOVERNANCE ON INTELLECTUAL CAPITAL EFFCIENCY - EVIDENCE FROM SRI LANKAN BANKING SECTOR

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ABSTRACT

The study explores the intricate link between Corporate Governance (CG) factors and Intellectual Capital (IC) efficiency within the Sri Lankan banking sector. It delves into the impact of variables such as Board Size (BSIZE), Board Activity (BACT), Board Independence Composition (BIND), Audit Committee Size (AUDS), and Frequency of Audit Committee Meeting (AUDM) on Intellectual Capital, treating the latter as the dependent variable. For the five years between 2018 and 2022, the research technique comprises a thorough investigation of banking sector company in Sri Lanka, excluding three banks. The goal of the study is to obtain understanding of the connection between CG variables and IC efficiency through secondary data analysis using data from stock market transactions and audited financial statements. The main analytical tools are descriptive statistics and regression modeling, which enable a detailed comprehension of the relationship between CG dynamics and IC efficiency. Through a detailed examination of these variables across time and across different financial institutions, the study seeks to illuminate the ways in which CG practices impact the creation and application of IC in the banking industry. In the conclusion, the results of this study are important not only for scholars but also for professionals and decision-makers in the banking sector in Sri Lanka. The study provides significant insights that can guide strategic decision-making, governance reforms, and resource allocation within banking institutions, ultimately leading to improved organizational efficiency and long-term sustainability. This is achieved by revealing the complex relationships between Corporate Governance and Intellectual Capital.

Keywords: Corporate Governance, Intellectual Capital, Value Added Intellectual Coefficient

1. INTRODUCTION

Corporate Governance (CG) and Intellectual Capital (IC) have become topics of great concern in entities in recent time. Solving problems about collective action among dispersed investors and solving conflicts of interest among different corporate owners can be defined as CG. Excellent CG and fully revealed facts help to reduce the agency problem by demonstrating management transparency and management accountability in running a corporation (Sanad and Al-Sartawi, 2016). According to Tricker (2000) the growth of corporations, the complexity of corporate groups and the challenges of ensuring proper accountability and corporate responsibility in an increasingly global business world have all heightened in CG. A system of laws, policies, regulations and guidelines which are protected shareholders, investors and other stakeholders from loss of financial side due to fraudulent acts can be identified as CG.

IC is considered as a key strategic asset in value creation process for enterprises in a knowledge-based economy (Ranjith and Bhuyan, 2015). According to Saunders and Brynjolfsson (2016), researchers are currently concentrating their efforts on IC which includes an employee's expertise and experience, systems which are related to database and information, goodwill, commercial relationships and alliances. IC brings value to businesses by enhancing knowledge sharing and the generation of new knowledge (Meer-Kooistra and Zijlstra, 2001). Many companies, including banks are focusing on improving their efficiency of IC as a means of increasing wealth of them (Aslam and Haron, 2021). However, managing IC can be identified as a considerable crucial challenge. Because of its multidimensional character and diverse variation, managing IC remains a significant problem for businesses (Buallay and Hamdan, 2020; Corvino and Caputo, 2019). CG disclosure on a voluntary basis disclosure is seen as a valuable addition to financial statements.

According to Ranjith and Bhuyan (2015), if IC is not maintained properly, it may be suboptimal, and its power of creation value may be less. Dzemyda and Jurgelevièius (2014) mentioned that IC can alter the countries' economic structure and has a great impact on the country's long-term development. Due to its complexity and diversity, managing IC remains one of the most difficult tasks for accountants (Hussinki, 2015). As a result, various studies emphasize the importance of understanding the role of corporate governance (CG) in effectively utilizing, preserving, and maintaining an organization's intellectual capital (IC) (Ranjith and Bhuyan, 2015; Saruchi, 2019). The connection between CG side and IC has many facts and CG decision-makers have a fiduciary responsibility to manage and fully utilize IC (Keenan and Aggestam, 2001).

CG and IC can be identified as the primary value drivers of a firm's performance and they have become important aspects in boosting competitive advantage and lowering agency problems for such firms, because IC is not as obvious as CG and because it is similar to many other intangible assets, it may be difficult to recognize and disclose in financial statements. As a result, there is a discrepancy between the financial statement value of a company and its actual market worth. According to Gangi (2018) companies will add value through IC with mechanisms of effective CG by providing a protected workplace, providing training, improving processes, hiring experts, education programs and systems, and building a valuable relationship with stakeholders. Furthermore, Andreeva and Garanina (2017) suggested that a more noteworthy development, observations and adaptability will be required for IC in the procedures of leadership of the level of board and management. Therefore, it will boost stakeholder's and employee's confidence in the quality of CG which is used in international business (Aslam and Haron, 2021).

This study will be directed towards Sri Lankan banking sector. The banking sector of Sri Lanka dominants 61.9% of the total assets of financial sector in Sri Lanka at the end of year 2022. The banking sector accounts for approximately 8.2% of total gross domestic products (GDP). Total loan as a percentage of GDP represents 48.3% of banking industry intermediation. Individual deposits are mobilized and loans to small businesses and individuals are made. Liquidity is provided by banking sector for the economy while modifying risk characteristics of asset. 24 licensed commercial banks and 6 licensed special banks are operated under Sri Lankan banking sector at present. In addition, banking sector is most operating sector from sector of bank finance and insurance in Colombo stock exchange (CSE) Sri Lanka and due to Covid 19 pandemic, a lot of changes took place in the banking sector with compare with other sectors. Special in the area of IC and CG (Harshana and Wanniarachchige, 2022). A significant relationship can be identified between IC and performance (ROE) of Sri Lankan banks (Aruppala and Wickramasinghe, 2015). But most researchers rarely take the banking sector into their studies because of regulations and existing changes in financial statements. But this industry is very powerful and important industry and both CG and IC play an important role in sector of banking (Faisal and Hassan, 2016). Therefore, it is important to carry on research on this topic in the Sri Lankan context by using related indicators. The main objective of this research is to investigate the relationship between corporate governance (CG) factors and intellectual capital (IC) efficiency in Sri Lankan banking sector. The banking sector plays a pivotal role in the economic stability and growth of any country, making it a crucial area for study, particularly in the context of Sri Lanka (Gowthaman, 2022). The selection of the banking sector for this research is justified by its significant contribution to financial intermediation, as evidenced by the fact that total loans represent 48.3% of GDP, highlighting its central role in the economy. Additionally, the sector's function in mobilizing individual deposits, providing liquidity, and modifying the risk characteristics of assets further underscores its importance. Unlike other sectors, the banking industry is highly regulated and sensitive to changes in corporate governance (CG) practices and intellectual capital (IC) efficiency. Effective CG is vital for maintaining the confidence of depositors, investors, and other stakeholders, while IC is essential for fostering innovation, improving service delivery, and ensuring competitive advantage in an increasingly knowledge-driven economy. The COVID-19 pandemic has accelerated changes in these areas, making the study of CG and IC in the Sri Lankan banking sector not only relevant but necessary for understanding how banks can navigate and thrive in a post-pandemic world. Therefore, this research aims to investigate the relationship between CG factors and IC efficiency within this sector, offering insights that could be pivotal for both academia and industry practitioners. Several theoretical frameworks are relevant

when exploring the impact of corporate governance on intellectual capital efficiency. Agency theory, Stakeholder theory, Institutional theory and Dynamic Capabilities theory collectively enhance our understanding of the intricate relationship between corporate governance and intellectual capital efficiency. Illuminating the principalagent relationship, Agency Theory emphasizes potential conflicts between shareholders and management (Jensen and Meckling, 1976). In the context of intellectual capital efficiency, this theory reveals insights into how governance mechanisms influence managerial decisions, mitigating conflicts and fostering the efficient use of intellectual capital. Stakeholder Theory posits that organizations should consider the interests of various stakeholders beyond just shareholders (Harrison and Freeman, 2015). When applied to corporate governance and intellectual capital, it broadens the perspective, highlighting the broader implications for stakeholders such as employees, customers, and the community. Institutional Theory explores how organizations conform to societal norms and expectations (Powell and DiMaggio, 1983). In the context of corporate governance and intellectual capital, this theory unveils how governance practices align with or deviate from institutional expectations, thereby influencing the efficient management of intellectual capital. Focusing on a firm's ability to adapt and innovate, Dynamic Capabilities Theory is instrumental in understanding how governance structures enable organizations to capitalize on intellectual capital in dynamic business environments (Teece, 1997). These theories have been widely used by researchers to convey the significance of corporate governance and intellectual capital.

2. LITERATURE REVIEW

2.1. Corporate Governance

In the literature, corporate governance (CG) is a topic of great significance and concern. It refers to the conventions, methods, rules, regulations, and institutions that guide corporations and organizations in managing, behaving, and controlling their activities. The concept of CG aims to achieve the organization's goals, fulfill its achievements, and maintain relationships with stakeholders such as shareholders and the board of directors. Successful corporate governance in an organization involves aligning the interests of the firm's stakeholders and finding a balance between control and ownership. According to the Organization for Economic Cooperation and Development CG encompasses the way in which business corporate decisions, as well as the distribution of rights and responsibilities among different players within the organization, including the board of directors, shareholders, managers, and other relevant stakeholders. CG also provides the structures and systems for setting, monitoring, and achieving corporate goals.

However, CG is a relatively new idea (Cadbury, 1992). According to Claessens and Yurtoglu (2012) the concept has evolved over the last decade to meet the emergence of the corporate social responsibility (CSR) concept and the increased involvement of both stakeholders and shareholders in business decision- making processes, and

they identified two types of people. One of them is focused with corporate behavioral patterns such as efficiency, financial structure, growth, performance, and stakeholder and shareholder treatment. Another is the normative framework and the rules that regulate how firms operate, such as regulations originating from financial markets, labor markets, and the legal system, among other areas. According to Cadbury (1992), corporate governance is the mechanism that controls and directs companies; however, Zingales (1998) defined governance as a complicated collection of constraints that influence ex post bargaining over the firm's quasi rents earned. The CG and expressions are used to explain how corporations command and control their activities. It includes the rules, protocols, and processes, as well as the attitudes and values that suffocate a Council arrangement for effective and efficient management, customer satisfaction, leadership, stewardship of public monies, performance, and community participation.

According to the Cadbury (1992), corporate governance is the mechanism that controls and directs companies; however, Zingales (1998) defined governance as a complicated collection of constraints that influence ex post bargaining over the firm's quasi rents earned. According to Jensen and Meckling (1976), governance systems such as shareholder voting, the non-executive directors' apparatus, and so on, are measures that finance suppliers require to safeguard their interests in a world of imperfectly verifiable acts. Jensen and Meckling (1976) also investigated the case of an owner-manager who is 100% committed to selling a portion in the company to outsiders. According to the Organization for Economic Cooperation and Development (OECD) the CG is the system through which corporations are regulated and governed. The CG structure establishes the distribution of obligations and rights among various related stakeholders of the organization, such as shareholders, director board, other stakeholders, and managers, and sets the norms and procedures for business decision making. According to the organization for economic co-operation and development (OECD), CG comprises a wide variety of concepts and phenomena.

The board of directors, the senior management duties, the legal and regulatory framework, accountability and transparency, risk management strategies, and information flows can be highlighted as the more crucial parts of the CG (Uhlaner et al., 2007). More external candidates, shorter CEO tenures, and higher CEO compensation, sometimes through subtle or indirect mechanisms, are also part of a new trend that is related to CG toward good diligence of boards will guide to CEOs. Furthermore, they expected that, under suitable conditions, the terms of CEO selected externally would be shorter than those of CEOs nominated domestically. Previous and subsequent studies have discussed the value of CG in both developed and developing nations. Substantial linkages between business performance and governance have been discovered through research (Hermalin, 2005). They also claimed that higher CG is associated with both greater performance and improved firm valuation. According to Bruno and Claessens (2007), CG measures play a significant role in a company's efficient operation, the protection of shareholders, and a positive impact on valuation. However, at the national level, they have little bearing on valuation and there are signs of possible over regulation.

Under CG, a lot of significant and distinctive characteristics can be recognized. Committees, the board of directors, organizational hierarchy, learning and monitoring controls, processes, policies, the legal system, accountability, and openness are a few of them. Elements of CG include board size, board activity, board independence composition, audit committee size, frequency of meetings, and audit committee independence composition. According to prior studies, the four primary components of CG are people, purpose, performance, and process. Recent research suggests that there aren't many reasons to concentrate on CG. According to the findings of the earlier studies stated above, CG appears to be a significant issue that affects several different factors. At the same time, when combined with the above definitions, it appears that the mechanism through which firms are directed and governed is known as corporate governance.CG is influenced by a country's political climate, economic landscape, and legal system, as well as its financial resources and historical and cultural context. This recent research has emphasized several aspects of legal frameworks and essential CG practices that are connected to improved business performance, as well as the channels via which CG may influence firm performance. The notion of corporate governance (CG) has also mitigated the risk of private benefits and expropriation by controlling shareholders, thereby reducing agencyrelated issues between shareholders and managers, as well as among different stakeholders within the organization.

2.2. Intellectual Capital

Intellectual capital is a comprehensive concept that encapsulates the intangible assets and knowledge-based resources critical to an organization's value creation and sustained competitiveness. Coined by Stewart (1997) as the "new wealth of organizations," this multifaceted construct comprises various dimensions that collectively contribute to organizational success. Human capital, one of the foundational pillars of intellectual capital, represents the collective skills, expertise, and knowledge possessed by an organization's workforce. The investment in employee development and knowledge management practices is central to enhancing human capital (Edvinsson and Malone, 1997). Structural capital, another integral component, encompasses the organizational infrastructure, processes, and systems that facilitate the efficient utilization and dissemination of knowledge. This includes databases, patents, and other intellectual property that contribute to operational excellence and innovation within the organization. Edvinsson and Malonem (1997) stressed the importance of structural capital in realizing an organization's hidden brainpower. Relational capital extends the scope of intellectual capital to external stakeholders, emphasizing the significance of relationships and networks with customers, suppliers, and partners. Nahapiet and Ghoshal (1998) argued that the social interactions and collaborations fostered through relational capital enhance the organization's ability to acquire and leverage external knowledge. Innovation capital, a dynamic dimension, underscores an organization's capacity for creativity, adaptability, and continuous innovation. Bontis (1998) emphasized that this dimension encompasses proprietary technologies, the ability to adapt to change, and a commitment to ongoing innovation efforts.

In the knowledge-driven economy, effectively managing and utilizing these elements of intellectual capital is critical for corporate success. Human, structural, relational, and innovation capital strategically aligned enables firms to handle challenges, stimulate innovation, and create long-term value. As businesses increasingly realize the critical role of intellectual capital in their success, research and practice continue to evolve, revealing insights into effective techniques for managing and utilizing intellectual capital in a variety of industries and circumstances.

2.3. Review of Related Empirical Literature

The relationship between corporate governance (CG) and intellectual capital (IC) in various countries, including Sri Lanka and India, has been a subject of extensive research. Balasundaram (2019) highlighted the significance of audit committee characteristics, such as meeting frequency and size, in determining IC in Sri Lanka. Puwanenthiren (2018) explored the connection between CG and IC disclosure in Sri Lankan companies, emphasizing the positive impact of board size on IC disclosure. In India. Kamath (2021) conducted an analysis of IC in manufacturing and service sectors, revealing the substantial influence of board size and independence on IC disclosures. Widiatmoko et al. (2020) examined Indonesian companies, establishing a positive association between CG and IC disclosure, subsequently impacting market capitalization. Notably, the impact of CG measures on IC varied, with factors like board size, audit committee characteristics, and ownership structures influencing IC disclosure and quality differently in different contexts (Alshhadat, 2017; Benjamin and Yahaya, 2022). The research landscape spans from developed nations like the UK (Baldini and Liberatore, 2016) to emerging economies like Oman (Dalwai and Mohammadi, 2020) showcasing the global relevance of understanding the interplay between CG and IC. The ongoing studies contribute to refining our understanding of these dynamics across diverse cultural and economic contexts.

Corporate governance (CG) is critical when making major investment decisions, as it ensures transparency, accountability, and alignment of interests among stakeholders. Over the years, various studies have been conducted to examine the impact of CG on key concepts such as financial performance, risk management, corporate sustainability, and shareholder value. These studies highlight the importance of strong governance frameworks in fostering trust, enhancing decisionultimately contributing long-term making. and to the success of organizations.Furthermore, many previous researchers have emphasized the importance of understanding the CG role in the development and maintenance of IC attributed to enterprises in critical research (Keenan and Aggestam, 2001). Pulic (2002) developed a valuable model known as the Value-Added Intellectual Coefficient (VAIC) to investigate the impact of value creation in companies with both tangible and intangible assets. Buallay and Hamdan (2020) examined the relationship between CG and IC in 171 Saudi stock exchange listed companies from 2012 to 2014 and discovered that organizations with higher CG have higher human and structural

efficiency. Similarly, Wahid et al. (2013) discovered a beneficial relationship between CG and IC.

2.4. Hypotheses Development

Based on the view of past research, the hypotheses of current study were developed as follows,

Board Size

Another factor that influences intellectual capital disclosure (ICD) is board size. In this regard, the stewardship theory implies an undeniable influence of appropriate supervision and performance on the part of senior management, which is entirely dependent on the characteristics of the director board. In this context, among the proposed components encompassing board directors' size, types of organization, and the potential effect of sectoral environment, the size of the board of directors plays a significant role. Such an influence on voluntary disclosure is explained by the power concentration theory, which states that when power is concentrated in a few people, it can affect decision-making, causing managers to act in their own self-interest rather than the interests of the company (Salehi and Farzaneh, 2018). Therefore, a greater number of board directors may lead to distribute power among more individuals who represent different parties and shareholders (Puwanenthiren, 2018). Fernandes and Bornia (2019) investigated the influence of boards of directors on listed companies' voluntary disclosure of information concerning IC using an analytical framework comprised of agency theory and a resource-based perspective. They emphasize the importance of exercising caution when adding additional directors to an existing board, as it may not necessarily lead to improved disclosure outcomes. It is crucial to analyze the internal mechanisms of corporate governance, particularly the characteristics of the board of directors, to understand how they influence the voluntary disclosure of intangibles. They find that increase in the number of members of the boards, up to 15 has a beneficial effect on the disclosure of intangibles. Allegrini and Greco (2013) found a positive association between board size and levels of ICD.

H₁: There is a significant positive impact of board size on IC efficiency.

Board Activity

Puwanenthiren (2018) discovered that board activity was only marginally related to IC efficiency and disclosures. Allegrini and Greco (2013) discovered a link between the number of board meetings and voluntary information releases. Boards of directors that form quickly are thought to be more successful and diligent in monitoring management (Lipton and Lorsch, 1992). However, the following hypothesis was developed for this study based on prior literature and related theory.

H₂: There a significant positive impact of board activity on IC efficiency.

Board Independence Composition

Board independence is one of the most important indicators for demonstrating the effectiveness of the board of directors and its impact on IC disclosure. Ranjith and Bhuyan (2015) found that board composition was significantly related to IC. According to Corvino and Caputo (2019), there is a positive relationship between board independence and the level of IC, but there is also a negative relationship (Al-Musali, 2015). The IC effectiveness of Oman's banking sector and subsectors was not associated with board independence compositions (Dalwai and Mohammadi, 2021). Therefore, based on the common view of above literatures, the hypothesis of current study is as given below.

H₃: There is a significant impact of board independence composition on IC efficiency.

Audit Committee Size

Proponents of agency theory (Hillman, 2003) argued that increasing the size of the audit committee may improve control and monitoring functions. The size of the audit committee may also be beneficial to the audit (Baxter and Cotter, 2009). Large audit committees benefit from members with diverse expertise who more effectively supervise financial reporting processes (Vafeas, 2010). According to DeZoort and Hermanson (2003), a larger audit committee can form a subcommittee comprised of specialists, experienced, and expert members capable of resolving financial reporting issues. Dalwai and Mohammadi (2021) developed the hypothesis that there was a positive relationship between audit committee size and intellectual capital in Oman's financial sector, but it was not supported. They also stated that the size of the audit committee is negatively related to the VAIC and the efficiency of human capital in banks. According to Haji (2015), the size of the audit committee has a significant and positive influence on the overall quantity of IC disclosures at the 5% level. The size of the audit committee is significantly and positively related to IC (Mangena et al., 2012). The following hypothesis was developed for this study based on prior literature and related theory.

H₄: There is a significant positive impact of audit committee size on IC efficiency.

Frequency of Audit Committee Meeting

This variable has been found to be substantially related to the efficiency of IC in the banking industry. The frequency of audit committee meetings had a significant favorable effect on IC (Dalwai and Mohammadi, 2020; Buallay and Hamdan, 2020). According to Abbott (2000), the regularity with which audit committee meetings are held reflects their motivation to perform their tasks. According to Haji (2015), the frequency of audit committee meetings has a good and significant impact on overall IC. Based on the preceding literature and related theory, the following hypothesis was created for this investigation.

 H_5 : There is a significant positive impact of frequency of audit committee meeting on IC efficiency.

3. METHODOLOGY

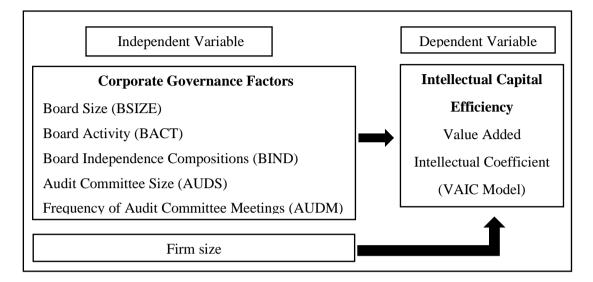


Figure 1: Conceptual Framework Diagram

The main objective of this study was to investigate the relationship between corporate governance on intellectual capital efficiency in Sri Lankan banking industry. This study analyzed data using a quantitative approach. These quantitative approaches are followed by hypothesis or theories that are tested to determine whether they are true or false, and this method has a higher predictive capacity than other methods in formal studies. The title of this study will be more related to a quantitative approach and easily accessible numerical figures, as well as the creation of hypotheses and the use of a calculation process to achieve research objectives. Sample size of this study thirty but due to the data unavailability three banks have to be excepted from sample size. Annual reports of companies in banking sector from last 5 years from 2018 to 2022 will be analyzed and this method is consistent with previous studies were conducted by several scholars to study the connection between CG and IC (Dalwai and Mohammadi, 2020).

The dependent variable is Value Added Intellectual Coefficient (VAIC) and it was measured by using VAIC model. The VAIC model was developed for analyzing and measuring both the efficiency and size of IC. The equation of measurement of VAIC is as given below.

The independent variables were Board Size (BSIZ), Board Activity (BACT), Board Independence Composition (BIND), Audit Committee Size (AUDS), Frequency of Audit Committee Meetings (AUDM). BSIZ was measured by using the total number of members in the committee of board of directors (Hidalgo, 2010). BACT was

measured using number of board meeting held by firm (Allegrini and Greco, 2013). BIND was measured utilizing the number of independent directors as a percentage of total directors (Nadeem, 2020). AUDS was measured using the number of members of audit committee (Aldamen and Duncan, 2011). AUDM was measured using the number of audit committee meetings held in a financial year (Beasley, 2000). Firm size (SIZE) was used as the control variable of the study. Natural logarithm of total assets used to measure the firm size of the company. Niresh (2014) also measured firm size by using the logarithm of total assets. In keeping with most other studies, this study used the logarithm of total assets as a measurement criterion for firm size.

4. DATA ANALYSIS AND DISCUSSION

Descriptive statistics, Correlation analysis and Regression analysis are used in the examination of the research objective. According to Ranjith and Bhuyan (2015), Pearson correlation among independent variables were generated and analyzed to identify potential multi collinearity issues. The analysis reveals the findings of firms over a 10-year period, linking mechanisms of corporate governance (CG) factors and intellectual capital (IC) using a fixed-effects regression model. Dalwai and Mohammadi (2020) discussed these techniques in their study. Regression model has been used for investigating relationship between CG factors and IC. The regression model used in the study is as given below;

 $VAIC_{it} = \beta 0 + \beta_1 BSIZE_{it} + \beta_2 BACT_{it} + \beta_3 BIND_{it} + \beta_4 AUDS_{it} + \beta_5 AUDM_{it} + \beta_6 SIZE_{it} + \varepsilon....(02)$

There are three models offered to estimate parameters. They are pooled method, fixed effect and random effect method. All three models also be estimated in order to choose the model that best fits the objectives of the study. There are two tests that can be used for selecting a panel data regression model, Hausman test, and the Redundant fixed effects tests. Based on the results, this study used random effect model.

Regression Results

Variable	Coeff.	Std. Error	t-statistic	Prob.
С	2.7530	0.8389	3.281	0.001
BSIZ	0.3162	0.1452	2.177	0.031
BACT	0.0541	0.0189	2.871	0.004
BIND	0.3239	0.4063	0.797	0.027
AUDS	0.0304	0.0398	0.764	0.046

Table 1: Regression Results

AUDM	-0.029	0.0247	-1.202	0.232
SIZE	0.022	0.0279	0.799	0.425
R-squared	0.700	Mean dependent var	3.868	
Adjusted R squared	0.665	S.D. dependent var	1.363	
S.E. of regression	0.498	Sum squared resid	4.185	
F-statistic	0.905	Durbin-Watson stat	1.876	
Prob(F-statistic)	0.004			

Source: Author Calculation

When looking at the probability value of the F-statistic, it is explained that the entire model is significant at the 5% confidence level, hence the probability value of the F-statistic is 0.004. That suggests the overall model is significant at a high level of confidence. When considering R square, all independent variables explain 70% of the dependent variable of intellectual capital. Since the Durbin-Watson value is 1.8, there is no autocorrelation in the selected sample. BSIZ, BACT, BIND and AUDS were statistically significant at a level of 0.05. AUDM and SIZE are statistically not significant at a level of 0.05.

H₁ assumes board size has significant positive relationship with IC efficiency. The results of the regression analysis mention a positive coefficient of 0.316 with the probability value of 0.031 which is significant because if the probability value (P) is less than 0.05, this probability can be identified as significant. This hypothesis can be accepted because coefficient of board size is positive, and probability is significant. It is concluded that board size has significant positive impact on IC efficiency. H₂ assumes board activity has significant positive relationship with IC efficiency. The regression analysis shows a positive coefficient of 0.054 with the probability value of 0.049 which is significant and there is a significant positive relationship between board activity and IC efficiency according to this analysis. This hypothesis can be accepted, and it is concluded that board activity has significant positive impact on IC efficiency. H₃ mentions board independence composition has significant positive relationship with IC efficiency. The results of the regression analysis represent a positive coefficient of 0.323 with the probability value of 0.0273 which is significant and there is a significant positive relationship between board independence composition and IC efficiency according to this analysis. This hypothesis can be accepted, and it is concluded that board independence composition size has significant positive impact on IC efficiency. H₄ assumes audit committee size has significant positive relationship with IC efficiency. the results show a positive coefficient of 0.323 with the probability value of 0.044 which is significant and there is a significant positive relationship between audit committee size and IC efficiency according to this analysis. This hypothesis can be accepted, and it is concluded that audit committee size has significant positive impact on IC efficiency. H_5 shows frequency of audit committee meetings has significant positive relationship with IC efficiency. the results of the regression analysis represent a negative coefficient of 0.297 with the probability value of 0.232 which is insignificant because this probability value (P) is more than 0.05 as result of that this hypothesis has to be rejected because probability is not significant.

This section presents an integrated explanation of the research's findings. In this research, board size has significant positive relationship with IC efficiency, board activity has significant positive relationship with IC efficiency and audit composition has significant positive relationship with IC efficiency. In considering the relationship between frequency of audit committee meeting and IC. H₅ was rejected according to regression analysis. Reasons for this mismatching is content of this audit committee meeting frequency have been negatively affected to human capital efficiency and content of audit committee meeting frequency are not much related with side of IC as well.

5. CONCLUSION

Investigating the relationship between CG factors and IC in Sri Lankan banking sector can be identified as the main objective of this study and under this objective, few outcomes could be found through analysis. A positive significant relationship between board size and IC was confirmed significantly. In addition, the positive significant relationship between board activity and IC, board independence composition and IC, audit committee size and IC were also confirmed significantly though this study, but the findings indicated that it's difficult to conclude, and audit committee meeting are positively associated with the IC. Findings of this study are practically important to investment analysts, government, shareholders, directors of other company and managers in Sri Lanka. Not only that this study is also important to students for conducting research. Few limitations can be identified with this study. Sample size of this study is small due to this study is limited to Sri Lankan banking sector. Due to data unavailability, three banks have to be excepted form sample size, because there is not any published data regarding corporate governance factors for those three banks. Another limitation of this study is using the VAIC, and it is a proxy for IC. This type of measurement is complex and have some matters. Future researchers can consider about border area than banking sectors. In this study, all findings are limited with banking sector only, but future researchers can be extending their area to financial sector in Sri Lanka as a whole. Future researchers must consider about selecting suitable model for analysis. Using more independent variable than this research is another suggestion for future study. Future researchers may consider using other methods of data collection to examine the relationship between corporate governance mechanisms and IC (e.g. interviews and surveys). In considering the data collection process for this study, not using published annual report for collecting corporate governance data can be mentioned as another suggestion for future research, because all banks and financial companies are not published their corporate governance figures clearly.

REFERENCES

Abbott, L.J. (2000) 'The effects of audit committee activity and independence on corporate fraud', *Managerial Finance*, 26(11), pp. 55–68.

Aldamen, H. and Duncan, K. (2011) 'Audit committee characteristics and firm performance during the global financial crisis', in *6th International Conference on Corporate Governance*.

- Allegrini, M. and Greco, G. (2013) 'Corporate boards, audit committees and voluntary disclosure: Evidence from Italian listed companies', *Journal of Management & Governance*, 17(1), pp. 187–216.
- Al-Musali, M.A.K.M. (2015) 'Board diversity and intellectual capital performance: The moderating role of the effectiveness of board meetings', *Accounting Research Journal*, 28(3), pp. 268–283.
- Alshhadat (2017) 'The patterns of the intellectual capital disclosure in emerging economies: The case of Jordanian companies', *S.L.: S.N.*
- Andreeva, T. and Garanina, T. (2017) 'Intellectual capital and its impact on the financial performance of Russian manufacturing companies', *Foresight and STI Governance*, 11(1), pp. 31–40.
- Aruppala, D. and Wickramasinghe, V. (2015) 'Intellectual capital and financial performance in Sri Lankan banks', in 6th International Conference on Business & Information.
- Aslam, E. and Haron, R. (2021) 'Corporate governance and banking performance: The mediating role of intellectual capital among OIC countries', *Corporate Governance*, 21(1), pp. 111–136.
- Balasundaram, N. (2019) 'Audit committee characteristics and their impact on intellectual capital disclosure: A study of listed manufacturing companies in Sri Lanka', Asia-Pacific Management Accounting Journal (APMAJ), 14(1), pp. 135–149.
- Baldini, M.A. and Liberatore, G. (2016) 'Corporate governance and intellectual capital disclosure: An empirical analysis of the Italian listed companies', *Corporate Ownership & Control*, 13(2).
- Baxter, P. and Cotter, J. (2009) 'Audit committees and earnings quality', 49(2).
- Beasley, M.S. (2000) 'Fraudulent financial reporting: Consideration of industry traits and corporate governance mechanisms', *American Accounting Association*, 14(4), pp. 441–454.
- Benjamin, U.D. and Yahaya, O.A. (2022) 'Effect of financial performance on environmental reporting practices of listed manufacturing firms in Nigeria', 2(2), pp. 321–336.

- Bontis, N. (1998) 'Intellectual capital: An exploratory study that develops measures and models', *Management Decision*, 36(2), pp. 63–76.
- Bruno, V. and Claessens, S. (2007) 'Corporate governance and regulation: Can there be too much of a good thing?', *Journal of Financial Intermediation*, forthcoming, p. 50.
- Buallay, A. and Hamdan, A.M. (2020) 'The efficiency of GCC banks: The role of intellectual capital', *European Business Review*, 32(3), pp. 383–404.
- Cadbury, A. (1992) *Financial Aspects of Corporate Governance Committee*, London: Division of Professional Publishing Ltd.
- Claessens, S. and Yurtoglu, B.B. (2012) 'Corporate governance in emerging markets: A survey', p. 77.
- Corvino, A. and Caputo, F. (2019) 'The moderating effect of firm size on relational capital and firm performance: Evidence from Europe', *Journal of Intellectual Capital*, 20(4), pp. 510–532.
- Dalwai, T. and Mohammadi, S.S. (2020) 'Intellectual capital and corporate governance: An evaluation of Oman's financial sector companies', *Journal of Intellectual Capital*, pp. 1125–1152.
- Dalwai, T. and Mohammadi, S.S. (2021) 'Does intellectual capital and corporate governance have an impact on annual report readability? Evidence from an emerging market', *International Journal of Emerging Markets*, 18(9), pp. 2402–2437.
- Teece, D.J. (1997) 'Dynamic capabilities and strategic management', *Strategic Management Journal*, 18(7), pp. 509–533.
- DeZoort, F.T. and Hermanson, D.R. (2003) 'Audit committee support for auditors: The effects of materiality justification and accounting precision', *Journal of Accounting and Public Policy*.
- Dzemyda, I. and Jurgelevièius, A.J. (2014) 'The impact of intangible capital on countries' sustainability during the economical recession', *Economics Business*.
- Edvinsson, L. and Malone, M.S. (1997) Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower, Business, Computer Science.
- Faisal, M. and Hassan (2016) 'Impact of corporate governance on intellectual capital efficiency: Evidence from KSE listed commercial banks', 28(4), pp. 353–361.
- Fernandes, S.M. and Bornia, A.C. (2019) 'The influence of boards of directors on environmental disclosure', *Management Decision*, 15(9), pp. 2358–2382.
- Gangi, F. (2018) 'Sustainable development and corporate governance in the financial system: Are environmentally friendly banks less risky?'

- Gowthaman, J. (2022) 'The impact of banking sector stability on economic growth: Evidence from Sri Lanka for the post-war period', *Volume 12*, pp. 945–950.
- Haji, A.A. (2015) 'The role of audit committee attributes in intellectual capital disclosures: Evidence from Malaysia', *Managerial Auditing Journal*, 30(8/9), pp. 756–784.
- Harrison, J. and Freeman, E. (2015) 'Stakeholder theory as an ethical approach to effective management: Applying the theory to multiple contexts', *Revista Brasileira de Gestao de Negocios*, 17(55), pp. 858–869.
- Harshana, K. and Wanniarachchige, M. (2022) 'Effect of COVID-19 pandemic on the performance of Sri Lankan banks', *International Journal of Accounting and Business Finance*, 8(2), p. 135.
- Hermalin, B.E. (2005) 'Trends in corporate governance', The Journal of Finance.
- Hidalgo, R.L. (2010) 'Corporate governance and intellectual capital disclosure', *Journal of Business Ethics*, p. 483–495.
- Hillman, A.J. (2003) 'Boards of directors and firm performance: Integrating agency and resource dependence perspectives', *The Academy of Management Review*, 28(3), pp. 383–396.
- Hussinki, H. (2015) 'Review of empirical research on intellectual capital and firm performance', *Journal of Intellectual Capital*, 16(3), pp. 518–565.
- Mangena, M. and Pike, R. (2012) 'The effects of audit committee characteristics on intellectual capital disclosures', *British Accounting Review*, 44(2).
- Jensen, M.C. and Meckling, W.H. (1976) 'Theory of the firm: Managerial behavior, agency costs and ownership structure', *Journal of Financial Economics*, 3(4), pp. 305–360.
- Kamath, G.B. (2021) 'Corporate governance and intellectual capital disclosure', *International Journal of Learning and Intellectual Capital*, 18(4), pp. 365– 398.
- Keenan, J. and Aggestam, M. (2001) 'Corporate governance and intellectual capital: Some conceptualizations', *Corporate Governance: An International Review*, 9(4), pp. 259–275.
- Lipton, M. and Lorsch, J.W. (1992) 'A modest proposal for improved corporate governance', *The Business Lawyer*, 48(1), pp. 59–77.
- Meer-Kooistra, V.D. and Zijlstra (2001) 'Reporting on intellectual capital', Accounting, Auditing & Accountability Journal, 14(4), pp. 456–476.
- Nadeem, M. (2020) 'Corporate governance and supplemental environmental projects: A restorative justice approach', *Journal of Business Ethics*, p. 261–280.

- Nahapiet, J. and Ghoshal, S. (1998) 'Social capital, intellectual capital, and the organizational advantage', *The Academy of Management Review*, 23(2), pp. 242–266.
- Niresh, A. (2014) 'Firm size and profitability: A study of listed manufacturing firms in Sri Lanka', *International Journal of Business and Management*, 9(4).
- Powell, W.W. and DiMaggio, P.J. (1983) 'The iron cage revisited: Institutional isomorphism and collective rationality in organizational fields', *American Sociological Review*, 48(2), pp. 147–160.
- Pulic, A. (2002) 'Measuring the performance of intellectual potential in the knowledge economy', *Economics*.
- Puwanenthiren, P. (2018) 'Is corporate governance and intellectual capital disclosure related? A Sri Lankan case', *Journal of Business Studies*, 5(2), pp. 45–59.
- Ranjith, A. and Bhuyan, M. (2015) 'Examining the influence of corporate governance on intellectual capital efficiency: Evidence from top service firms in Australia', *Managerial Auditing Journal*, Volume 30, pp. 347–372.
- Salehi, M. and Farzaneh, M. (2018) 'The impact of board's human capital on the relationship between board's characteristics and firm's performance in Iran', 15(4), pp. 293–308.
- Sanad, Z. and Al-Sartawi, A.M. (2016) 'Investigating the relationship between corporate governance and internet financial reporting (IFR): Evidence from Bahrain Bourse', *Volume 12*.
- Saruchi, S.A. (2019) 'Examining the impact of corporate governance on intellectual capital: Empirical evidence of Islamic banks', *International Journal of Academic Research in Accounting Finance and Management Sciences*, 9(3).
- Saunders, A. and Brynjolfsson, E. (2016) 'Valuing information technology related intangible assets', *Computer Science, Business, Economics*.
- Stewart, T.A. (1997) Intellectual Capital: The New Wealth of Organizations, Illustrated Ed. S.L.: Doubleday / Currency.
- Tricker, R.I. (2000) Corporate Governance, 1st Edition. London: S.N.
- Uhlaner, L., Wright, M. and Huse, M. (2007) 'Private firms and corporate governance: An integrated economic and management perspective', *Small Business Economics*, Volume 29, pp. 225–241.
- Vafeas, N., 2005. Audit committees, boards, and the quality of reported earnings. *Contemporary Accounting Research*, 22(4), pp.1093-1122. [online] Available at: <u>https://doi.org/10.1506/1qyn-2rfq-fkyx-xp84</u>

- Wahid, A. H. D. A., Abu, N. A., Latif, W. A., and Smith, M. (2013). Corporate Governance and Intellectual Capital: Evidence from Public and Private Universities. *Higher Education Studies*, 3(1). https://doi.org/10.5539/hes.v3n1p63
- Widiatmoko, J., Indarti, K. and Pamungkas, I.D. (2020) 'Markets, finance, market value, economics, market capitalization', *Cogent Business & Management*.
- Zingales, L. (1998) 'Corporate governance', *The New Palgrave Dictionary of Economics and the Law*, 1998.