

Intellectual Capital: The Current Affluence of Organizations in Malaysian Banking Industry.

Siti Zaitun Saddam

Faculty of Business and Management, Puncak Alam Campus, UiTM Selangor, 42300 Bandar Puncak Alam, Selangor, Malaysia
Email: sitizaitun@uitm.edu.my

To Link this Article: <http://dx.doi.org/10.6007/IJARBS/v11-i1/8371> DOI:10.6007/IJARBS/v11-i1/8371

Published Date: 04 January 2021

Abstract

This article discusses on the importance of Intellectual Capital in organization. In this new millennium, the dependence on intellectual capital has an indispensable rise on the economy from industrialization into knowledge-based economy. The main motivation behind this study is to educate that intangible asset is recognized as the key driver of efficiency and economic growth. Moreover, the competitive business environment is compulsory for firm to apply an innovative method to conduct business. Therefore, Intellectual Capital is needed to protect the organizations against the demand of innovation and competitive business environment in today's knowledge-oriented economy. Nowadays, sources of economic value and wealth encompasses not only the goods manufactured by organizations but also their intangible assets. Hence, intellectual capital will attribute to additional role in generating values. In the knowledge based socio-economic period where intellectual capital has become one of the production factors, performance measurements for organization may not be viable with traditional accounting practices any longer as many people value intellectual somewhat than physical resources. The main idea of exploring Intellectual Capital in banking industry is because of the nature of banking industry as a knowledge intensive industry. Moreover, countries economy and growth highly dependent on monetary and financial stability, thus banking industry plays a crucial role in the development of financial systems.

Keywords: Intellectual Capital, Firm's Financial performance, Intangible Asset, knowledge-based Economy, Malaysian Banking Industry, Value-Added Intellectual Capital (VAIC).

Introduction

Successful organizations represent a significant component for developing nations. Numerous economists deliberate them parallel to an engine in determining their economic, social, and political development. To survive in a competitive business environment, every firm should operate in conditions of strong performance. Therefore, assessing the

performance of organizations has always be one of interest to management teams of organization and researchers.

According to the resource-based theory, resources that exist in a firm can be broken down into two categories which are tangible and intangible resources. Intellectual capital falls under intangible resources and these resources that fulfill the criteria of valuable, rare, inimitable, and non-substitutable can be added advantages for a firm to excel further (Barney, 1991). Intangible resources are one of the key sources of competitive advantage and wealth creation for companies (Adnan, Abdulhamid, & Sohail, 2018; Jancenelle, 2015; Sumedrea, 2013).

This study is been governed by the Resource-Based Theory (RBV), the theory of RBV has been a focal point of fascination over the most recent 30 years, as it guides the internal firm-level factors to explore unexplained variability in firm performance (Kamasak, 2017). According to Cruz and Haugan (2019) RBV is a perfect theory to consider on company's performance. The figure below shows the entire resources of organization in value creation.

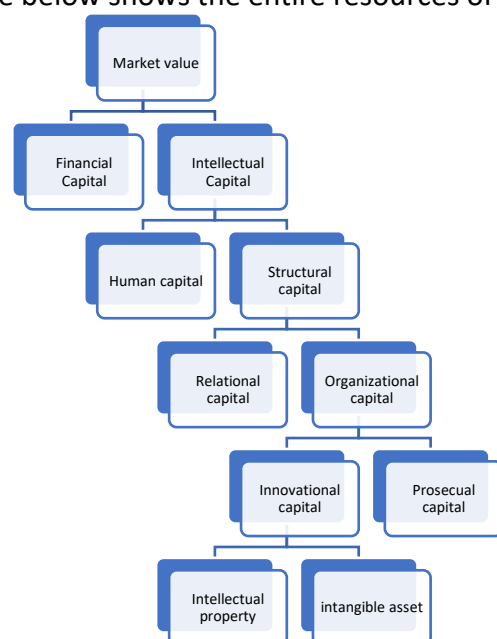


Figure 1.1 Skandia Navigator

Intellectual capital can be described as the portfolio of a firm's resources that assist in enhancing their sustainable values (Xu & Wang, 2018). To add, this portfolio that normally consists of human capital, structural capital and relational capital is actually a factor that drives the firms' performance (Sulanjaku, 2014).

Intellectual capital has been accepted as a paramount in the modern knowledge economy (Saddam, 2020). The advancement in the economy has edge the organization to chase for competitive advantage. Knowledge is weighted as primary asset for the organizations value creation. Therefore, in the current scenario, the economy is changing rapidly from production-based economy to knowledge-based economy. Moreover, along the arrival of virtual economy, the significant of intangible asset resemble to outperform, resulted to be the main determinant of arising concern on intellectual capital. According to Edvinson and Malone (1977) Intellectual capital stand for knowledge, experience, relationship between customers, technology of the organization and other related professional intelligence. To be specific, intellectual capital incorporate organizations intangible assets and knowledge to achieve valued added and attain competitive advantage.

In the knowledge era, material and financial assets have vanished their impact over the victory of businesses in the long run. Subsequently, knowledge has become an essential and basic resource for the organizations. Consequently, in order to generate a long-term competitive advantage, the well-organized formation of Intellectual Capital is compulsory in knowledge base economy.

The initiation of the concept of Intellectual capital has been acknowledge as a criticality for firm's endurance and success, achievement, competitiveness and innovativeness. These Days, the business arena become more global, consequently, the organisation need to find new ways of preserve their existence as the businesses are facing intensified competition (Wendra, Sule, Joeliaty, & Azis, 2019). Hence, in order to endure in the competitive world, knowledge-based economy is desirable in organizations.

Malaysia had proficient a substantial development in economy from economy relying on agriculture in 1970s to industrial in 1980s under the twenty years plan from 1970 to 1990 (Malaysia Economic Planning Unit, 2018). Recently, the government informed that the main factor of nation's economic development is only attributed by the indispensable components of intellectual capital which is human capital predominantly during the industrialization era.

Human Capital has been mostly viewed as the greatest significant element for economic growth, this can benefit to advance an economy by broadening the knowledge and skills of the people. Human capital includes the skill, knowledge and experience of the workers. In Malaysia, priority has been given to human capital since 1st Malaysia plan. For example, shifting the economy growth from the input driven to knowledge driven economy has been a major highlight.

Recently, The Ministry of Economic Affairs (MEA) unveil that the 12th Malaysia Plan, covering the period from 2021 to 2025, will be concentrating on the mutual thriving initiative. Furthermore, the new plan additionally focused on quickening human capital improvement for better developed country. Studies found that, investment in human capital is a focal part in a knowledge economy (Pelinescu, 2015). Human capital theory realizes education and training an endeavour that can profit social and private returns through increased knowledge and aptitudes for economic growth and social improvement. Therefore, with the fast move toward knowledge economy, the source of economy value has currently depended on the creation of Intellectual Capital. Knowledge based industries are considered as the strength of the new economy called knowledge-based economy.

The Importance of Banking Industry

Banking Institution played an important role in facilitating the economic transformation and growth of overall economy by the various phase of development. Moreover, this sector is considered as the backbone of the country's economic growth and development. Practically, the concept of economic development is broader than economic growth, though, both works together as the non-existence of economic growth the sustainable economic development cannot be attained (Paun, Musetescu, Topan, & Danuletiu, 2019).

Moreover, the banking industry has become more important in the recent years and there is a solid evidence that good financial environment lead to better development (Gulzar, 2018). Fundamentally, banking institutions involved in managing fund from surplus to deficit unit in order to mobilise saving and direct funds into production sectors. Besides, this sector also accelerates delivery of products and services, payment management and risk

management. In addition, it ensures the availability of various instruments, such as insurance packages, and information that facilitates trade activities (Bakar & Sulong, 2018). Furthermore, financial development is usually defined as a process that marks improvement in quantity, quality, and efficiency of financial intermediary services such as banking sector. Thus the development in banking sector indirectly will improve the countries financial development (Khan et al., 2015) because bank act as intermediary institutions, thus the banks have an important role in the economic growth of a country. Therefore, the development and the refinement of the financial sector has gradually become important for any nation interested in sustainable growth (Paun et al., 2019).

Objective of the Study

The importance of intellectual capital is undeniable in the current economy; thus, the objective of this study is to:

- To examine the relationship between intellectual capital and financial performance of Banking industry in Malaysia.
- To determine the impact of VAIC model on firm financial performance of banking industry in Malaysia.

Previous Studies on Intellectual Capital and Banking Industries

Past studies involving intellectual capital mostly focused on banking industry in a single country, this was attributed because of the knowledge-intensive nature of banking industry (Adesina, 2019; Goh, 2005; Joshi, Cahill, & Sidhu, 2010; Kamath, 2007; Meles, Porzio, Sampagnaro, & Verdoliva, 2016; Oppong & Pattanayak, 2019). Therefore, it made an ideal industry for research on intellectual capital (Al-Musali & Ismail, 2014; Goh, 2005; Joshi, Cahill, Sidhu, & Kansal, 2013; Kamath, 2007; Shih, Chang, & Lin, 2010; Wah Low, Tze Tee, Roei kew, & Ghazali, 2015).

Studies on banking industry was done by Goh (2005) in Malaysia, Joshi et al. (2010) in Australia, Kamath (2007) in India and Menton and Bontis (2013) in Luxemburg and Belgium, Mavridis and Kyrmizoglou (2005) in Greece, Adesina (2019) studies on African bank, Meles et al. (2016) on commercial banks in US and Oppong and Pattanayak (2019) on commercial banks in India. Besides banking industry, some of the researcher also studied on financial sectors such as Ting and Lean (2009) and Nik Maheran (2009) studies on Malaysian financial institutions and the limitation of the research was on the aspect of coverage because the study does not cover all finance companies in Malaysia due to limited data (Ting & Lean, 2009).

The main idea of discovering on banking institutions is because of countries economy and growth highly dependent on monetary and financial stability, thus financial sector (banks) plays a crucial role in the development of the country's financial system. Therefore, when the financial sector is more developed, more financial resources can be allocated into productive real investment and additional physical capital gets formed, which will stimulate economic growth (Zarrouk, El Ghak, & Abu Al Haija, 2017). A Good financial system will ensure effective and efficient financial intermediation, economic growth contribution and development. According to Joshi et al. (2013) financial sector business and activities require higher level of knowledge therefore it is crucial for this sector to invest in the development of intellectual capital in order to make competitive advantage sustainable and durable.

Literature Review

Organization's growth and development in financial performance mainly reflected by the growth and financial health of business over specified period. The performing company are going to be able to maximize shareholders wealth and profitability then eventually sustain in its business (Naz & Ijaz, 2016). Therefore, a successful organization denote a dominant element for nations advancement. Nowadays, in order to outlive in a competitive commerce environment, all the organizations ought to work in conditions of solid financial performance. Subsequently, surveying the performance of organizations has continuously be one of intrigued to administration groups of organization and analysts. Analysts have expanded endeavours to decide measures for the concept of measuring organizations performance.

On the other hand, studies also have stretched the valuation of organization's performance by observing at the affiliation between performance and other associated factors particularly on the item that provides value added to organization's performance (Barney, 1991; Edvinsson & Malone 1997; Gogan, 2014; Jancenelle, 2015; Manzari, Kazemi, Nazemi, & Pooya, 2012; Mendes, Mario, & Romao, 2016). This is essential as the principal necessity of organization is to completely exploit its resources in order to maximize shareholders' wealth and profitability.

As stated in the resource-based theory, organization's resources are broken down into two categories which are tangible and intangible resources. Intellectual capital sorts under intangible resources and these resources that accomplish the criteria of valuable, rare, inimitable, and non-substitutable (VRIN). Therefore, this resources with VRIN attributes are believed to added value and create advantages for organizations to outshine further (Barney, 1991). Intangible resources are one of the key sources of competitive advantage and wealth creation for organizations (Adnan et al., 2018; Jancenelle, 2015; Sumedrea, 2013).

Intellectual capital can be portrayed as the portfolio of a firm's intangible assets that help in improving their sustainable values (Xu & Wang, 2018). To include, this portfolio ordinarily comprises of human capital, structural capital and relational capital that leading contributor to the organization's superior performance and victory (Sulanjaku, 2014).

Intellectual capital is necessary and it has been definitely affected on the financial performance of a company, likewise the market value which can be considered as an indicator of future financial performance (Clarke, Seng, & Whiting, 2011; Dzenopoljac, Janosevic, & Bontis, 2016). Moreover, the findings of Kamasak (2017) uncovered that intangible assets and capacities contributed hugely to firm performance compared to tangible assets.

Components of Intellectual capital

There are various studies have been performed in order to look at the organization's performance of the three important elements of Intellectual Capital. The objective of the study basically to recognize which element of these contributed more towards the organization's performance.

Human Capital

As confirmed by Edvinson and Malone (1977) human capital incorporates information and capacities of the organization in solving business problem, it also incorporates how enough an organization utilizes its individuals' assets, as measured by inventiveness and advancement. Human capital is the implied information that employee of organization gathers through their education, experience, attitudes, and other individual characteristics (personal traits) that the employee brings into the organization.

Structural Capital

Structural capital indicates to internal knowledge that is accumulated through the processes and procedures that the organization implements (Singh, Sidhu, Joshi, & Kansal, 2016) for example habits, practices, processes, routines, information systems, working cultures. Structural Capital is also referred as permission, personification and supportive infrastructure of human capital.

Relational Capital

Relational capital encompassed of all the outside relationships of an organization. relational capital is a mixture of associations with outside parties (including customers, suppliers, competitors, governments, and the community) and the reputation of the organization based on its transactions, products, and services provided to these parties (Curado, Guedes, & Bontis, 2014; Darwish et al., 2020).

Conclusion

Intellectual Capital refers to organization's asset that can be transformed into value creation (Rezende, Correia, & Gomes, 2017). The organization's growth is not intensely determined on physical assets such as buildings, lands, machineries and inventories but on Intellectual Capital (Ibrahimy & Raman, 2019). In Malaysia, the vision 2020 had set a target that Malaysia required to be high yielding and innovative to drive the economy by setting important standards and change the behavior of Malaysia. Therefore, the concentration on human capital development still constantly become an agenda in 11th Malaysia Plan (2016-2020). This is to generate and improve the human capital with exact knowledge, skills and frame of mind in order to bloom in a globalized economy. These will all to the Malaysia's economy development and will become the most competitive countries in the region.

Additionally, knowledge-based economy is the focal part of the economic and social progression procedure of any nation. Developing countries are path sending towards the new economic models of development by huge utilization of data and information resources. In previous human paradigms, knowledge was a discriminatory thought. However, today in the knowledge-based economy era, it is a need for growth and progress. In an agricultural economy land is the distinct advantage meanwhile natural resources like coal and iron are important resources in an industrial economy. On the other hand, in a knowledge economy knowledge is the secret weapon to attain prosperity in organizations.

Therefore, intangible asset is desirable in today's knowledge economy. The Term Knowledge Economy is a key term to mirror the expanded significance of knowledge as a key wellspring of growth. That is why a few scholars and reporters argue that developed

countries' economies growth is driven by technologies that depends on knowledge and data creation and dispersion.

The transformations in the global economy had viewed a different approach towards firms' sources of value creation. Moreover, Mohtar, Abdul Rahman, and Abbas (2015) argues that the studies on intellectual Capital is new and required to be study in the developing countries such as Malaysia as it can profit the organizations. Most of the studies on Intellectual Capital has been done in developed countries (Adesina, 2019). Therefore, this study's main intention is to include Malaysian banking industry as the scope of the study for Intellectual capital as the nature of this industry is knowledge intensive. In the current Knowledge-based economy, the organizations are facing great challenges to stay competitive and massive need for knowledge (Mahdi, Nassar, & Almsafir, 2019). Besides, the organizations are struggling to remain due to the rapid changing environment. Hence, intellectual capital is recognized as one of the most crucial assets for the success and survival of organization (Khalique, Hina, Ramayah, & Abdul Nassir, 2020). Thus, this study is needed for boosting the sustainable competitive advantage and firm value creation. Additionally, this study provides contributions to the existing organizations and banking industry as an overall measure for value creation and to stay competitive in present economic environment. Also, deliver the message to practitioners by helping banking industry in realizing the importance of intellectual capital, thus, enable them to adopt the best Intellectual Capital Management and measurement methods that will help them to meet organizations strategic goals.

References

- Adesina, K. S. (2019). Bank technical, allocative and cost efficiencies in Africa: The influence of intellectual capital. *The North American Journal of Economics and Finance*, 48, 419-433.
- Adnan, M., Abdulhamid, T., & Sohail, B. (2018). Predicting Firm Performance through Resource Based Framework. *European Journal of Business and Management*, 10(1).
- Al-Musali, & Ku Ismail. (2014). Intellectual Capital and its Effect on Financial Performance of Banks: Evidence from Saudi Arabia. *Procedia - Social and Behavioral Sciences*, 164, 201-207. doi:10.1016/j.sbspro.2014.11.068
- Bakar, H. O., & Sulong, Z. (2018). The Role of Financial Sector on Economic Growth: Theoretical and Empirical Literature Reviews Analysis. *Journal of Global Economics*, 06(04). doi:10.4172/2375-4389.1000309
- Barney, J. (1991). Firm Resources and Sustained Competitive Advantage. *Journal of Management*, 17(1), 99-120.
- Clarke, M., Seng, D., & Whiting, R. H. (2011). Intellectual capital and firm performance in Australia. *Journal of Intellectual Capital*, 12(4), 505-530.
- Cruz, A. M., & Haugan, G. L. (2019). Determinants of maintenance performance: A resource-based view and agency theory approach. *Journal of Engineering and Technology Management*, 51, 33-47. doi:10.1016/j.jengtecman.2019.03.001
- Curado, C., Guedes, M., & Bontis, N. (2014). The Financial Crisis of Banks (Before, During and After): An Intellectual Capital Perspective. *Knowledge and Process Management*, 21. doi:10.1002/kpm.1434
- Darwish, S., Alzayed, S., & Ahmed, U. (2020). How Women in Science can Boost Women's Entrepreneurship: Review and Highlights. *International Journal of Innovation Creativity and Change*, 14(1), 453-470.

- Dzenopoljac, V., Janosevic, S., & Bontis, N. (2016). Intellectual capital and financial performance in the Serbian ICT industry. *Journal of Intellectual Capital*, 17(2), 373-396. doi:10.1108/jic-07-2015-0068.
- Edvinson, L., & Malone, M. S. (1977). "Intellectual capital: realising your company's true value by finding its hidden brainpower. New York: HarperBusiness. Studying spirituality and religion in organisation". *Journal of Organizational Change Management*, 14(4), 335.
- Edvinsson, L., & Malone, M. (1997). *Intellectual Capital: Realizing Your Company's True Value by Finding Its Hidden Brainpower*: HarperCollins.
- Gogan, M.-L. (2014). An Innovative Model for Measuring Intellectual Capital. *Procedia - Social and Behavioral Sciences*, 124, 194-199. doi:10.1016/j.sbspro.2014.02.477
- Goh, P. K. (2005). Intellectual capital performance of commercial banks in Malaysia. *Journal of Intellectual Capital*, 6(3).
- Gulzar, A. (2018). The Contribution of the Financial Sector in the Economic Growth of Pakistan: A Literature Review on Growth Theories and Indicators of Economic Growth. *Journal of Business & Financial Affairs*, 07(03). doi:10.4172/2167-0234.1000352
- Ibrahimi, A., & Raman, K. (2019). THE IMPACT OF INTELLECTUAL CAPITAL ON FIRM PERFORMANCE IN MALAYSIA. *UNIMAS Review of Accounting and Finance*, 2, 9-18. doi:10.33736/uraf.1996.2019
- Jancenelle, V. E. (2015). The relationship between firm resources and joint ventures: revisited. *American Journal of Business*, 30(1), 8-21. doi:10.1108/ajb-07-2014-0045
- Joshi, M., Cahill, D., & Sidhu, J. (2010). Intellectual capital performance in the banking sector. *Journal of Human Resource Costing and Accounting*, 14(2).
- Joshi, M., Cahill, D., Sidhu, J., & Kansal, M. (2013). Intellectual capital and financial performance: an evaluation of the Australian financial sector. *Journal of Intellectual Capital*, 14(2), 264-285. doi:10.1108/14691931311323887
- Kamasak, R. (2017). The contribution of tangible and intangible resources, and capabilities to a firm's profitability and market performance. *European Journal of Management and Business Economics*, 26(2), 252-275. doi:10.1108/ejmbe-07-2017-015
- Kamath, G. B. (2007). The intellectual capital performance of Indian banking sector. *Journal of Intellectual Capital*, 8(1), 96-123.
- Khalique, M., Hina, K., Ramayah, T., & Shaari Jamal Abdul Nassir, b. (2020). Intellectual capital in tourism SMEs in Azad Jammu and Kashmir, Pakistan. *Journal of Intellectual Capital*, 21(3), 333-355. doi:10.1108/JIC-11-2018-0206
- Khan, M. S., Khan, I., Bhaba, J. I., Qureshi, Q. A., Qureshi, N. A., & Khan, R. (2015). The Role of Financial institutions and the Economic Growth: A Literature Review. *European Journal of Business and Management*, 7(1).
- Mahdi, O. R., Nassar, I. A., & Almsafir, M. K. (2019). Knowledge management processes and sustainable competitive advantage: An empirical examination in private universities. *Journal of Business Research*, 94, 320-334. doi:10.1016/j.jbusres.2018.02.013
- Manzari, M., Kazemi, M., Nazemi, S., & Pooya, A. (2012). Intellectual capital: Concepts, components and indicators: A literature review. *Management Science Letters*, 2(7), 2255-2270. doi:10.5267/j.msl.2012.07.018
- Mavridis, D. G., & Kyrmizoglou, P. (2005). Intellectual capital performance drivers in the Greek banking sector. *Management Research News*, 28(5), 43-62.
- Meles, A., Porzio, C., Sampagnaro, G., & Verdoliva, V. (2016). The impact of the intellectual capital efficiency on commercial banks performance: Evidence from the US. *Journal of Multinational Financial Management*, 36, 64-74. doi:10.1016/j.mulfin.2016.04.003

- Mendes, D., Mario, J., & Romao, M. (2016). *Creating Value from Intangible Assets: An Employee Portal Case Study*.
- Mention, A. L., & Bontis, N. (2013). Intellectual capital and performance within the banking sector of Luxembourg and Belgium. *Journal of Intellectual Capital*, 14(2), 286-309.
- Mohtar, M., Abdul Rahman, I. S., & Abbas, A. (2015). Intellectual Capital and its Major Components. *Journal of Technology and Operations Management*, 10(1), 15-21.
- Naz, F., & Ijaz, F. (2016). FINANCIAL PERFORMANCE OF FIRMS: EVIDENCE FROM PAKISTAN CEMENT INDUSTRY. *Journal of Teaching and Education*.
- Nik Maheran, N. M. (2009). Intellectual Capital Efficiency and Firm's Performance: Study on Malaysian Financial Sectors. *International Journal of Economics and Finance*, 1(2).
- Opping, G. K., & Pattanayak, J. K. (2019). Does investing in intellectual capital improve productivity? Panel evidence from commercial banks in India. *Borsa Istanbul Review*. doi:10.1016/j.bir.2019.03.001
- Paun, C., Musetescu, R., Topan, V., & Danuletiu, D. (2019). The Impact of Financial Sector Development and Sophistication on Sustainable Economic Growth. *Sustainability*, 11(6), 1713. doi:10.3390/su11061713
- Pelinescu, E. (2015). The Impact of Human Capital on Economic Growth. *Procedia Economics and Finance*, 22, 184-190. doi:https://doi.org/10.1016/S2212-5671(15)00258-0
- Rezende, J. F., Correia, A. A., & Gomes, B. A. (2017). The intellectual capital and the creation of value in research units linked to the Brazilian Ministry of Science Technology and Innovation. *RAI Revista de Administração e Inovação*, 14(3), 199-215. doi:https://doi.org/10.1016/j.rai.2017.03.010
- Saddam, S. Z. (2020). The Motivation of Intellectual Capital on Firm's Financial Performance: Analysis on Financial Sector in Malaysia. *International Journal of Academic Research in Accounting, Finance and Management Sciences*, 10(2), 195-199.
- Shih, K. H., Chang, C. J., & Lin, B. (2010). Assessing knowledge creation and intellectual capital in banking industry. *Journal of Intellectual Capital*, 11(1), 74-89. doi:10.1108/14691931011013343
- Singh, S., Sidhu, J., Joshi, M., & Kansal, M. (2016). Measuring intellectual capital performance of Indian banks: A public and private sector comparison. *Managerial Finance*, 42, 635-655. doi:10.1108/MF-08-2014-0211
- Sulanjaku, M. (2014). The Contribution of Skandia Navigator in Intangibles Measurements. *SSRN Electronic Journal*. doi:10.2139/ssrn.2527891
- Sumedrea, S. (2013). Intellectual Capital and Firm Performance: A Dynamic Relationship in Crisis Time. *Procedia Economics and Finance*, 6, 137-144. doi:10.1016/s2212-5671(13)00125-1
- Ting, & Lean. (2009). Intellectual capital performance of financial institutions in Malaysia. *Journal of Intellectual Capital*, 10(4).
- Low, W. S., Tze Tee, L., Kew, R. S., & Ghazali, N. (2015). The Link between Financial Development and Knowledge-Based Economy - Evidence from Emerging Markets. *Journal of Economic Cooperation and Development*, 36(1), 51-88.
- Wendra, W., Sule, E. T., Joeliaty, J., & Azis, Y. (2019). Exploring dynamic capabilities, intellectual capital and innovation performance relationship: evidence from the garment manufacturing. *Business: Theory and Practice*, 20, 123-136. doi:10.3846/btp.2019.12

Xu, J., & Wang, B. (2018). Intellectual Capital, Financial Performance and Companies' Sustainable Growth: Evidence from the Korean Manufacturing Industry. *Sustainability*, 10(12), 4651. doi:10.3390/su10124651

Zarrouk, H., El Ghak, T., & Abu Al Haija, E. (2017). Financial development, Islamic finance and economic growth: evidence of the UAE. *Journal of Islamic Accounting and Business Research*, 8(1), 2-22. doi:10.1108/jiabr-05-2015-0020