Institutions and Economies
Vol. 11, No. 4, October 2019, pp. 31-49

Intellectual Capital and Financial Performance of Islamic Banks in Indonesia

Indra Siswanti[1], Eko Ganis Sukoharsono[2]

Abstract: *This study analyses the impact of Islamic intellectual capital and Islamic financial performance on business sustainability of Islamic banks in Indonesia. For sustainability, Islamic banks face many challenges like: products, development technology, and human capital competing with conventional banks and overcome problems in the ASEAN banking economy. To achieve this aim, the study uses a quantitative approach by collecting secondary data of Islamic banks focusing on three variables: Islamic intellectual capital, Islamic financial performance and business sustainability for the period from 2010-2016. The research used secondary data, from financial reports and annual reports. The data is taken from the internet and Infobank. A census method of Islamic banks in Indonesia is carried out. The data is tested and analysed using partial least squares regression. The results show that: 1) Islamic intellectual capital has a significant impact on Islamic financial performance, 2) Islamic intellectual capital has a significant impact on business sustainability, 3) Islamic financial performance has a significant impact on business sustainability, 4) Islamic financial performance partially mediates the impact of Islamic intellectual capital on business sustainability. Thus, Islamic banks in Indonesia must always develop their intellectual capital, so that Islamic banks in Indonesia will be able to competitive with foreign banks and will be sustainable. From the results of the study, it can be concluded that strengthening intellectual capital and performance improvement could improve the business sustainability of Islamic banks in Indonesia.*

Keywords: Islamic intellectual capital; Islamic financial performance; business sustainability
JEL Classification: G21; G32

Article Received: 22 May 2018; Article Accepted: 14 February 2019

1. Introduction

Competition in the banking industry is becoming increasingly tight. The competition between banks in ASEAN is becoming increasingly stringent, which affects their performance, including that of Islamic banks. The

[1] Corresponding author. Department of Management, Faculty of Economics and Bisnis, Perbanas Institute, Jakarta, Indonesia. *Email: indrasiswanti3@gmail.com*
[2] Department of Accounting, Faculty of Economics and Bisnis, University of Brawijaya, Malang, Indonesia. *Email: eg.sukoharsono@ub.ac.id*

constraints and problems facing Islamic banks in Indonesia include limited capital, limited financial resources, lack of human resource competency and minimal use of information technology. Hence, Islamic banks should prioritise several challenges and strategies such as financial product innovation, improving employee competency, and updating their use of information technology. As observed, from the strategies, financial product innovations of the Islamic banks are important to meet the progressive developments of societies.

Globalisation challenges banking industries to think globally and act locally. In the area of technology, globalisation supports greater innovation and accelerates banking activities, which result in increased competition. One of the keys to accelerating globalisation is intellectual capital where human knowledge is important to be developed. The banks must focus on its intellectual capital, which consists of human capital, structural capital, and relational capital.

Shakina and Barajas (2013) stated that intellectual capital is viewed as an integral part of enterprise in the process of value creation, and increasingly plays an important role in maintaining the company's competitive advantage. They define intellectual capital as an intangible asset that includes technology, customer information, brand names, reputation and a highly valuable corporate culture for the competitiveness of a company. In a modern business environment, intellectual capital is considered the most important strategic asset for corporate success. Intellectual capital is the lifeblood of a company's high technology. Accordingly, there is a great need to nurture the concept and application of intellectual capital in the banking sector (Rezaei, 2014).

Zeghal and Maaloul (2010) stated that the main goal in a knowledge-based economy is to create added value. To be able to create added value requires a precise measure of physical capital and intellectual potential (represented by employees with all the potential and capabilities attached to them). Following the idea of Zeghal and Maaloul (2010), Ulum (2013) conducted a study to create a measure of intellectual capital in Islamic banks, and the results of his research is known as Islamic intellectual capital. However, as observed, no one has used Islamic intellectual capital as a research variable to test its effect on sustainable business. As such, the use of the variable of Islamic intellectual capital can be regarded as a novelty in this study.

Research about intellectual on financial performance like Ozkan et al. (2017) examined the impact of intellectual capital on financial performance in the Turkish banking sector. The result obtained when value-added intellectual coefficient (VAIC) is divided into its components; it can be observed that capital employed efficiency (CEE) and human capital efficiency (HCE) positively affect the financial performance of banks.

Kurfi et al. (2017) examined the impact of intellectual capital (IC) on the financial performance of listed Nigerian food products companies for a five year period from 2010 to 2014 by adopting the Pulic model of intellectual capital (IC) known as value-added intellectual coefficient (VAIC). The results show that there was a significant positive influence of intellectual capital (IC) on financial performance. Specifically, the results showed that structural capital (SC) and capital employed (CE) influence the financial performance of Nigerian food products companies. Based on the resource-based theory, the results prove that companies can enhance financial performance by emphasising on intellectual capital (IC), especially in food products companies.

The impact of intellectual capital on financial performance has been proven empirically by Dadashinasab and Sofian (2014), Kamath (2015), Onyekwelu (2017), state the result of the study showed that intellectual capital had a significant positive effect on return on asset, return on equity, and market-to-book intellectual capital on the firm performance in each subsector of the manufacturing industry, Isanzu (2015), state the results revealed that Intellectual capital has a positive relationship with financial performance of banks operating in Tanzania. Okenwa et. al (2017), state the results of this study revealed that there is a positive and statistically significant relationship between Intellectual Capital and financial performance. Rehman et al. (2011), state the results show that human capital and structure capital have significant relation with financial performance (ROE and EPS), Phusavat et al. (2011), state intellectual capital positively and significantly affects a manufacturing firm's performance. It impacts all four performance indicators under study, i.e. return on equity, return on assets, revenue growth, and employee productivity Carrington (2012), state intellectual capital has significant effect on financial performance. Khan et al. (2012), state intellectual capital has impact on financial performance of banks in Pakistan Fathi et al. state intellectual capital has significant effect on financial performance in the pharmaceutical industry in Iran (2013), Nawaz et al. (2014), state intellectual capital has impact on corporate performance of Islamic financial institutions. Musali and Ismail (2014), state show that IC performance of Saudi banks is low and it is positively associated with bank financial performance indicators and Nuryaman (2015) who stated that intellectual capital has a significant influence on financial performance.

Financial performance is a tool used to convey information to investors. One measure of financial performance is profitability. Dilling (2009) states that companies that have high profitability characteristics and have strong long-term growth have robust business sustainability. As stated by Nawaiseh (2015), a company's financial performance proxied by return on assets and return on equity (ROE) shows a positive and significant influence on corporate social responsibility disclosure.

Maskun (2013) and Nawaiseh (2015) state that the financial performance of the company has a significant positive effect on corporate social responsibility disclosure which, in turn, will improve the welfare of the community. Similarly, Siswanti et al. (2017) state that financial performance has a significant effect on the sustainability of Islamic banks in Indonesia.

Sustainability is the balance between people-planet-profit, known as the triple bottom line concept. Sustainability lies in the meeting between the three aspects of people-social, planet-environment, and profit-economic (Sukoharsono, 2010). Sustainable business can be realised in corporate social responsibility. Corporate social responsibility in the Islamic perspective should be able to reflect the principles of Islam by prioritising the interests of society. As such, the Islamic banks in running their business should not be solely profit-oriented, but also promote social welfare and meet human needs (Jusoh et al., 2015).

In relation to financial performance as measured by the level of profitability, Aisjah and Hadianto (2013) measured the financial performance of Islamic banks using the profit-sharing ratio and zakat performance ratio. They used the Murabaha ratio to measure Islamic financial performance. This is a novelty of their study. The Murabahah ratio has never been applied by Islamic banks to measure financial performance (Siswanti et al., 2017). Thus, one of the contributions of the study is to use the Murabaha ratio as a measure of financial performance.

Based on the results of previous discussions, the study aims to firstly examine the effect of Islamic intellectual capital on Islamic financial performance. Secondly, to examine the effect of Islamic intellectual capital on business sustainability. Thirdly, to examine the effect of Islamic financial performance on business sustainability, and fourthly, to examine the effect of Islamic intellectual capital on business sustainability as mediated by Islamic financial performance

The study is expected to contribute to the development of financial management sciences, especially the financial management of Islamic banks, and the application of intellectual capital related to the financial and sustainable business performance of Islamic banks. In addition, the study expects to build Islamic intellectual capital as part of financial statements and provide benefits for the Islamic banks to manage their intellectual capital better, in order to compete in the global market and provide a competitive advantage for Islamic banks.

2. Literature Review and Hypothesis Development

Based on the research background and previous research findings, the study finds research gaps where Zeghal and Maaloul (2010) and Ulum (2013) have not utilised Islamic intellectual capital to test its effect on either the Islamic financial performance and business sustainability. The study also finds gaps where the results of Musibah and Wan Sulaiman, (2013), stated different results to Akhtar et al. (2015), where the results showed that intellectual capital had a negative impact on corporate social responsibility of Islamic banks in the Gulf Cooperation Council (GCC). Their research findings failed to find any significant association between structural capital efficiency (SCE) and corporate social responsibility of the Islamic banks in the Gulf Cooperation Council (GCC). From the above research gaps, the study focuses on the four research hypotheses.

2.1 Islamic Intellectual Capital and Islamic Financial Performance

As the results of previous researchers, Al-Hawajreh (2013) stated that structural capital (SC) has a significant positive effect on business performance. Similar but with different independent variables, Kurfi et al. (2017) stated that there is a significant positive effect of intellectual capital on company performance as measured by profitability, productivity and market valuation. Supporting Kurfi et al. (2017), Kamath (2015) stated that intellectual capital has a significant positive effect on financial performance. Okenwa et al. (2017) stated that intellectual capital has a significant positive effect on the financial performance of the company. Carrington (2012), Fathi et al. (2013), and Nawaz et al. (2014) stated that intellectual capital has a significant positive effect on the financial performance of the company. From the research, it can be argued that intellectual capital is a very important variable to the success of the company in the context of financial performance. It indicates that the company that has high intellectual capital which includes human capital (HC), structural capital (SC) and capital employed (CE) could compete in the global market and better financial performance. Based on the above discussions, we hypothesise:

> **H_1:** *Increasing Islamic intellectual capital will increase Islamic financial performance*

2.2 Islamic Intellectual Capital and Business Sustainability

In the context of intellectual capital and sustainability, Dzemyda and Jurgelevicius (2014) stated that intangible assets consisting of intellectual capital, human capital and social capital were able to change the economic structure of a country and affect the sustainability of a country's development. Similarly, Akhtar et al. (2015) stated that intellectual capital has a significant positive effect on the business sustainability of microeconomic enterprises (MEE). Akhtar et al. (2015) also found that knowledge and innovation from the dimension of intellectual capital influence in creating a sustainable microeconomic enterprise (MEE). From the results of the previous research findings, it can be argued that intellectual capital comprising human capital (HC), structural capital (SC) and capital employed (CE), is vital to business sustainability. Better intellectual capital will encourage companies to work more effectively and efficiently. Thus, the company will be better in creating a competitive advantage in their global business world, and they could sustain their business. Based on the discussions, it can be proposed a hypothesis as follows:

> **H_2**: *Increasing Islamic intellectual capital will increase business sustainability*

2.3 Islamic Financial Performance and Business Sustainability

In relation to the context of financial performance and business sustainability research findings, Nawaiseh (2015) stated that the company performance measured by return on asset (ROA) shows a significant positive effect on CSR disclosure. Similar to but using different performance measurements, Maskun (2013) stated that the level of leverage, firm size and profitability have a significant positive effect on CSR disclosure, which ultimately improves people's welfare. Sari and Marsono (2013) found that ROA has a significant positive effect on the disclosure of sustainability reports. Sari and Marsono (2013) also found that companies that have a good level of financial performance tend to increase investment by opening many lines and branches of business. From the above research findings, it can be argued that a company that has good financial performance tends to be sustainable in their business compared to a company that has weaker financial performance. In other words, good financial performance will be able to improve the company’s ability to increase its social responsibility, which, in turn, improves the welfare of the community. Based on the discussions, we hypothesise:

> **H_3**: *Increasing Islamic financial performance will increase business sustainability*

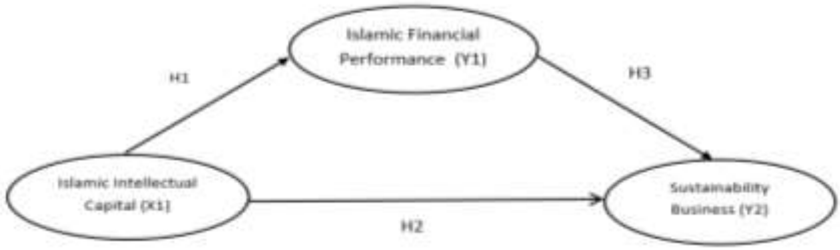
2.4 Islamic Financial Performance Mediates Islamic Intellectual Capital on Business Sustainability

Dzemyda and Jurgelevicius (2014) stated that intangible assets consisting of intellectual capital, human capital and social capital were able to change the economic structure of a country and affect the sustainability of a country's development. Similarly, Akhtar et al. (2015) stated that intellectual capital has a significant positive effect on SME business sustainability. Based on the above discussions, this study tests the direct influence of Islamic intellectual capital on business sustainability and indirect influence of Islamic intellectual capital influence on business sustainability as mediated by Islamic financial performance. Based on the discussion, we hypothesise:

H_4: *Islamic financial performance mediate Islamic intellectual capital will increase business sustainability*

Figure 1 shows the relationships between H1, H2 and H3. The framework comprises interrelated variables of Islamic intellectual capital, Islamic financial performance and business sustainability.

Figure 1: Research Framework



3. Methodology

This study uses secondary data in the form of reports of good corporate governance, annual reports and financial statements of all the Islamic banks in Indonesia for the period from 2010 to 2016. Islamic banks in Indonesia are chosen as the sample because they perform worse than conventional banks. As such, the study seeks to identify areas of possible improvement by analysing Islamic intellectual capital, financial performance and business sustainability. The periods between 2010 to 2016 as the total assets of Islamic banks in Indonesia increased significantly.

The variables used in this study are Islamic intellectual capital as the independent variable (X1), Islamic financial performance as the first dependent variable and as an intervening variable (Y1), and business sustainability as the second dependent variable (Y2). The criteria of population determination in this study are:

1. Islamic banks which published corporate governance reports between 2010 - 2016

2. Islamic banks which published annual reports between 2010 - 2016
3. Islamic banks which published financial statements between 2010 - 2016

The study used saturated sampling (census method) because the population in this study is relatively small. Saturated sampling (census method) is a sampling technique if all members of the population are included in the sample. The population in this study is nine Islamic banks.

This study used partial least squares (PLS) as the primary analytical tool because it can be applied to all data scales, does not require many assumptions and the sample size does not have to be large. PLS is used not as a confirmation theory, but also to recommend relationships that exist or which do not yet exist. It is an analytical method that is not based on many assumptions and allows an analysis of various indicators of latent variables and indicators that can be reflexive and formative.

To support the results of statistical tests, the study conducts interviews with bank practitioners. The aim of the follow-up interview is to clarify the respondents' opinions related to their questionnaire response. Furthermore, if the interview results support the results of the study, it will be included as information that supports the results of the statistical test. The limitations of this study are not differentiating the status of group banks in foreign exchange banks or non-foreign exchange banks.

3.1 Measurement of Islamic Intellectual Capital

Ulum (2013) states that the formula for calculating Islamic intellectual capital differs little from the intellectual capital formulated by Zeghal and Maaloul (2010). The fundamental difference between the two lies in the accounts to calculate the value added (VA). The formula for calculating employed capital (CE) refers formula no (1), human capital formula (HC) refers formula no 2, and capital structure (SC), refers formula no.3. Value added (VA) on the Islamic intellectual capital is constructed from Syariah-based income accounts, which are net income for Syariah activities and Syariah non-operational income. The indicators of the Islamic intellectual capital consist of three with the following measurements:

1. Capital Employed (CE) is calculated by the formula of:

$$\text{iB-VACA} = \text{VA}/\text{CE}$$

2. Human Capital (HC) is calculated by the formula of:

$$\text{iB-VAHU} = \text{VA}/\text{HC}$$

3. Structural Capital (SC) is calculated by the formula of:

$$\text{iB-STVA} = \text{SC}/\text{VA}$$

3.2 Measurement of Islamic Financial Performance

In this study, the Islamic financial performance of the Islamic banks in Indonesia is measured by financial ratios by developing the research conducted by Aisjah and Hadianto (2013). To measure the Islamic financial performance, the study uses the Murabaha ratio (MR) following the formula of:

$$MR = \frac{\text{Murabaha Financing}}{\text{Total Financing}} \text{ X } 100\ \%$$

3.3 Measurement of Business Sustainability

Business sustainability in this study is measured using three aspects of triple bottom lines, which are economic performance (6 items), social performance (10 items) and environmental performance (8 items). To get an objective value in measuring business sustainability, we used scoring index analysis calculated by self-assessment using question items so that every Islamic bank can be assessed for the condition of its business sustainability.

4. Results and Discussion

4.1 Test Validity and Reliability

The research variables of the Islamic intellectual capital in this study have three reflexive indicators, which are: human capital (HC), structural capital (SC) and capital employees (CE). The evaluation of the outer model of the Islamic intellectual capital variable is measured by convergent validity, discriminant validity and composite reliability as shown in Table 1.

Based on Table 1, the convergent validity variable of intellectual capital shows the outer loading of > 0.50. Thus, it can be concluded that the measurement of indicators Islamic intellectual capital meets the convergent validity test, and is significant in measuring the Islamic intellectual capital variable. The results of the convergent validity of financial performance variables show that the value of outer loading is > 0.50. It can be concluded that the measurement of Islamic financial performance meets the convergent validity test and is significant in measuring the Islamic financial performance variable. The test results of the convergent validity of sustainable business variables show that the value of outer loading is > 0.50. Hence, the measurement of indicators for sustainable business variables meets the convergent validity test and is significant in measuring the sustainability of the business.

Table 1: Validity Test

Variables	Islamic Intellectual Capital	Islamic Financial Performance	Business Sustainability
X1.1	0.837		
X1.2	0.859		
X1.3	0.855		
Y1		1	
Y2.1			0.984
Y2.2			0.951
Y2.3			0.974

Based on Table 2, the composite reliability test results of Islamic intellectual capital show a value of 0.8866, Islamic financial performance recorded 1.000 and sustainable business value of 0.9793. This indicates that analysis has high reliability because the composite reliability values are > 0.50.

The results of the discriminant validity test can be seen from the square root value of average variance extracted (AVE). If the square root AVE value is higher than the other correlation value between the contracts, it means that the variable has high discriminant validity. Based on the analysis, the AVE value for Islamic intellectual capital is 0.7228, and square root value of AVE is 0.8502. This value is higher than the correlation value between Islamic intellectual capital and Islamic financial performance (0.7363) and sustainable business (0.6538). The value of AVE Islamic financial performance is 1.000, and the square root value of AVE is 1.000. This value is higher than the correlation value between Islamic financial performance and Islamic intellectual capital (0.7363) and sustainable business (0.6315). The continuous value of AVE sustainable business is 0.9403, and square root value of AVE is 0.9695. This value is higher than the correlation value between sustainable business and Islamic intellectual capital (0.6538) and Islamic financial performance (0.6315). It indicates that Islamic intellectual capital, Islamic financial performance variable, and sustainable business have high discriminant validity.

Test results show the value of Cronbach's alpha and composite reliability have values exceeding 0.70 for every variable, so it can be inferred that all the indicators of invalid reflexive constructs meet the test of reliability.

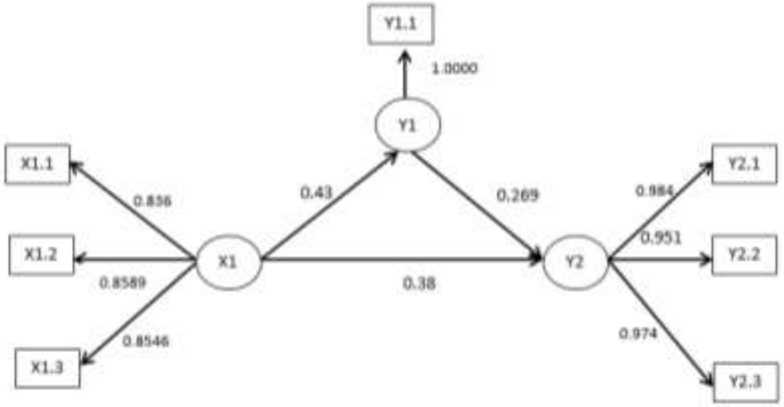
Table 2: Values AVE and Reliability Test

Variables	AVE	Composite Reliability	Cronbach Alpha
X1	0.723	0.887	0.830
Y1	1	1	1
Y2	0.940	0.979	0.968

4.2 Partial Least Square Analysis

The partial least square analysis (PLS) used Smart PLS 3.0, as shown in Figure 2:

Figure 2: Inner Model



X1: Islamic intellectual capital
Y1: Islamic Financial Performance
Y2: Sustainability Business

The data processing using PLS 3.0 produced R-Square values, as shown in Table 3. The R-Square of Islamic intellectual capital affected Islamic financial performance by a measure of 0.6510. It can be interpreted that Islamic intellectual capital can explain 65.10% of Islamic financial performance, while the remaining 34.90% is explained by factors outside the model. The R-Square of Islamic intellectual capital affected sustainability business by a measure of 0.4816. It means that Islamic intellectual capital can explain 48.16% of business sustainability and the remaining 51.84% is explained by factors outside the model.

Table 3: Value of R-Square

Variable	R- Square
Islamic Intellectual Capital (X1)	
Islamic Financial Performance (Y1)	0.651
Sustainability Business (Y2)	0.482

With the test path, the study hypotheses are acceptable if the value of the t-statistic is > 1.96. The original sample estimate and the value of t-statistic on the inner workings of the model are shown in Table 4.

Table 4: Impact Coefficient and T-Statistics

Hypotheses	Relationship	Coefficient	T-statistic	Description
	Direct Relationship			
H1	Islamic Intellectual Capital --> Islamic Financial Performance	0.431	3.314	Accepted
H2	Islamic Intellectual Capital --> Sustainability Business	0.381	2.038	Accepted
H3	Islamic Financial Performance --> Sustainability Business	0.270	2.111	Accepted
	Indirect Relationship			
H4	Islamic Intellectual Capital -->Islamic Financial Performance	0.431	2.148	Accepted
	Islamic Financial Performance -->Sustainability Business	0.27		

From Table 4, the hypotheses test results show that the coefficient of Islamic intellectual capital (X1) on Islamic financial performance (Y1) is 0.4314 with t-statistic of 3.3135 where the value is bigger than 1.96 and P-value is smaller from 0.05 (0.001 < 0.05). The results indicate that there is a significant impact of Islamic intellectual capital (X1) on Islamic financial performance. This means that if Islamic intellectual capital increases, it will significantly increase Islamic financial performance. Based on these results, hypothesis 1 (H1) is accepted.

The coefficient of Islamic intellectual capital (X1) on business sustainability (Y2) is 0.3805 with the t-statistic of 2.0375 where the values are bigger than 1.96 and P-value is smaller than 0.05 (0.042 < 0.05). The results indicate that there is a significant impact of Islamic intellectual capital (X1) on business sustainability (Y2). This means that if Islamic intellectual capital increases, it will significantly increase business sustainability. Based on these results, hypothesis 2 (H2) is accepted.

The coefficient if Islamic financial performance (Y1) on business sustainability (Y2) is 0.2695 with t-statistic of 2.1109 where the values are bigger than 1.96 and P-value is smaller from 0.05 (0.035 <0.05). The results indicate that there is a significant impact of Islamic financial performance (Y1) on business sustainability. This means that if Islamic financial performance increases, it will significantly increase business sustainability. Based on these results, hypothesis 3 (H3) is accepted.

The indirect effect of Islamic intellectual capital (X1) mediated by Islamic financial performance (Y1) on business sustainability (Y2) can be proven by the coefficient value of direct effect of Islamic intellectual capital (X1) on Islamic financial performance (Y1) is 0.4314 (significantly accepted), coefficient value of direct effect Islamic financial performance (Y1) on business sustainability (Y2) is 0.2695 (significant), and coefficient value of direct effect Islamic intellectual capital (X2) on business sustainability (Y2) with a coefficient value is 0.3805 (significant). The result of Sobel test shows the coefficient's indirect effect of Islamic intellectual capital (X2) on business sustainability (Y2) through Islamic financial performance (Y1) is 2.148 > 1.96 with P-value of 0.042. Based on the results, Islamic financial performance (Y1) has partial mediation. Thus, it can be concluded that the improvement of Islamic intellectual capital as mediated by Islamic financial performance has a significant effect on the business sustainability of Islamic banks. It means that empirical facts support the hypotheses. This indicates that good Islamic financial performance can have a mediating effect on Islamic intellectual capital to promote the sustainability of Islamic banks.

The results of this study indicate that Islamic intellectual capital has a significant positive effect on the financial performance of Islamic banks. Based on the results, Islamic intellectual capital as measured by human capital, structural capital and capital employed could give added value to Islamic banks, and positively impact on their financial performance. Thus, it can be argued that when the Islamic banks manage their intellectual capital well, this will increase their value s and improve financial performance.

The results of forum discussion group with practioners of Islamic banking, stated that intellectual capital is very important for the improvement and sustainability of Islamic banks in Indonesia. The results of the study are in line with Ulum (2013), who states that the average growth of intellectual capital has a significant positive effect on financial performance in the future. The results are also similar to Kurfi et al. (2017), who stated that there was a significant positive influence of intellectual capital (IC) on financial performance. The result of the study is also supported by Kamath (2015), Okenwa et al. (2017), Carrington (2012), Fathi et al. (2013), and Nawaz et al. (2014) who stated that intellectual capital has a significant positive effect on the financial performance of the company

The results of this study also indicate that Islamic intellectual capital as measured by human capital (HC), structural capital (SC) and capital employed (CE) has a significant positive effect on the business sustainability of Islamic banks in Indonesia. The results of this study are supported by Dzemyda and Jurgelevicius (2014) that intangible assets that consist of intellectual capital, human capital and social capital can change the economic structure of a country and affect the sustainability of a country's development. The results are also similar to Akhtar et al. (2015) that intellectual capital has a significant positive effect on the business sustainability of small and medium enterprises. If human capital is not optimised, then it can lead to failures that will disrupt the business sustainability of small and medium businesses.

This study was supported by the results of interviews with Islamic bank practitioners, who stated that it is vital for Islamic banks to manage intellectual capital well. A lack of available human capital results in an imbalance between the demand for human resources and the availability of existing human resources. At present, Islamic banks in Indonesia find it difficult to obtain human resources that understand Islamic financial transactions and understand Muamalah knowledge. Thus, Islamic banks in Indonesia must conduct training on sharia financial transactions to improve human capital because human capital is the main controller of Islamic banks. Accordingly, if intellectual capital is managed and developed properly, it will affect the performance of Islamic banks positively.

The results of this study indicate that financial performance has a significant positive effect on the business sustainability of Islamic banks. Dilling (2009) states that companies with high profitability characteristics and strong long-term growth have robust business sustainability. The results of this study are supported by Nawaiseh (2015), who states the corporate performance as reflected with the return on asset shows a significant positive effect on corporate social responsibility disclosure. Also, Maskun (2013) showed that leverage, firm size and profitability have a significant positive effect on corporate social responsibility disclosure, which improves the welfare of the community.

Financial performance is vital to maintaining the viability of the company in the long-term. This means that financial performance could indicate whether the company has bright prospects. Thus, every company must invest in improving its financial performance. Better financial performance of the Islamic banks will mean they are more secure. Nevertheless, Islamic banks are not responsible solely for the single bottle line but must address the triple bottom line comprising economic, social and environmental aspects. This is because financial performance is insufficient to guarantee the company's growth and sustainability.

This study is supported by the results of interviews with Islamic bank practitioners who stated that Islamic banks are necessary for maintaining performance, including financial performance. Financial performance is something that gets the most attention from Islamic banks because from financial performance, it can be assessed whether the performance of Islamic banks is good or not. Hence, all Islamic banks compete to improve their financial performance. Good financial performance provides opportunities for Islamic banks to continue to grow, develop and be sustainable. Also, for Islamic banks to become sustainable, they must also address social and environmental performance.

This study finds that Islamic intellectual capital as mediated by Islamic financial performance has a significant effect on the business sustainability of Islamic banks. Business sustainability in Islamic banks can be realised by the influence of good Islamic financial performance. Also, good Islamic intellectual capital supports strong Islamic financial performance and sustainability of Islamic banks. Hence, the company that neglects human capital is destined to fail.

The interviews with Islamic bank practitioners underscored the importance of intellectual capital for the sustainability of Islamic banks. Intellectual capital that is maintained, both in terms of quality and quantity, can improve the company's financial performance, which in turn, improves the sustainability of Islamic banks.

5. Conclusions and Implications

Based on the above discussions and interpretations, Islamic intellectual capital affects Islamic financial performance. Intellectual capital has a very important role and strategy in measuring human resources development of Islamic banking industries. Intellectual capital is an important strategic asset to the success of Islamic banks. It could create a corporate wealth of the banking industry. The intellectual capital includes all employees' knowledge, organisation and their ability to create value-added and sustainable competitive advantage. This means that the intellectual capital could provide value-added for the Islamic banks in improving financial performance and improving the sustainability of Islamic banks.

Islamic intellectual capital could also increase business sustainability. Intellectual capital is considered the most important strategic asset for the success of Islamic banks. It could contribute to and create corporate wealth. This means that the quality and quantity of intellectual capital, the financial performance of Islamic banks could increase and could bring an effect on business sustainability of Islamic banks.

Islamic financial performance could increase banking sustainability. It shows that Islamic financial performance is the easiest factor to measure by shareholders and customers. Islamic banks will be sustainable if their financial performance is healthy.

The existence of intellectual capital as an intangible asset is one of the factors that create business sustainability of the Islamic banks. Well-managed quality and quantity of intellectual capital support the increase of financial performance and drives the sustainable growth of Islamic banks.

The results benefit the development of financial management theory, especially Islamic financial management theory and provides practical benefits to Islamic banks. The study could develop financial management theory on Islamic banking by using the Murabahah ratio as an indicator to measure the financial performance of Islamic banks. This is because the financing scheme of the Islamic banks in Indonesia is more dominated by financing with murabahah scheme. Also, Islamic banks in Indonesia use Murabahah schemes more than Musyarakah and Mudaraba. As such, the Murabaha ratio is a particularly instructive measure of the financial performance of Islamic banks in Indonesia. (3) The Islamic banks have to manage the quality and quantity of human capital by improving their competence and skill as well as improving structural capital and employed capital.

6. Limitation and Recommendations for Future Study

This study is specific to Islamic banks, and hence, the findings may not be suitable for all types of banks. The total assets of the sampled banks also differ, meaning that the data is heterogeneous. Future studies are advised to replicate a conceptual framework model where the differentiated total assets of the bank are identified. Other studies could compare Islamic financial institutions such as Islamic insurance companies, Baitul Maal Wat Tamwil (BMT) and Zakat Amil Institutions, to find new models of business sustainability.

References

Aisjah, S., & Hadianto, A.E. (2013). Performance based Islamic Performance Index (Study on the Bank Muamalat Indonesia and Bank Syariah Mandiri). *Asia-Pacific Management and Business Application*, *2*(2), 98-110.

Akhtar, C.S., Ismail, K., Ndaliman, M.A., Hussain, J., & Haider, M. (2015). Can intellectual capital of SMEs help in their sustainability efforts. *Journal of Management Research***,** *7*(2), 83–97. http://dx.doi.org/10.5296/jmr.v7i2.6930

Al-Hawajreh, K.M. (2013). The impact of structural capital on business performance in Jordanian pharmaceutical manufacturing companies. *European Journal of Business and Management*, 5(10), 177-189.

Carrington, D. (2013). Intellectual capital and its influence on the financial performance of companies in under developed capital markets – The Case of the Caribbean**.** *The Proceedings of The 10th International Conference On Intellectual Capital, Knowledge Management & Organizational Learning ICICKM-2013*. The George Washington University Washington DC, USA 24-25 October.

Dadashinasab, M., & Sofian, S. (2014). The impact of intellectual capital on firm financial performance by moderating of dynamic capability. *Asian Social Science*, *10*(17), 93-100. http://doi.org/10.5539/ass.v10n17p93

Dilling, P.F.A. (2009). Sustainability reporting in a global context: What are the characteristics of corporations that provide high quality sustainability reports – An empirical analysis. *International Business &*

Economics Research Journal, *9*(1), 19-30. http://doi.org/10.19030/iber.v9i1.505

Dzemyda, I., & Urgelevicius, A. (2014). The impact of intangible capital countries' sustainability during the economic recession. *8th International Scientific Conference "Business and Management 2014"* May 15–16. 814-822, Vilnius, Lithuania.

Fathi, S., Farahmand, S., & Khorasani, M. (2013). Impact of intellectual capital on financial performance. *International Journal of Academic Science, 2*(1), 6-17.

Isanzu, J.N. (2015). Impact of intellectual capital on financial performance of banks in Tanzania. *Journal of International Business Research and Marketing*, *1*(1), 16-23. http://doi.org/10.18775/jibrm.1849-8558.2015.11.3002

Jusoh, W.N.H.W., Ibrahim, U., & Napiah, M.D. (2015). An Islamic perspective on corporate social responsibility of Islamic banks. *Mediterranean Journal of Social Sciences*, *6*(2), 308-315. http://doi.org/10.5901/mjss.2015.v6n2s1p308

Kamath, G. B. (2015). Impact of intellectual capital on financial performance and market valuation of firms in India. *International Letters of Social and Humanistic Sciences*, *48*, 107-122. https://doi.org/10.1108/14691930710715088

Khan, F.A., Khan, R.A.G., & Khan, M.A. (2012). Impact of intellectual capital on financial performance of banks in Pakistan: Corporate restructuring and its effect on employee morale and performance. *International Journal of Business and Behavioral Sciences, 2*(6), 22-30. https://doi.org/10.6007/IJARBSS/v4-i11/1292

Kurfi, S.A., Udin, N.M., & Bahamman, S.M. (2017). The impact of intellectual capital on the financial performance of listed Nigerian food products Companies, *Journal of Accounting and Taxation, 9*(11), 147-160. https://doi.org/10.5897/JAT2017.0246

Maskun, A. (2013). Leverage level, company size, profitability toward the disclosure of Corporate Social Responsibility (CSR) of Lq-45 companies in Indonesia stock exchange. *International Journal of Academic Research*, *5*(2), 140-144.

Musali, M., Abdul K., & Ismail, K.N.I. (2014). Intellectual capital and its effect on financial performance of banks: Evidence from Saudi Arabia**.** *Procedia Social and Behavioral Sciences 164*, 201-207. https://doi.org/10.1016/j.sbspro.2014.11.068

Musibah, A.S., & Wan Sulaiman, W.Y. (2013). Impact of intellectual capital on corporate social responsibility evidence from Islamic banking sector in GCC. *International Journal of Finance and Accounting*. 2(6), 307-3011. http://doi.org/10.5923/j.ijfa.20130206.02

Nawaiseh, M. (2015). D**o** firm size and financial performance affect corporate social responsibility disclosure: Employees' and environmental dimensions? *American Journal of Applied Sciences*,12(12), 967-981. https://doi.org/10.3844/ajassp.2015.967.981

Nawaz, T., Haniffa, R., & Hudaib, M. (2014). The impact of intellectual capital on corporate performance of Islamic financial institutions. *Proceedings of the International Conference on Intellectual Capital,* 519.

Nuryaman. (2015). The influence of intellectual capital on the firm's value with the financial performance as intervening variable. *Procedia - Social and Behavioral Sciences,* 211, 292 – 298. https://doi.org/10.1016/j.sbspro.2015.11.037.

Okenwa, O., Ndubuisi, A.N., Abiahu Mary, A., & Chidoziem, F. (2017). Effect of intellectual capital on financial performance of quoted deposit money banks in Nigeria (2010-2015). *Journal of Global Accounting*, *5*(1), 114-125.

Oni, L.B., Akinsa, T.A, & Aninkan, O.O. (2014). Intellectual capital formation and economic growth in Nigeria. *Journal of Economics and Sustainable Development*, 5(6), 1-8.

Onyekwelu, U.L., Okoh, J.I., & Iyidiobi. (2017). Effect of intellectual capital on financial performance bank in Nigeria. *European Journal of Accounting, Auditing and Finance Research*, 5(2), 28-57.

Ozkan, N., Sakan, S., & Kayacan, M. (2017). Intellectual capital and financial performance: A study of the Turkish banking sector. *Bursa Istambul Review*, *17*(3), 190-198. https://doi.org/10.1016/j.bir.2016.03.001

Phusavat, K., Comepa, N., Lutek, A.S., & Ooi, K.B. (2011). Interrelationships between intellectual capital and performance empirical examination. *Industrial Management & Data System*s, *111*(6), 810-829. https://doi.org/10.1108/02635571111144928

Rehman, W., Rehman, C.A., Rehman, H., & Zahid, A. (2011). Intellectual capital performance and its impact on corporate performance: An empirical evidence from Mudaraba sector of Pakistan. *Australian Journal of Business and Management Research,* 1(5), 8-16.

Rezaei, E. (2014). Statistical analysis of the impact of intellectual capital elements on future performance: A case study of Tehran stock exchange. *Research Journal of Recent Sciences*, 3(12), 131-137.

Sari, M.P., & Marsono. (2013). Pengaruh kinerja keuangan, ukuran perusahaan dan corporate governance terhadap pengungkapan sustainability report (*The effect of financial performance, corporate size, and corporate governance on sustainability report disclosure*). *Diponegoro Journal of Accounting, 2*(3), 1-10.

Shakina, E., & Barajas, A. (2013). The contribution of intellectual capital to value creation. *Contemporarey Economics*, *7*(4), 41-55. https://doi.org/ 10.5709/ce.1897-9254.121

Siswanti, I., Salim,U., Sukoharsono, E.G., & Aisjah, S. (2017). Sustainable business of Islamic bank through on the Islamic corporate Governance and Islamic financial performance. *Journal of Finance and Banking Review, 2*(2), 15-20.

Sukoharsono, E.G (2010). Metamorfosis akuntansi sosial dan lingkungan: Mengkonstruksi akuntansi sustainabilitas berdimensi spiritualitas *(Metamorphosis of Social and Environmental Accounting: Constructing Sustainability Accounting Based on Spiritual Dimension).* Professor Inaguration of University of Brawijaya.

Ulum, I., (2013). iB -VAIC: Model pengukuran kinerja intellectual capital perbankan syariah di Indonesia (*iB -VAIC: Performance measurement model of intellectual capital of Islamic bank in Indonesia*), *Jurnal Inferensi (terakreditasi), 7*(1), 183-204.

Zeghal, D., & Maaloul, A. (2010). Analysing value added as an indicator of intellectual capital and its consequences on company performance. *Journal of Intellectual Capital*, *11*(1), 39-60. https://doi.org/10.1108/14691931011013325