



## Impact of intellectual capital on firm value: A study of listed non-financial companies in Sri Lanka

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### Abstract

The paper aims to investigate the impact of intellectual capital on firm value in Sri Lanka. The study sample includes 50 non-financial companies listed on Colombo stock exchange for the period from 2021 to 2025. This research uses intellectual capital disclosure index to measure intellectual capital of a firm. The intellectual capital disclosure includes the sum of three components: Human Intellectual Capital Disclosure Index, Structural Intellectual Capital Disclosure Index, and Relational Intellectual Capital Disclosure Index. In this paper, firm value is measured by Tobin's Q ratio. Firm size and leverage are used as control variable to pointed out the impact of intellectual capital on firm value. Descriptive statistics, correlation analysis, and multiple regression analysis were performed to analyze the data. The statistical results show a statistically significant positive impact of intellectual capital disclosure index on firm value. Further, study demonstrates that improving the disclosure of human capital and structural capital can contribute to higher firm value among listed non-financial companies in Sri Lanka. This evidence provides a new insight to decision makers on how to improve the value of firms listed on Colombo stock exchange.

**Keywords:** Firm Value; Intellectual Capital Disclosure; Human Capital Disclosure; Structural Capital; Relational Capital; Non-Financial Companies

### 1. Introduction

At present, the world economy is transiting from an industrial economy to the knowledge-based economy in order enhance the wealth creation. As per this transition, to be sustaining the competitive advantage, the economy has to depend on the knowledge-based capital so called the intellectual capital, such as: knowledge workers, employee related measurements, patents, trademarks, organizational system and business strategies. In this new world that information and economy have significant role, should paid to the development and management of information and knowledge to earn money. Generally, the value is caused by information sources is called intellectual capital (Guthrie, 2012). Two intellectual capital components, human capital and structural capital, are related to organization itself, while relation capital is related to the relationship between the organization and the external parties such as customers, suppliers, investors, and other external stakeholders. Intellectual capital disclosure is needed because it is a mechanism to cut down the agency cost which arises from the possibility that the manager acts not for the sake of the stakeholders (Hassan et al., 2009).

Several components in the non-financial aspect are experiences, organization technology, and customer's relationship that create companies' competitive advantage in the market. Intellectual capital is the possession of knowledge, applied experience, organizational technology, customer relationships and professional skills. These characteristics were later categorized into three Intellectual capital components; human, internal structural and relational capital. Human capital refers to employee's education and skills, and is the "extent of professionalism" (Vergauwen et al., 2007) and the effectiveness and efficiency of staff to improve the productivity of the firm. Intellectual Capital is recognized as one of

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the basic factors to evaluate the company's performance (Serenko et al., 2013). The value of the firm is reflected in terms of stock prices, which are economic consequences of business activities in the market. Hence, signaling theory posits that investors rely on information delivered by firms (Abeysekera et al., 2009).

This study aims to find out the impact of providing the intellectual capital disclosure in the annual reports to the value of company which is measured by Tobin's Q. There are two methods in calculating a company's value which is accounting-based measurement and market-based measurement. ROA and ROE are the examples of accounting-based measurement, meanwhile, Tobin's Q is implication of market-based measurement. Tobin's Q is able to measure long-term performance which is expected by the company (Kweh et al., 2014). Tobin's Q is a basic assessment for the company over its assets and it is a good media to reflect company's competitive advantages; it is also able to reveal the profit earned from the investment in intellectual capital (Aramburu et al., 2011).

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## 2. Literature review

Although most empirical studies support a positive relationship between intellectual capital disclosure and firm value, the findings are not entirely consistent. Many studies conclude that extensive disclosure reduces information asymmetry, enhances transparency, and increases market valuation. Conversely, some researchers argue that voluntary disclosure alone does not necessarily improve firm value unless the disclosed information is credible, relevant, and useful for investment decisions. Differences in research findings may also arise from variations in disclosure measurement methods, firm characteristics, industry sectors, sample sizes, corporate governance mechanisms, and economic conditions. Furthermore, much of the existing evidence originates from developed countries. Comparatively fewer studies have focused on developing economies such as Sri Lanka, where intellectual capital reporting practices are still evolving. This highlights the need for further empirical investigation using Sri Lankan listed companies to determine whether intellectual capital disclosure significantly influences firm value.

Sri Lanka has increasingly recognised the importance of intellectual capital as a driver of organisational competitiveness and sustainable value creation. Although research on intellectual capital is more limited than in developed countries, existing studies provide valuable evidence on disclosure practices, determinants, and their implications for corporate performance. Abeysekera (2008) examined intellectual capital disclosure practices among Sri Lankan listed companies and found that firms voluntarily disclosed information related to employees, organisational systems, and external relationships. The study concluded that intellectual capital reporting enhances corporate transparency and helps investors understand intangible value that is not captured in traditional financial statements. Jayasooriya and Gunawardana (2016) investigated managerial perceptions of intellectual capital disclosure in Sri Lankan listed companies. Their findings indicated that managers viewed intellectual capital disclosure as an important tool for improving corporate reputation, attracting investors, and strengthening stakeholder confidence. However, they also identified challenges such as the absence of standard reporting guidelines and concerns about revealing strategically sensitive information.

Furthermore, Puwanenthiren, Ajanthan and Kengatharan (2019) analysed annual reports of Sri Lankan listed companies and found considerable variation in the extent of intellectual capital disclosure across industries. The study reported that human capital information was disclosed more frequently than structural and relational capital information, suggesting that companies place greater emphasis on reporting employee-related resources. Chandraratne, Pathirawasam and Mohamed (2021) examined the influence of board characteristics on intellectual capital disclosure among Sri Lankan listed firms. Their findings suggested that effective corporate governance, including board independence and board expertise, positively influences the quality and extent of intellectual capital disclosure.

Overall, Sri Lankan evidence indicates that intellectual capital disclosure has improved over time, although disclosure practices remain largely voluntary and differ considerably across firms and industries. Numerous international studies have examined the relationship between intellectual capital disclosure and firm value. Keter, Cheboi and Kosgei (2024) investigated 39 firms listed on the Nairobi Securities Exchange (NSE) in Kenya and found that, intellectual capital disclosures have a mediating effect on the relationship between financial performance and firm value. The results confirm that intellectual capital disclosure is an important mediator in the relationship between financial performance and firm value; firm managers should use intellectual capital disclosure as a winning edge. Additionally, firms with high intellectual capital are likely to engage in voluntary disclosure to legitimize their success. Li, Pike and Haniffa (2008) investigated UK listed companies and found a significant positive association between intellectual capital disclosure and market valuation. The authors concluded that transparent reporting of intangible resources enhances investor confidence and contributes to higher firm value. Ferreira, Branco and Moreira (2012) reported that companies with extensive disclosure of intellectual capital achieved greater market recognition and stronger investor confidence. Their findings emphasised that voluntary disclosure reduces uncertainty surrounding future performance. Similarly, Veltri

and Silvestri (2011) found that firms with higher levels of intellectual capital disclosure experienced superior market performance because investors considered knowledge resources as indicators of future profitability. Vafaei et al. (2011) established that intellectual capital disclosure has a positive effect on firm value-based control for country and industry characteristics. Additionally, intellectual capital disclosure has a positive and significant effect on firm value in cross-sectional analysis (Orens et al., 2009).

More recent studies conducted in Asian and European markets continue to demonstrate a positive relationship between intellectual capital disclosure and firm value. However, some studies report weak or insignificant relationships, suggesting that the impact of disclosure may vary according to institutional environments, corporate governance structures, industry characteristics, and national reporting practices. Although numerous international studies have examined the relationship between intellectual capital disclosure and firm value, several important gaps remain. First, most empirical evidence originates from developed economies such as the United Kingdom, Australia, Italy, and Malaysia, while relatively few studies focus on Sri Lanka. Second, many Sri Lankan studies have concentrated on describing disclosure practices rather than examining the direct effect of intellectual capital disclosure on firm value. Third, limited research has separately analysed the influence of Human Capital Disclosure (HICDI), Structural Capital Disclosure (SICDI), Relational Capital Disclosure (RICDI), and the Overall Intellectual Capital Disclosure Index (ICDI) on Tobin's Q while controlling for firm size and leverage. Finally, disclosure practices have continued to evolve with increasing emphasis on integrated reporting and corporate transparency. Consequently, updated evidence using recent data from Sri Lankan listed non-financial companies is needed. This study addresses these gaps by examining the impact of HICDI, SICDI, RICDI, and ICDI on firm value (Tobin's Q), while incorporating firm size and leverage as control variables.

### 3. Methodology

This study uses a quantitative research method in which the intellectual capital disclosure (ICDI) as the independent variable. It includes the sum of three components: Human Intellectual Capital Disclosure Index, Structural Intellectual Capital Disclosure Index, and Relational Intellectual Capital Disclosure Index. In this paper, firm value is measured by Tobin's Q ratio. Firm size and leverage are used as control variable to pointed out the impact of intellectual capital on firm value; Firm Size and Leverage as control variables, and firm's value as the dependent variable. This study is an associative causality research. The Colombo stock exchange (CSE) has 290 companies representing 20 business sectors the researcher's concentration field is non-financial sector. The target population for this study comprised 208 of non-financial listed companies in Colombo Stock Exchange. Researcher used random sampling method to select sample of 50 listed non-financial companies in Sri Lanka for the period 2021 to 2025. This study used secondary data which was obtained through a review of annual report. The annual reports of respective companies are obtained from CSE. Further Scholarly articles academic Journals, relevant text books on the subject and internet search were also used. Based on the research hypotheses the following research model is created by the researcher. This regression model shown below was used to find the impact of intellectual capital on firm value

- $\text{Tobin's } Q = \alpha + \beta_1\text{HICDI} + \beta_2\text{RICDI} + \beta_3\text{SICDI} + \beta_4\text{FS} + \beta_5\text{LEV} + \varepsilon$
- Where,
- $\alpha$  - Constant
- $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$  - Coefficient of variable
- $\varepsilon$  - Error term
- HICDI- Human Intellectual Capital Disclosure Index
- RICDI- Relational Intellectual Capital Disclosure Index
- SICDI- Structural Intellectual Capital Disclosure Index
- FS – Firm Size
- LEV – Leverage

#### 4. Results and Discussion

The study uses Descriptive statistics, correlation analysis, and multiple regression analysis were performed to analyze the data.

**Table 1** Descriptive statistics

| Variables | N   | Min   | Max    | Mean  | SD    |
|-----------|-----|-------|--------|-------|-------|
| HICDI     | 250 | 0.360 | 0.700  | 0.505 | 0.058 |
| RICDI     | 250 | 0.180 | 0.470  | 0.336 | 0.055 |
| SICDI     | 250 | 0.150 | 0.360  | 0.251 | 0.044 |
| ICDI      | 250 | 0.260 | 0.503  | 0.364 | 0.043 |
| FS        | 250 | 6.703 | 13.144 | 9.611 | 1.753 |
| LEV       | 250 | 0.015 | 0.912  | 0.368 | 0.213 |
| Tobin's Q | 250 | 0.219 | 4.627  | 0.998 | 0.623 |

Table 1 presents the descriptive statistics for the study variable based on 250 observations from listed non-financial companies in Sri Lanka. The overall intellectual capital disclosure index (ICDI) has a mean of 0.364, with a minimum value of 0.260, a maximum value of 0.503, and a standard deviation of 0.043. This finding indicates that the overall level of intellectual capital disclosure among the sampled firm is moderate, while the low standard deviation reflects limited variation in disclosure practices across companies. The dependent variable, Tobin's Q, has a mean value of 0.998, with value ranging from 0.219 to 4.627 and a standard deviation of 0.623. The average Tobin' Q close to 1 indicates that, on average, the market value of the sampled firms is approximately equal to the book value of their assets. However, the relatively wide range and higher standard deviation indicate noticeable differences in firm value across the companies.

**Table 2** Multiple regression analysis

| Variables  | $\beta$ | Std. Error | t-Statistic | Sig.  | VIF   |
|------------|---------|------------|-------------|-------|-------|
| (Constant) | 0.024   | 0.350      | 0.069       | 0.945 |       |
| HICDI      | 1.669   | 0.715      | 2.333       | 0.020 | 1.537 |
| RICDI      | 0.089   | 0.799      | 0.111       | 0.912 | 1.704 |
| SICDI      | 5.478   | 1.062      | 5.156       | 0.000 | 1.985 |
| FS         | -0.145  | 0.021      | -6.886      | 0.000 | 1.229 |
| LEV        | 0.324   | 0.161      | 2.018       | 0.045 | 1.053 |

R<sup>2</sup>- 0.301, Adj. R<sup>2</sup>- 0.286, F- 20.97, p < 0.001

As shown table 2, The overall regression model is **statistically significant (F = 20.97, p < 0.001)**, indicating that the independent variables jointly explain a significant proportion of the variation in firm value. The model has an **R<sup>2</sup> value of 0.301**, implying that approximately **30.1%** of the variation in Tobin's Q is explained by HICDI, RICDI, SICDI, FS, and LEV. The **Adjusted R<sup>2</sup> of 0.286** indicates that, after adjusting for the number of predictors, the model explains **28.6%** of the variance in firm value, while the remaining **71.4%** is attributable to factors not included in the model. Regarding the individual variables, **Human Intellectual Capital Disclosure (HICDI)** has a **positive and statistically significant** effect on firm value ( **$\beta = 1.669$ ,  $t = 2.333$ ,  $p = 0.020$** ). This indicates that an increase in human capital disclosure is associated with an increase in Tobin's Q. Therefore, the hypothesis that HICDI positively influences firm value is **supported**.

In contrast, **Relational Intellectual Capital Disclosure (RICDI)** has a **positive but statistically insignificant** relationship with firm value ( **$\beta = 0.089$ ,  $t = 0.111$ ,  $p = 0.912$** ). Although the coefficient is positive, the high p-value indicates that relational capital disclosure does not significantly affect Tobin's Q in this sample. Therefore, the corresponding hypothesis is **not supported**. **Structural Intellectual Capital Disclosure (SICDI)** shows a **strong**

**positive and statistically significant** effect on firm value ( $\beta = 5.478$ ,  $t = 5.156$ ,  $p < 0.001$ ). This finding suggests that companies providing greater disclosure of structural capital information tend to have higher market value. Among the intellectual capital disclosure variables, SICDI has the strongest positive influence on firm value. Therefore, the related hypothesis is **supported**.

Among the control variables, **Firm Size (FS)** has a **negative and statistically significant** relationship with firm value ( $\beta = -0.145$ ,  $t = -6.886$ ,  $p < 0.001$ ). This result indicates that larger firms in the sample tend to have lower Tobin's Q values, holding other variables constant. **Leverage (LEV)** has a **positive and statistically significant** effect on firm value ( $\beta = 0.324$ ,  $t = 2.018$ ,  $p = 0.045$ ). This suggests that firms with higher leverage tend to exhibit higher firm value within the sample. The **Variance Inflation Factor (VIF)** values range from **1.053 to 1.985**, all of which are well below the commonly accepted threshold of **10** (and even below the stricter threshold of **5**). This indicates that **multicollinearity is not a concern**, and the independent variables do not exhibit problematic correlations with one another.

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## 5. Conclusion

The findings show a statistically significant positive impact of intellectual capital disclosure index on firm value. In conclusion, the study demonstrates that improving the disclosure of **human capital** and **structural capital** can contribute to higher firm value among listed non-financial companies in Sri Lanka. Therefore, corporate managers are encouraged to strengthen intellectual capital reporting practices, while regulators and policymakers may consider developing more comprehensive reporting guidelines to improve the consistency and quality of intellectual capital disclosure in Sri Lanka. The regression model produced an **R<sup>2</sup> value of 0.301**, indicating that **30.1%** of the variation in firm value (Tobin's Q) is explained by Human Intellectual Capital Disclosure (HICDI), Relational Intellectual Capital Disclosure (RICDI), Structural Intellectual Capital Disclosure (SICDI), Firm Size (FS), and Leverage (LEV). The remaining **69.9%** of the variation in firm value is attributable to other factors not included in the model, such as corporate governance practices, profitability, growth opportunities, firm risk, ownership structure, macroeconomic conditions, industry-specific characteristics, and other unobserved variables. Therefore, while the selected variables significantly explain firm value, additional determinants also influence the market value of listed non-financial companies in Sri Lanka. These findings also provide useful insights for investors, company management, regulators, and future researchers interested in intellectual capital reporting and corporate value creation in emerging markets.

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## Compliance with ethical standards

### *Disclosure of conflict of interest*

No conflict of interest to be disclosed.

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## References

- [1] Abeysekera, I. (2008). Intellectual capital disclosure trends: Singapore and Sri Lanka. *Journal of Intellectual Capital*, 9(4), 723–737.
- [2] Aramburu, N., & Saentz, J. (2011). *Structural capital, innovation capability, and size effect: An empirical study*. *Journal of Management & Organization*, 17(3), 307–325.
- [3] Bollen, L., Vergauwen, P., & Schnieders, S. (2005). Linking intellectual capital and intellectual property to company performance. *Management Decision*, 43(9), 1161–1185.
- [4] Bontis, N. (1998). Intellectual Capital: An Exploratory Study that Develops Measures and Models, *Management Decision*, 36 (2), 63–76.
- [5] Bontis, N. (2001). Assessing Knowledge Assets: A Review of the Models Used to Measure Intellectual Capital. *International Journal of Management Reviews*, 3(1), 41–60.
- [6] Hatane, S. E., Tertiadajadi, A., Tarigan, J. (2017). *The impact of corporate governance on intellectual capital and firm value: Evidence from Indonesia and Malaysia consumer goods*. *International Journal of Management and Applied Science (IJMAS)*, 3(1), 78–83.
- [7] Hassan, O. A., Romilly, P., Giorgioni, G., & Power, D. (2009). *The value relevance of disclosure: Evidence from the emerging capital market of Egypt*. *The International Journal of Accounting*, 44(2009), 79–102.

- [8] Kweh, Q. L., Lu, W. M., & Wang, W. K. (2014). *Dynamic efficiency: Intellectual capital in the Chinese non-life insurance firms*. Journal of Knowledge Management, 18(5), 937-951.
- [9] Li, J., Pike, R., & Haniffa, R. (2008). Intellectual capital disclosure and corporate governance structure in UK firms. Accounting and Business Research, 38(2), 137–159.
- [10] Nimtrakoon, Sirinuch. (2015). *The relationship between intellectual capital, firms' market value and financial performance: Empirical evidence from the ASEAN*. Journal of Intellectual Capital, 16(3), 587-618.
- [11] Serenko, A., & Bontis, N. (2013). *Investigation the current state and impact of the Intellectual Capital academic discipline*. Journal of Intellectual Capital, 14(4), 476-500.
- [12] Smriti, N., & Das, N. (2017). *Impact of Intellectual capital and business performance: Evidence from Indian Pharmaceutical sector of Jordan*. Management Decision, 48(1), 105-131.