

The Mediating Role of Corporate Governance on Intellectual Capital and Corporate Performance

Dewi Fariha Earnest and Saudah Sofian

Abstract—Recognition and development of intellectual capital (IC) as organizational invaluable intangible asset has been traced as immense vital essence that influence good corporate performance and success. This paper attempts to synthesize relevant empirical research and literature to extend the intended potentials of IC on corporate performance, particularly in publicly traded companies. The paper also proposes that corporate governance poses a mediating role between IC and corporate performance by linking the resource based view theory (RBV) and agency theory in its relationship. Since the existing literature provides less evidence that attempt to observe the influence of IC when integrated with the effectiveness of a separate function in an organization, this paper offers and calls a promising proposition for future research.

Index Terms—Corporate governance, corporate performance, intellectual capital.

I. INTRODUCTION

The extant of literatures emphasize the importance of intellectual capital (IC) in providing a competitive edge for companies to sustain and boost its performance regardless of any economic circumstance. IC is an invaluable intangible asset of which if acknowledged and utilized to its optimum, could provide significant value to a business. On the other hand, IC management (ICM) system is equally important in an organization that exert as a systematic way to manage and utilize organisational resources such as knowledge, skills, expertise, innovations, technical know-how, patterns, procedures, customer relations, networking and alliances to achieve corporate objectives and goals [1]-[4].

Reference [4] states that IC empowers organizational value creations such as innovations, competitiveness, strategies, skills, improved system, patent, etc. IC is frequently associated as values which are vital to achieve business success, however, due to difficulties in intangibles; IC is somehow often ignored. On another note, companies with high IC levels are capable of minimizing the adverse effects of economic uncertainties [4]. Having said that, what is even more distressing is that, without realising, the cost of ignoring IC can be detrimental to company's success. Hence, it is critically important for organization or companies to acknowledge appreciate and managed their IC to achieve superior performance.

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II. INTELLECTUAL CAPITAL AND CORPORATE PERFORMANCE

IC is defined as “all nonmonetary and nonphysical resources that are fully or partly controlled by the organization and contribute to the organization's value creation” as in [5]. Reference [6] states that a company's value is made up of both tangible and intangible assets in which should be converted into profits. Therefore, it can be concluded that IC is referred to as an intangible asset that cannot be given a monetary value and commonly constitutes three components: human capital, structural capital and relational capital (refer Fig.1).

Human capital is the value embedded in an individual which includes knowledge, skills, experience, competence, innovativeness, education and capabilities. While, structural capital is the organizational intangibles which are documented in a written form such as information, patents, trademarks, systems, databases, documents, operating manual and procedures, organizational structure, corporate culture and strategies. Relational capital illustrate organizational liaison with an external party such as relationship with customer/ supplier, customer satisfaction, brand image, reputation, distribution networks, alliances and partnerships, relationship with stakeholders and authorities.

IC is often remains hidden in most organization but undeniably it empower innovations, competitive strategies and value creations of an organization [7]. It is impossible to change IC into a physical substance, however can be transformed into new ideas; new innovations, products, profits, services, profitability, customer loyalty, line of clientele, branding, etc. This reflects that IC does exist in every organization and how it poses great importance on organizational performance and success.

In short, without IC, a company could risk a failure to sustain profitability and competitive edge. While companies such as Dow Chemicals, IBM, Sony, generate revenue from strong company and product branding image. This concurs with the notions under the resource-based view (RBV) theory which suggests that organizational resources, either tangible or intangible resources, must be identified, managed and utilized to achieve business goals thus boost corporate performance [8], [9].

By far, there is no universal theory that is directly associated to IC. However, the resource based view (RBV) theory is frequently linked within studies related to IC and corporate performance. The RBV fundamentally argues that a firm's resources potentially instill competitive advantages, profitability and superior performance. The RBV emerged in the 1990s and gained importance since, strongly highlights

that an effective management of firm's stock of resources and capabilities will result in an improved financial performance and constant sustainable success [9], [10].

The RBV also suggests that companies which manage their resources, knowledge and dynamic capabilities effectively will result in an improved performance [10], [11]. Indeed, the RBV signifies that a company's resources have to be unique and superior of the competitors to create strategic values. Resources (tangible and intangible resources) which are invaluable for companies to gain competitive edge and uncompromising sustainability must be well preserved and nurtured. Hence, it can be argued that when failing to measure and evaluate IC, a company risks a loss of inefficiency, effectiveness and profit.

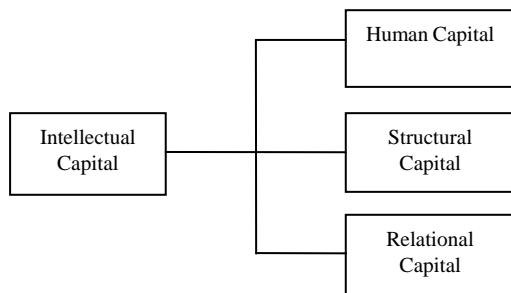


Fig.1. Intellectual capital and its components.

III. THE MEDIATING ROLE OF CORPORATE GOVERNANCE

Global concern over company's collapse such as in the case of Enron is always closely associated with the absence of good corporate governance which is a cornerstone to sustaining current and future corporate success. As stated in [12], [13], corporate governance is about how a company is directed and controlled to carry out their business activities in order to achieve good performance. It is also how a company conducts its business in a proper and acceptable manner to pull higher confidence in the marketplace thus fulfill society's expectations on good corporate governance.

Reference [13] suggested the definition by the Committee on the Financial Aspects of Corporate Governance in 1992 is inclusive of the core elements of governance:

"Corporate governance is the system by which companies are directed and controlled. Boards of directors are responsible for the governance of their companies. The shareholder's role in governance is to appoint the directors and the auditors and satisfy themselves that an appropriate governance structure is in place. The responsibilities of the board includes setting the company's strategic aims, providing the leadership to put them into effect, supervising the management of the business, and reporting to the shareholders on their stewardship. The board's actions are subject to laws, regulations, and the shareholders in general meeting."

The importance of ensuring good corporate governance in an organization is credential. Undeniably, effective and good corporate governance would eventually improve corporate performance (financial or non-financial). Reference [14] emphasized that quality corporate governance which includes effective monitoring of internal controls, reliability

of financial statements will consequently improves corporate performance. While, on the other note, effective corporate governance is important in an organisation to help the company achieve its goal by means of conducting business activities ethically and in acceptable manner to remain substantial in the industry thus achieve superior business performance.

Reference [15] study on the use of corporate intangibles reported that fund manager's perceptions on financial institution corporate governance is much related to IC factors that drives the institution's corporate performance. The study claims that intangibles do influence the corporate governance of managers and human capital is specifically referred to be the most noteworthy IC component.

It is important to point out that effective corporate governance takes place when the management guarantees the procedures and activities of the organization are well administered thus provide a truthful and reliable management reporting (e.g. financial statements) and effective internal controls. Hence, an effective and efficient internal control is indeed crucial to guarantee good corporate governance and reliable financial reporting that eventually boost the investor's confidence in the capital markets [16]. As emphasized in the literature, all these good governance qualities will eventually influence organizational performance.

The agency theory on the other hand, is applied to explain the intervening role of corporate on IC and corporate performance. The agency theory argues that an agency relationship exists when the principal hires a person (the agent) under a specified contract to carry out duties and responsibilities on behalf of the principal [17]. The agents are represented by the managers and staff of an organization, while the shareholders or owners are the principals. The managers and staff are employed (paid) to work on behalf and for the best interest of the shareholders by increasing the value of the company. Hence, it is the responsibility of the board of directors and its audit committee to ensure effective corporate governance takes place in an organization.

IV. PROPOSED RESEARCH FRAMEWORK

After submitting the above arguments on IC and corporate governance, it is indeed interesting to further explore the contributions of IC on corporate performance of public listed companies. The aim of this proposed research is twofold. It is an ultimate aim that this research should see whether IC improve corporate performance and also if corporate governance brings positive synergy on the relationship between IC and corporate performance of public listed companies. If the outcome shows a positive and effective role on a company's success, then these companies should start seriously consider adopting a method to identify, manage, measure and utilizing IC and corporate governance to its optimum in their company.

Past empirical studies revealed that IC instills positive influence on business performance. There is also increased research which investigates the impact of IC on company's operation and performance [18]. However, to date, there is yet evidence that directly links IC *per se* and corporate

governance in previous research. IC values related to corporate governance do exist in literature, nevertheless, have not been discussed comprehensively.

In most circumstances, past studies has quite explicitly revealed that IC poses a positive direct influence on corporate performance (see relationship 'C' in Fig. 2). Past IC studies revealed that IC has a significant and substantive relationship with corporate performance. Nevertheless, limited evidence found that attempts to empirically investigate whether there are other elements or variable that could influence this relationship. Managing IC is important in organizations as it works as a system to manage and utilize organizational resources (consistent with the resource-based view theory) to achieve corporate objectives and goals.

By far, little evidence found on previous study that address the importance of considering whether corporate governance is in fact a vital facet of corporate success. As highlighted in literature, quality corporate governance is reflected through a higher corporate performance. Moreover, the role of intangibles in corporate governance has been addressed in past study on fund manager's incentive to use intangibles as means to exercise corporate governance.

Importantly, earlier research also suggests that IC influence corporate governance as in [19] (see relationship 'A' in Fig. 2). Good governance will affect the way managers manage a company. Good corporate governance exists and can be effective if a company has high IC. However, little empirical evidence can be found that link IC, corporate governance and corporate performance in a study. Hence, corporate governance now becomes as a mediator on the ground that literature strongly implies that effective corporate governance will influence an improved corporate performance (see relationship 'B' in Fig. 2).

When discussing about IC, it is equally essential to explore whether the association between IC and performance could also be influenced by other organizational element. This suggests that the relationship is not entirely direct where it could be influenced by other element that exists in a company. It is generally known that a company comprises of several important functions such as human resource, internal auditing, marketing and corporate governance which aim to meet organizational goals and objectives.

Mediator or an intervening variable is a type of variable that explains the relationship between an independent and dependent variable [20]-[22]. The proposed mediation model is illustrated in Fig. 2. The model hypothesized that the independent variable (IC) influence the mediator (corporate governance), which then will influence the dependent variable (corporate performance). This model proposes that corporate governance mediates the relationship between IC and corporate performance indicating that an indirect relationship exists. Corporate governance can be examined through the reliability of financial statements, its responsibility to ensure business transparency, monitor the effectiveness of internal control and maintain high accountability in their corporate business activities and operations.

IC is proposed as the independent variable based on the fact that massive literature and previous research revealed that IC poses strong influence on corporate performance.

Concurrently, past research also suggests that IC and corporate governance are indeed interrelated [23]. Since little empirical evidence is known that links IC, corporate governance and corporate performance in one study, hence, this proposal is imperative. Therefore, the proposed research questions are: Does IC influence corporate performance of companies? Does corporate governance act as the mediator on the relationship between IC and corporate performance?

This proposed study is suggested to employ a quantitative measures using self-administered questionnaire survey as the research instrument for collecting data. Furthermore, the same research methodology was also adopted in previous studies performed in the field of IC and corporate performance. Following that, the research data is recommended to be analyzed using statistical methods such descriptive statistics, path analysis, correlation analysis and multiple hierarchical regression analysis.

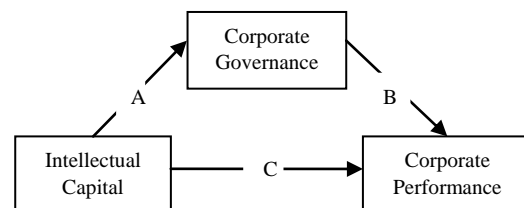


Fig. 2. The mediation model.

V. DISCUSSION AND CONCLUSION

The original intention of this study was to explore on the potentials to examine the mediating effect of corporate governance on IC and corporate performance as shown in our proposed model (Fig. 2). The issue of IC and corporate performance is frequently highlighted in literature, however little is found particularly attempting to investigate IC with corporate governance. Most literature was found to address issues on IC disclosures, managing and measuring IC, and also on IC definition or research, hence making our proposition unique.

This paper aims to provide an insight on the different perspective of IC and corporate performance. If any empirical investigation could successfully show that corporate governance does carry a mediating effect, this means that the relationship of IC and corporate performance can be caused by other intervening variable which could also be some other function in an organization. Potentially, the internal audit function or the human capital department might also create the same intervening role which in fact would bring positive impact to the organization. As much as we often expect, an effective function in an organization will influence the overall business performance.

Distinctive roles of these different functions or departments are expected to technically set immense influence on corporate performance. Hence, this is an indication that IC must be deployed in a systematic manner to ensure that these resources are identified and optimized to achieve business goals and improve corporate performance. IC values such as innovativeness, creativity, skills, knowledge, excellent operational system, well maintained policies and procedures are among organizational resources,

when manage and utilized to its optimal would result into a positive impact on profitability and business sustainability.

Why want to investigate mediating role? It is mainly because there is great possibility that the relationship between IC and corporate performance is not exclusively direct. Conceptually, corporate governance is an important role in any organization that has the attributes to gather all organizational resources and convert them to company's wealth. Moreover, it is believed that the effectiveness of IC management and utilization is driven by the effectiveness of corporate governance activities. Notably, this paper positions itself in extending previous studies on IC to a new perspective by incorporating the inclusion of corporate governance in its model. This is expected to subscribe and bring new insights and views on IC which have not been explored before. This should offer vast opportunities for future researchers to investigate further via diverse perspective pertaining to IC.

We believe that this paper could also potentially be reviewed within other function or department in an organization such as the internal audit function or human resource department. Hence, this provides wider opportunities for future research. Furthermore, this paper expects that the proposed research and framework developed will be extended to an empirical phase following this paper.

The fact that this proposed study is the new and distinctive in its own way (after considering the lack of related literature), it is expected to add valuable contribution to the body of knowledge, practicing professionals, regulatory authorities and corporate companies thus emulate existing standards and guidelines on corporate governance practices. Importantly, this study also contributes to the existing compilation of literature. Finally, the insights of this proposed research will be beneficial to offer a ground for future research to further generate extensive knowledge on issues relating to IC.

REFERENCES

- [1] A. Brooking, *Intellectual Capital*, London, International Thomson Business Press, 1997, ch. 2.
- [2] N. Bontis, W. C. K. Chua, and S. Richardson, "Intellectual capital and business performance in Malaysian industries," *Journal of Intellectual Capital*, vol. 1, pp. 85-100, 2000.
- [3] A. Bounfour, *The Management of Intangibles: The Organization's Most Valuable Assets*, London, Routledge, 2003, ch. 1.
- [4] M. Tayles, R. H. Pike, and S. Sofian, "Intellectual capital, management accounting practices and corporate performance: perceptions of managers," *Accounting, Auditing & Accountability Journal*, vol. 20, no. 4, pp. 522-548, 2001.
- [5] G. Roos, S. Pike, and L. Fernström, *Managing Intellectual Capital in Practice*, Oxford: Butterworth-Heinemann, 2005, ch. 1, pp. 19-28.
- [6] S. S. Harrison and P. H. Sullivan, *Einstein in the Boardroom: Moving Beyond Intellectual Capital to I-Stuff*, Hoboken, New Jersey: John Wiley & Sons, Inc, 2006, ch. 1, pp. 3-9.
- [7] C. A. Usoff, J. C. Thibodeau, and P. Burnaby, "The importance of intellectual capital and its effect on performance measurement system," *Managerial Auditing Journal*, vol. 17, no. 2, pp. 9-15, 2002.
- [8] B. Wernerfelt, "A resource-based view of the firm," *Strategic Management Journal*, vol. 5, pp. 171-180, 1984.
- [9] B. Wernerfelt, "The Resource-based view of the firm: Ten years after," *Strategic Management Journal*, vol. 16, pp. 171-174, 1995.
- [10] R. A. Raja Adzrin, A. N. Abu Thahir, and M. S. Maisarah, "Value creation strategy for sustainability," *Accountants Today*, vol. 22, no. 1, pp. 12-13, 2009.

- [11] G. Kristandl and N. Bontis, "Constructing a definition for intangibles using the resource based view of the firm," *Management Decision*, vol. 45, no. 9, pp. 1510-1524, 2007.
- [12] C. O'Leary and J. Stewart, "Governance factors affecting internal auditor's ethical decision-making: An exploratory study," *Managerial Auditing Journal*, vol. 22, no. 8, pp. 787-808, 2007.
- [13] A. A. Gramling and D. R. Hermanson, "What role is your internal audit function playing in corporate governance?" *Internal Auditing*, pp. 37-39, Nov/Dec 2006.
- [14] A. A. Gramling, M. J. Maletta, A. Schneider, and B. K. Church, "The role of the internal audit function in corporate governance: A synthesis of the extant internal auditing literature and directions for future research," *Journal of Accounting Literature*, vol. 23, pp. 194-244, 2004.
- [15] J. Holland, "Financial institutions, intangibles and corporate governance," *Accounting, Auditing & Accountability Journal*, vol. 14, no. 4, pp. 497-529, 2001.
- [16] D. R. Hermanson, "Ten conclusions on corporate governance, accounting and auditing," *Internal Auditing*, vol. 21, no. 4, pp. 45-48, 2006.
- [17] M. C. Jensen and W. H. Meckling, "Theory of the firm: managerial behavior, agency costs and ownership structure," *Journal of Financial Economics*, vol. 3, pp. 305-360, 1976.
- [18] S. Firer and S. M. Williams, "Intellectual Capital and Traditional Measures of Corporate Performance," *Journal of Intellectual Capital*, vol. 4, no. 3, pp. 348-360, 2003.
- [19] J. Holland, "Intellectual Capital and the Capital Market – Organisation and Competence," *Accounting, Auditing & Accountability Journal*, vol. 16, no. 1, pp. 39-48, 2003.
- [20] U. Sekaran, *Research Methods for Business: A Skill-Building Approach*, John Wiley & Sons, Inc, 2003, ch. 5, pp. 94-96.
- [21] R. M. Baron and D. A. Kenny, "The Moderator-mediator variable distinction in Social psychological research-conceptual, strategic and statistical considerations," *Journal of Personality and Social Psychology*, vol. 51, no. 6, pp.1173-1182, 1986.
- [22] A. D. Wu and B. D. Zumbo, "Understanding and Using Mediators and Moderators," *Social Indic Research*, vol. 8, no. 7, pp. 367-392, 2008.
- [23] A. Saffiedine, D. Jamali, and S. Noureddine, "Corporate governance and intellectual capital: Evidence from an academic institution," *Corporate Governance*, vol. 9, no. 2, pp.146-157, 2009.



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