## Islamic Financial Performance Index: The role of Islamic Intellectual Capital

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#### ABSTRACT

This research is intended to analyze the influence of Islamic Intellectual Capital on the Islamic Financial Performance Index of Islamic Commercial Banks in Indonesia. The used method in this research is causality method. The data were analyzed through panel data regression. The results indicate the level of Islamic Intellectual Capital of Islamic Commercial Banks in Indonesia is high. Furthermore, the Islamic Financial Performance Index indicator with a very high level are Islamic Investment Ratio or Halal Investment and Islamic Income Ratio. The high-level indicator is Equitable Distribution Ratio. The moderate level indicator is Profit Sharing Ratio. The low-level indicator is the Directors-Employees welfare ratio. The very low-level indicator is the Zakat Performance Ratio. Generally, the financial performance of Islamic Commercial Banks in Indonesia based on the Islamic Financial Performance Index has a fairly high level. In addition, Islamic Intellectual Capital has a positive and significant influence on the Islamic Financial Performance Index of Islamic Commercial Banks in Indonesia. The condition shows if the quality of employees, technology, operational systems and good relations of Islamic banks and their partners are high, it will encourage Islamic banks to have high financial performance based on Islamic Financial Performance Index. This research is expected to provide benefits in relation to the measurement of financial performance based on the Islamic Financial Performance Index of Islamic Commercial Banks in Indonesia.

Keywords: Financial performance, Profitability, Islamic Financial Performance Index, Islamic Intellectual Capital

## INTRODUCTION

Islamic Intellectual Capital (IIC) is a measuring tool in assessing the performance of Intellectual Capital (IC) in Islamic banking, which is constructed by Ulum (2013). Differently, The Islamic Financial Performance Index (IFPI) is an assessment tool for evaluating the financial performance of Islamic banks, encompassing both material and spiritual elements that are prominent within this sector. (Jan et al., 2019; Ledhem & Mekidiche, 2020) The index utilizes various measuring indicators, such as the Profit Sharing Ratio (PSR), Zakat Performance Ratio (ZPR), Equitable Distribution Ratio (EDR), Directors-Employees Welfare Ratio (DER), Islamic Investment Ratio (IH), and Islamic Income Ratio (PH). (Hameed, et al., 2004). In addition, performance of an industry can be measured among others on the degree of profitability, innovation, and efficiency (Machmud, 2016). The following matter shows that one of the ways in measuring company performance is an index measurement. The index was developed to assist stakeholders in evaluating the performance of Islamic financial institutions. Thus, the measurement of financial performance in Islamic banks can be different from conventional banks. Reality says differently, the measurement of financial performance in both conventional banks and Islamic banks still uses profitability level (Siswanti, et al., 2017).

The performance of Islamic banks in Indonesia based on IFPI during the year of 2011-2014 period has the rating with quite satisfactory predicates. However, there are two unsatisfactory ratios, namely ZPR and DER. The condition shows that the distribution of zakat funds carried out by Islamic banks in Indonesia is still low. In addition, the range of differences in the welfare of directors and employees of Islamic banks is still high (Meilani, et al., 2016). More relevant information about the measured elements is not only tangible assets, but also intangible assets needed in an effort to improve the finances of company (Ningrum & Shiddiq, 2012). Therefore, disclosure of intangible assets is considered very important to achieve competitive advantage in their business. Intangible assets in the form of business knowledge are commonly referred to Intellectual Capital (Guthrie, 2001(Ali et al., 2022; I Sidharta & A Affandi, 2016; Nawaz & Haniffa, 2017; Ur Rehman et al., 2022). Islamic Intellectual Capital with the formula of Islamic Banking-Value Added Intellectual Coefficient (iB-VAIC) constructed by Ulum (2013) is a suitable measurement tool in assess IC performance as it is based on financial accounts of Islamic banks in Indonesia (Ulum, 2013).

Many current studies discuss the influence of IC on banking financial performance. Yet, there are still a few studies that discuss IIC or measurements using iB-VAIC against IFPI. According to the research conducted by Pramitasari (2016), IC has a significant effect on IFPI and can be used to predict IFPI in the future. In addition, IC growth rates (ROGIC) also have a significant effect on future IFPI. The research was supported by Andraeny & Putri (2017) who state that Islamic Social Reporting, IC with iB-VAIC and Islamic Supervisory Board models has a positive and significant effect on IFPI Islamic banks. Moreover, the research conducted by Siswanti (2017) reveals that the improvement of IIC will increase IFPI which is proxied with Murabahah Ratio. Based on research conducted by Andraeny & Putri (2017); Siswanti, Salim, Sukoharsono & Aisjah (2017); Pramitasari & Wahidahwati (2016); and Harianto & Syafruddin (2013) show that one of the variables affecting IFPI is IIC.

This study aims to evaluate the levels of Islamic Intellectual Capital and the Islamic Financial Performance Index while also examining the influence of Islamic Intellectual Capital on the Islamic Financial Performance Index within Indonesian Islamic Commercial Banks. This study is expected to substantially contribute to financial performance assessment by focusing on the Islamic Financial Performance Index of Indonesian Islamic Commercial Banks.

## LITERATURE REVIEW

The success of the company in achieving goals can be seen by measuring its financial performance. One way to measure company performance is through the index. This index was developed to help stakeholders (depositors, shareholders, religious bodies, government, and others) to evaluate the performance of Islamic financial institutions. IFPI is a financial performance measurement tool that can express the materialistic and spiritual values that exist in Islamic banks (Hameed, et al., 2004).

The Resources-Based Theory, developed by Wernerfelt (1984), posits that a firm's resources can provide a competitive advantage, leading to superior performance. This theory provides a comprehensive analysis of a company's resources and explores strategies for efficiently managing and leveraging these resources. When effectively comprehended and utilized, these resources can create additional value for the organization by exploiting opportunities and mitigating hazards. Consequently, this gives the company a unique competitive edge over its rivals.

Intellectual capital (IC) is a company resource that includes individual and group talents and skills, technology and social networks, related cultures, and intellectual property such as patents, copyrights, methods, procedures, archives, and others (Stewart, 1997). IC is not only needed by companies to survive in business competition but also able to achieve superior performance (Andraeny & Putri, 2017). By using iBVACA, iB-VAHU and iB-STVA indicators, IC in Islamic banking can be measured (Ulum, 2013). These measurement results can be used as an indication for decision makers about how companies manage their IC to maximize added value for the company (Andraeny & Putri, 2017).

In this study, the independent variable is IIC with iB-VACA, iB-VAHU and iB-STVA indicators. Meanwhile, the dependent variable is IFPI with indicators PSR, ZPR, EDR, DER, IH and PH. Based on these indicators, then see how the IIC effect on IFPI.

This is in line with the research conducted by Hameed, et al (2004), Hameed, et al (2013), and Meilani, et al. (2016) that it is important to measure Islamic Commercial Bank (ICB) financial performance based on IFPI in order to express the materialistic and spiritual value of BUS. Furthermore, Andraeny & Putri, (2017), Siswanti, et al. (2017), (Pramitasari & Wahidahwati (2016) and Harianto & Syafruddin (2013) show that IIC has a positive effect on financial performance based on IFPI. Thus, it can be assumed that IIC had a positive effect on IFPI.

The uniqueness of this study with previous research is that the IC measurement model used is iB-VAIC, then analyzed its association with IFPI.

## METHOD

The used method in this study was the causality method. The design of this study was included in the explanatory research design. This research was conducted to test certain hypotheses that explain the causality relationship between IIC variables towards IFPI.

The object in this study relates to financial performance as measured by IFPI and IIC of Islamic Commercial Bank in Indonesia from 2010 to 2016. The used population in this study were all Islamic Commercial Bank (ICB) in Indonesia during the year of 2010-2016, which amounted to 13 ICB. In addition, sampling in this study was carried out by purposive sampling. Purposive sampling describes a method of selecting the chosen samples based on consideration or certain criteria. The sample in this study was taken based on the following conditions:

- 1) Islamic Commercial Banks which run its operations and is registered by Bank Indonesia during the period of 2010-2016.
- 2) Islamic Commercial Banks which publish an annual report and a complete report at Good Corporate Governance during the study period of 2010-2016.

The used data analysis techniques in this study were panel data regression methods. Panel data explains as a combination of cross data (cross section) and time series data (time series). Meanwhile, EViews 9 software was used in processing data.

## RESULTS AND DISCUSSION

# The Analysis Of The Level Of Islamic Intellectual Capital In Islamic Commercial Banks In Indonesia

IIC level measurement which consists of three indicators namely iB-VACA, iB-VAHU and iB-STVA are as follows:

1) iB-VACA

iB-VACA describes as a ratio that shows the contribution made by each Capital Employed (CE) to the Value Added (VA) of the company (Ulum, 2013). Based on iB-VACA measurements in Table 1 during the period of 2010-2016 towards the 11 selected Islamic Commercial Banks (ICB), the ICB11 is the Islamic commercial bank which has the highest iB-VACA with an average of 0.65. This is because the total equity of the ICB11 is small but can generate a large VA, which results in a high contribution made from CE to VA ICB11. In the other hand, the lowest Islamic Commercial Banks with iB-VACA is ICB8 with an average of -0.03. It is caused by the total equity of ICB8 is large but it produces a small VA that has even been minus or suffered a loss. Thus, the impact of the contribution generated from CE on VA ICB8 is low. Ulum (2013) assumes that if one unit from CE produces a greater return than other companies, then the company is better at managing its CE.

ICB	2010	2011	2012	2013	2014	2015	2016	Average
ICB1	0.59	0.56	0.50	0.43	0.46	0.37	0.36	0.47
ICB2	0.28	0.38	0.43	0.43	0.25	0.33	0.21	0.33
ICB3	0.08	0.17	0.09	0.24	0.24	0.14	-0.45	0.07
ICB4	0.11	0.25	0.38	0.49	0.44	0.43	0.44	0.36
ICB5	0.09	0.13	0.16	0.18	0.11	0.09	0.12	0.13
ICB6	0.22	0.33	0.42	0.34	0.26	0.29	0.31	0.31
ICB7	0.46	0.40	0.34	0.40	0.19	0.18	0.17	0.31
ICB8	-	0.08	0.08	0.14	0.19	-0.48	-0.19	-0.03
ICB9	0.05	0.12	0.25	0.4	0.42	0.50	0.50	0.32
ICB10	0.06	0.26	0.23	0.23	0.04	-0.04	-0.01	0.11
ICB11	0.99	0.88	0.92	0.71	0.47	0.32	0.29	0.65

Table 1. iB-VACA

#### 2) iB-VAHU

iB-VAHU describes as a ratio that shows contributions made from invested rupiah (IDR) in Human Capital (HC) to Value Added (VA) companies (Ulum, 2013). The results of the iB-VAHU measurement based on Table 2 in the period of 2010-2016 towards 11 Islamic Commercial Banks indicate that ICB9 is an Islamic Commercial Bank that has the highest iB-VAHU with an average of 5.56. It is caused as the burden of the employees of ICB9 is small but the generated VA is large, which results a high contribution from each HC to VA ICB9. In addition, the lowest iB-VAHU of Islamic Commercial Bank is ICB8 with an average of 0.49. It is caused as in the last two years, namely in 2015 and 2016, ICB8 suffered a loss which resulted in minus of generated VA. Thus, the impact of the generated contribution from each HC to VA ICB8 was low.

ICB	2010	2011	2012	2013	2014	2015	2016	Average
ICB1	1.91	1.77	2.13	1.74	1.22	1.22	1.24	1.60
ICB2	1.91	1.91	1.95	1.88	1.18	1.27	1.06	1.59
ICB3	1.22	1.40	0.76	1.37	1.29	1.17	-2.62	0.66
ICB4	1.48	1.49	1.43	1.39	1.34	1.48	1.52	1.45
ICB5	1.31	1.27	1.28	1.41	1.34	1.50	1.62	1.39
ICB6	1.1	1.06	1.43	1.46	0.98	1.33	1.44	1.26
ICB7	1.56	2.32	1.82	1.87	1.38	1.56	1.53	1.72
ICB8	-	3.89	3.27	5.13	6.45	-12.52	-3.28	0.49
ICB9	0.87	3.64	6.25	5.95	8.19	7.50	6.49	5.56
ICB10	1.60	3.87	1.43	1.16	0.21	-0.22	-0.03	1.15
ICB11	1.29	1.23	1.76	1.5	1.07	1.07	1.94	1.41

Table 2. iB-VAHU

## 3) iB-STVA

iB-STVA describes as a ratio that shows the contribution of the needed Structural Capital (SC) in producing one rupiah from the Value Added (VA) of a company (Ulum, 2013). Based on the data from the iB-STVA results in Table 3, ICB10 indicates as the highest iB-STVA with the average of 5.99. It was caused as in 2016, VA and SC ICB10 were minus. Thus, it had an impact on the high contribution of SC needed to produce VA on ICB10. While the lowest Islamic Commercial Bank with iB-STVA is ICB6 with an average of 0.18. This is since during this period, the Structural Capital of ICB6 was small but could generate a large VA, which had an impact on the low contribution of the needed SC to generate VA on ICB6.

ICB	2010	2011	2012	2013	2014	2015	2016	Average
ICB1	0.48	0.44	0.53	0.43	0.18	0.18	0.19	0.35
ICB2	0.48	0.48	0.49	0.47	0.15	0.21	0.05	0.33
ICB3	0.18	0.29	-0.32	0.27	0.23	0.14	1.38	0.31
ICB4	0.32	0.33	0.30	0.28	0.25	0.32	0.34	0.31
ICB5	0.24	0.21	0.22	0.29	0.25	0.33	0.38	0.27
ICB6	0.09	0.05	0.30	0.31	-0.02	0.25	0.31	0.18
ICB7	0.36	0.57	0.45	0.46	0.27	0.36	0.35	0.40
ICB8	-	0.74	0.69	0.81	0.85	1.08	1.31	0.91
ICB9	-0.15	0.73	0.84	0.83	0.88	0.87	0.85	0.69
ICB10	0.38	0.74	0.30	0.14	-3.82	5.56	38.64	5.99
ICB11	0.22	0.19	0.43	0.33	0.06	0.06	0.48	0.25

Table 3. iB-STVA

Furthermore, in order to assess Islamic Intellectual Capital of Islamic banks, the summation of the three components above; iB-VACA, iB-VAHU and iB-STVA are then called iB-VAIC. Based on predicate assessment of iB-VAIC results on Table 4, it is known that ICB9 and ICB10 are Islamic Commercial Banks with very high IIC rates. It was caused as the score produced of iB-VAIC was more than 3. Then, Islamic Commercial Banks with high IIC rates occur in ICB1, ICB2, ICB4, ICB7 and ICB11. It was caused as the generated score of iBVAIC from the Islamic Commercial Banks was between 2 and 2.99.

In addition, moderate IIC rates occur at ICB5 and ICB6. It was caused as the produced score of iB-VAIC from the two Islamic Commercial Banks were between 1.5 and 1.99. The Commercial Bank with a low IIC level experiences ICB3 and ICB8. It was caused as the produced score of iB-VAIC from the two Commercial Banks were less than 1.5. Overall, the level of IIC Islamic Commercial Bank in Indonesia were high, with an average score of 2.83.

		Table	<b></b>	icate As	sessiner	it of iD-		coun	
ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate
ICB1	2.98	2.77	3.16	2.60	1.86	1.77	1.79	2.42	High
ICB2	2.67	2.77	2.87	2.78	1.58	1.81	1.32	2.26	High
ICB3	1.48	1.86	0.53	1.88	1.76	1.45	-1.69	1.04	Low
ICB4	1.91	2.07	2.11	2.16	2.03	2.23	2.30	2.12	High
ICB5	1.64	1.61	1.66	1.88	1.70	1.92	2.12	1.79	Moderate
ICB6	1.41	1.44	2.15	2.11	1.22	1.87	2.06	1.75	Moderate
ICB7	2.38	3.29	2.61	2.73	1.84	2.10	2.05	2.43	High
ICB8	0	4.71	4.04	6.08	7.49	-11.92	-2.16	1.18	Low
ICB9	0.77	4.49	7.34	7.18	9.49	8.87	7.84	6.57	Very High
ICB10	2.04	4.87	1.96	1.53	-3.57	5.30	38.60	7.25	Very High
ICB11	2.50	2.30	3.11	2.54	1.60	1.45	2.71	2.32	High
	The Avera	ge of IIC o	of Islamic	Commerci	al Bank in	Indonesia		2.83	High

Table 4. Predicate Assessment of iB-VAIC Result

The assessment of the Intellectual Capital of Islamic Commercial Banks is as follows in Table 5:

Table 5. Assessment of Intellectual Capital of Islamic Commercial Banks

Score	Predicate
x > 3	Very High
$2 \le x \le 2.99$	High
$1,5 \le x \le 1.99$	Moderate
x < 1.5	Low

Source: Ulum (2013)

## Level Of Islamic Financial Performance Index Of Islamic Commercial Banks In Indonesia

1) Profit Sharing Ratio (PSR)

PSR describes a ratio that compares the financing of profit sharing with the total provided financing (Aisjah & Hadianto, 2013). Based on the PSR results in Table 6 during the period of 2010-2016 towards 11 Islamic Commercial Banks, the results show that the ICB9 has the highest PSR, which is in the average of 70.02%. It means that ICB9 has the largest portion in channeling financing with profit sharing contracts. In this case, ICB9 has succeeded in achieving the objectives of their existence as the principle of profit sharing is a characteristic that distinguishes between Islamic banks and conventional banks. In addition, the lowest PSR is ICB11 with an average of 2.41%. It was caused as ICB11 distributes financing with murabahah contracts rather

than profit sharing contracts. Thus, it will have an impact on the decline of the reputation of Islamic banks, namely the emergence of the public's view that Islamic banks are just similar as conventional banks that prioritize margins. The results of PSR measurements can be seen in Table 6.

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	36.10	26.91	23.29	22.95	22.19	26.49	29.77	26.81	Medium	2
ICB2	48.90	44.53	45.01	52.67	50.97	53.94	55.06	50.15	Fairly High	3
ICB3	29.53	28.27	37.4	35.31	29.37	22.32	19.47	28.81	Medium	2
ICB4	19.59	18.22	16.69	16.00	16.38	9.77	10.3	15.28	Low	1
ICB5	33.4	30.52	46.43	52.12	47.24	45.31	47.55	43.22	Fairly High	3
ICB6	18.4	19.06	23.26	28.52	31.67	37.24	36.96	27.87	Medium	2
ICB7	33.72	33.04	31.7	33.55	39.5	52.88	55.81	40.03	Fairly High	3
ICB8	-	0	0	0	15.67	18.24	24.24	9.69	Low	1
ICB9	81.7	45.7	49.42	52.29	86.72	90.61	83.7	70.02	High	4
ICB10	5.89	8.60	16.69	32.4	56.13	69.78	79.37	38.41	Medium	2
ICB11	4.55	1.70	0.55	0.60	0.75	1.41	7.29	2.41	Low	1

 Table 6. Profit Sharing Ratio (PSR) (in percent)

## 2) Zakat Performance Ratio (ZPR)

ZPR describes as a ratio that measures how much zakat is issued by Islamic banks when compared to their net asset value (Hameed, et al., 2004). The results of ZPR measurements in Table 7 in the period of 2010-2016 towards 11 Islamic Commercial Banks indicate that ICB1 has the highest ZPR with an average of 0.59%. Meanwhile, the lowest ZPR of Islamic Commercial Banks occurred at ICB7 and ICB8, which did not disclose the distribution of zakat funds in their financial statements. This shows that the compliance of Islamic banks is still low in channeling zakat funds. In general, the distribution of zakat funds at Islamic Commercial Banks in Indonesia is still low as it has not reached 2.5%. The results of ZPR measurements can be seen in Table 7.

 Table 7. Zakat Performance Ratio (ZPR) (in percent)

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	0.78	0	0.88	0.50	1.03	0.56	0.36	0.59	Medium	2
ICB2	0.07	0.21	0.58	0.56	0.55	0.35	0.36	0.38	Low	1
ICB3	0.01	0.01	0.01	0.01	0.09	0.02	0.06	0.03	Low	1
ICB4	0.03	0.30	0.38	0.59	0.56	0.58	0.63	0.44	Low	1
ICB5	0	0.01	0.01	0.01	0.01	0.01	0.01	0.01	Low	1
ICB6	0.05	0.21	0.31	0.33	0.41	0.18	0.28	0.25	Low	1
ICB7	0	0	0	0	0	0	0	0	Very Low	0
ICB8	-	0	0	0	0	0	0	0	Very Low	0
ICB9	-	0	0	0.03	0.08	0.33	0.19	0.11	Low	1
ICB10	0	0.03	0.07	0.15	0.04	0.06	0.02	0.05	Low	1

ICB11	0.56	0.50	0.36	0.59	0.54	0.11	0.2	0.41	Low	1

#### 3) Equitable Distribution Ratio (EDR)

EDR describes as a ratio that measures how much income earned by Islamic banks that have been distributed among stakeholders represented by the amount of funds spent on qard and donations, salary expenses, shareholders and net profits (Hameed, et al., 2004).

a) Qard & Donation

Based on data from the research findings in Table 8 during the period of 2010-2016 towards 11 Islamic commercial banks, the findings show that ICB10 with the highest qard and donation ratio with an average of 0.32%. Whereas with the lowest qard and donation ratio is the ICB3 with an average of 0.02%. This is because ICB3 only discloses qard funds and donations in 2013 and 2014. Overall, the qard ratio and donations of Islamic commercial banks in Indonesia are still low. This indicates that the social aspects of Islamic banks are still low. Islamic banks should channel more funds for social activities compared to conventional banks, for example, providing compensation to the surrounding community in need or in special cases.

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	0.08	0.04	0.04	0.01	0.05	0.11	0.77	0.16	Low	1
ICB2	0.68	0.26	0	0.10	0.19	0.36	0.06	0.24	Low	1
ICB3	0	0	0	0.01	0.13	0	0	0.02	Low	1
ICB4	0.01	0.07	0.03	0.01	0.06	0.04	0.04	0.04	Low	1
ICB5	0.03	0.01	0.07	0.1	0.15	0.16	0.11	0.09	Low	1
ICB6	0.03	0.05	0.17	0.28	0.24	0.09	0.05	0.13	Low	1
ICB7	0	0.25	0.35	0.36	0.30	0.23	0.16	0.24	Low	1
ICB8		0	0.11	0.18	0	0.02	0.03	0.06	Low	1
ICB9	0	0	0.02	0.01	0.01	0.04	0.09	0.02	Low	1
ICB10	0	0.31	0.36	0.24	0.25	0.58	0.52	0.32	Low	1
ICB11	0.08	0.03	0.01	0.01	0.01	0.02	0.04	0.03	Low	1

 Table 8. Qard & Donation (in percent)

#### b) Employees Expense

Based on the data from the research results in Table 9 during the period of 2010-2016 of the 11 Islamic commercial banks, the highest salary expense ratio occurs at ICB10 with an average of 53.62%. The condition shows that a large portion of ICB10 income is used for employee salaries. So that it will have an impact on the low allocation for other operational activities. Whereas the lowest salary expense ratio occurs in ICB8 with an average of 15.63%. It shows that a large portion of ICB8 revenue is used for other operational activities besides the salary burden. Overall, the ratio of ICB salaries in Indonesia is still the same, which is in the range of 30% to 38%. The results of the measurement of salary expenses are shown in Table 9.

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	29.71	31.56	25.83	27.1	31.8	39.16	38.1	31.89	High	4
ICB2	23.62	28.57	30.36	29.72	40.49	44.44	59.22	36.63	Very High	5
ICB3	41.62	41.64	36.71	39.26	21.5	40.2	44.28	37.89	Very High	5
ICB4	25.05	25.08	34.1	41.04	45.25	39.53	37.34	35.34	Very High	5
ICB5	28.67	31.01	32.96	33.12	35.91	28.18	20.42	30.04	High	4
ICB6	40.71	44.16	34.03	37.83	41.88	34.03	32.14	37.83	Very High	5
ICB7	36.32	30.76	36.85	35.98	41.76	36.89	32.69	35.89	Very High	5
ICB8	-	19.98	22.59	15.83	13.44	8.87	13.04	15.63	Medium	2
ICB9	42.53	20.82	14.14	12.82	10.23	10.82	13.05	17.77	Fairly High	3
ICB10	29.73	21.61	49.34	56.47	73.13	77.9	67.19	53.62	Fairly High	3
ICB11	38.49	38.71	30.85	27.74	35.88	22.89	17.99	30.36	High	4

 Table 9. Employees Expense (in percent)

#### c) Shareholders

Based on data from the research findings in Table 10 during the period of 2010-2016 out of 11 Islamic Commercial Banks show that generally, Islamic Commercial Banks in Indonesia does not distribute dividends to shareholders. It was conducted to improve the bank's capital structure. Subsequently, the recently founded financial institution will only distribute dividends if there is a surplus of cash remaining after allocating funds for reserve capital, financing operations, capital expenditure plans, and the operational capital of the company.

ICB4 have distributed dividends to shareholders proportionally in 2010. However, during 2011 to 2016 in accordance with the General Meeting of Shareholders and to improve the bank's capital structure as well, ICB4 did not distribute dividends to its shareholders. The results of the measurement of shareholders can be seen in Table 10.

ICD	0010	0011	0010	0010	0014	2015	0016			G
ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	0	0	0	0	0	0	0	0	Very High	5
ICB2	0	0	0	0	0	0	0	0	Very High	5
ICB3	0	0	0	0	0	0	0	0	Very High	5
ICB4	4.16	0	0	0	0	0	0	0.59	Very High	5
ICB5	0	0	0	0	0	0	0	0	Very High	5
ICB6	0	0	0	0	0	0	0	0	Very High	5
ICB7	0	0	0	0	0	0	0	0	Very High	5
ICB8		0	0	0	0	0	0	0	Very High	5
ICB9	0	0	0	0	0	0	0	0	Very High	5

Table 10. Shareholders (in percent)

ICB10	0	0	0	0	0	0	0	0	Very High	5
ICB11	0	0	0	0	0	0	0	0	Very High	5

d) Net Profit

Based on the measurement of net profit in Table 11 during the period of 2010-2016 towards the 11 Islamic Commercial Banks, the highest ratio of net profit occurs in ICB4 with an average of 14.36%. Although ICB4's net profit ratio fluctuated, it concluded to be stable. This can increase public confidence in keeping their funds in Islamic banks. The lowest net profit ratio occurs in ICB3 with an average of -8.34%. The condition is caused as in 2016, the ICB3 suffered a substantial loss, resulting in a minus net profit ratio too far. Overall, Islamic Commercial Banks in Indonesia have been quite good in obtaining net income, except that there are still a few banks with a minus average, including ICB3, ICB8 and ICB10.

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	19.97	18.02	21.43	14.78	1.75	15.82	5.76	13.93	Very High	5
ICB2	15.94	19.05	21.62	6.51	2.69	7.06	3.47	10.91	Very High	5
ICB3	9.16	16.66	9.80	14.65	9.29	3.85	-121.78	-8.34	Vey Low	0
ICB4	1.,90	12.18	14.81	15.97	15.46	16.25	13.96	14.36	Very High	5
ICB5	5.27	6.41	7.06	10.34	9.01	11.80	12.01	8.84	Very High	5
ICB6	2.35	1.70	10.72	12.25	0.58	8.38	10.16	6.59	High	4
ICB7	8.88	8.49	12.40	11.29	5.28	14.85	23.45	12.09	Very High	5
ICB8	-	42.83	38.14	24.78	24.57	-90.15	-62.72	-3.76	Vey Low	0
ICB9	-36.36	12.85	24.90	7.73	13.26	10.43	3.86	5.24	Fairly High	3
ICB10	17.96	61.72	21.29	9.06	-44.07	-70.43	-45.32	-7.11	Vey Low	0
ICB11	8.25	6.71	17.56	11.45	1.81	8.03	12.32	9.45	Very High	5

 Table 11. Net Profit (in percent)

Based on the EDR average score in Table 12 during the period of 2010-2016 towards 11 Islamic Commercial Banks, it can be seen that the highest EDR average score occurs at ICB2, ICB4 and ICB9 with an average score of 4 which means in high category. The lowest EDR average score occurs in ICB8, which is equal to 2 which means it is in the medium category. The results of measuring the EDR average score can be seen in Table 12.

ICB	Qard & Donation	Employees Expense	Shareholders	Net Profit	Average Score	Predicate
ICB1	1	4	5	5	3.75	Fairly High
ICB2	1	5	5	5	4	High
ICB3	1	5	5	0	2.75	Fairly High
ICB4	1	5	5	5	4	High

#### Table 12. EDR Average Score

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ICB	Qard & Donation	Employees Expense	Shareholders	Net Profit	Average Score	Predicate
ICB5	1	4	5	5	3.75	Fairly High
ICB6	1	5	5	4	3.75	Fairly High
ICB7	1	5	5	5	4	High
ICB8	1	2	5	0	2	Medium
ICB9	1	3	5	3	3	Fairly High
ICB10	1	3	5	0	2.25	Medium
ICB11	1	4	5	5	3.75	Fairly High

## 4) Directors-Employees Welfare Ratio (DER)

DER describes a ratio that compares the salary of directors with a number of funds used for employee welfare (Hameed, et al., 2004). Based on the results of DER measurements in Table 13, DER for the period of 2010-2016 towards 11 Islamic Commercial Banks experienced a considerable gap between the salary of directors and the welfare of employees. The highest gap occurred in ICB11 with an average of 61.28 times. The lowest gap occurs in ICB3 with an average of 10.89 times. This has an impact on the strategic risk of Islamic banks in determining the salary of directors and the welfare of employees.

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	16.37	25.26	25.40	25.80	26	25.30	24.10	24.03	Low	1
ICB2	12.50	37	37.10	27.60	29.10	29.60	29.60	28.93	Low	1
ICB3	-	-	8.96	14.10	7.03	7.20	17.17	10.89	High	4
ICB4	16.26	15.23	20	17.91	15.71	15	17	16.73	Fairly High	3
ICB5	35.80	37.70	21.30	25.20	25.71	23.53	24.35	27.66	Low	1
ICB6	21.38	24.15	26	20.14	24.11	23	24	23.25	Medium	2
ICB7	-	16.90	16.70	18.70	14.80	15.20	16.10	16.40	Fairly High	3
ICB8	-	39	24.15	18.97	17.86	17.70	14.70	22.06	Medium	2
ICB9	-	-	21.25	33.95	34.58	20.97	25.89	27.33	Low	1
ICB10	22	26	27	36	32	24	12	25.57	Low	1
ICB11	40.80	84	88.60	47.23	76.92	43.33	48.07	61.28	Very Low	0

Table 13. Directors-Employees Welfare Ratio (DER) (in times)

## 5) Islamic Investment Ratio (IH)

IH describes it as a ratio that compares halal investment to total investment (Hameed, et al., 2004). Based on the measurement of the halal investment ratio in Table 14, Islamic Commercial Bank (ICB) in Indonesia has fully invested according to Islamic law. Islamic principles prohibit transactions involving maysir, gharar, riba, haram, dzalim, and bathil. In this case, ICB has already channeled its funds using the contracts of murabahah, mudharabah, musyarakah, qard, ijarah and istishna. The value of halal investment of ICB in Indonesia has reached 100%. The condition shows that the compliance level of Islamic banks towards Islamic law is high. In addition, the level of public trust in Islamic banks

will increase as people will not be worried their invested funds in Islamic banks. This will have an impact on the increasing reputation of Islamic banks and its market share.

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	100	100	100	100	100	100	100	100	Very High	5
ICB2	100	100	100	100	100	100	100	100	Very High	5
ICB3	100	100	100	100	100	100	100	100	Very High	5
ICB4	100	100	100	100	100	100	100	100	Very High	5
ICB5	100	100	100	100	100	100	100	100	Very High	5
ICB6	100	100	100	100	100	100	100	100	Very High	5
ICB7	100	100	100	100	100	100	100	100	Very High	5
ICB8	-	100	100	100	100	100	100	100	Very High	5
ICB9	100	100	100	100	100	100	100	100	Very High	5
ICB10	100	100	100	100	100	100	100	100	Very High	5
ICB11	100	100	100	100	100	100	100	100	Very High	5

Table 14. Islamic Investment Ratio (IH) (in percent)

#### 6) Islamic Income Ratio (PH)

PH describes as a ratio that compares halal income with total income (Hameed, et al., 2004). Based on results of PH measurements in Table 15, during the period of 2010-2016 from 11 Islamic Commercial Banks (ICB) in Indonesia, ICB4 and ICB11 has the highest PH with an average of 99.98%. The ICB with the lowest PH occurs at ICB9 with an average of 98.85%. However, ICBs in Indonesia generally have made every effort to receive income from legal sources only. In the financial statements of Islamic Commercial Banks in Indonesia, non-halal income has been separated from halal income. Non-halal income is included in the reports on sources and uses of virtue funds on fines and non-halal income accounts. This shows that the operational activities of Islamic banks are clean and the level of compliance with Islamic law is high. It is caused as in Indonesia adheres to a dual banking system so that non-halal income is difficult to be avoided.

 Table 15. Islamic Income Ratio (PH) (in percent)

ICB	2010	2011	2012	2013	2014	2015	2016	Average	Predicate	Score
ICB1	99.94	99.96	99.97	99.41	99.30	98.36	99.19	99.45	Very High	5
ICB2	99.98	99.99	99.74	99.9	99.82	99.65	99.94	99.86	Very High	5
ICB3	99.99	99.97	99.9	99.92	99.90	99.76	99.81	99.89	Very High	5
ICB4	100	100	99.97	99.97	99.98	99.97	99.99	99.98	Very High	5
ICB5	99.93	99.71	99.61	99.67	99.72	99.78	99.85	99.75	Very High	5
ICB6	99.97	99.94	99.9	99.94	99.98	99.97	99.98	99.95	Very High	5
ICB7	100	100	99.78	99.88	99.77	99.73	99.73	99.84	Very High	5
ICB8	-	99.72	99.98	99.95	99.86	99.96	99.97	99.91	Very High	5
ICB9	99.78	99.99	99.99	97.90	98.90	97.75	97.63	98.85	Very High	5
ICB10	100	99.73	100	100	100	99.01	99.99	99.82	Very High	5

ICB11	99,.97	99.99	99.99	99.99	99.98	99.97	99.98	99.98	Very High	5

Furthermore, the sum of the scores of the six components, namely PSR, ZPR, EDR, DER, IH and PH were used in assessing the IFPI of Islamic bank. Based on the data from the research results in Table 16, IH and PH show very high predicates of indicator through the use of subjective judgments. Then, the indicator with a fairly high predicate is EDR. Furthermore, PSR is placed as the indicator with a medium predicate. In addition, the indicator with a low predicate is DER. The indicator with a very low predicate is ZPR.

ICB	PSR	ZPR	EDR	DER	IH	РН
ICB1	2	2	3.75	1	5	5
ICB2	3	1	4	1	5	5
ICB3	2	1	2.75	4	5	5
ICB4	1	1	4	3	5	5
ICB5	3	1	3.75	1	5	5
ICB6	2	1	3.75	2	5	5
ICB7	3	0	4	3	5	5
ICB8	1	0	2	2	5	5
ICB9	4	1	3	1	5	5
ICB10	2	1	2.25	1	5	5
ICB11	1	1	3.75	0	5	5
Average	2.18	0.91	3.36	1.73	5	5
Predicate	Medium	Very Low	Fairly High	Low	Very High	Very High

Table 16. Predicate Indicator of IFPI Results Based on Indicators

The IFPI assessment of Islamic Commercial Bank is stated in Table 17 as follows:

Table 17. IFPI Assessment of Islamic Commercial Bank

Average Score	Predicate
$0 \le x < 1$	Very Low
$1 \le x < 2$	Low
$2 \le x < 3$	Medium
$3 \le x \le 4$	Fairly High
$4 \le x < 5$	High
x = 5	Very High

Generally, the financial performance of Islamic Commercial Banks in Indonesia based on IFPI has a fairly high predicate. This is in line with the research from Meilani, Andraeny & Rahmayati (2016) and Aisjah & Hadianto (2013) which state that the performance of Islamic banks in Indonesia has a rating that is quite satisfying or high enough. Where the research

findings from Aisjah & Hadianto (2013) show that the IFPI of Islamic banks in Indonesia for the 2009-2010 period has a high level of assessment but there are two low ratios: ZPR and DER. Furthermore, the research conducted by Meilani, Andraeny & Rahmayati (2016) shows that the performance of Islamic banks in Indonesia based on IFPI during the 2011-2014 period has a rating with quite satisfying predicates. It just experienced two unsatisfactory ratios: ZPR and DER. This shows that the zakat issued by Islamic banks in Indonesia was still low and the gap between the salary of directors and employees was still large. The results of IFPI measurements based on each Islamic Commercial Bank (ICB) can be seen in Table 18.

ICB	PSR	ZPR	EDR	DER	IH	РН	Average	Predicate
ICB1	2	2	3.75	1	5	5	3.13	Fairly High
ICB2	3	1	4	1	5	5	3.17	Fairly High
ICB3	2	1	2.75	4	5	5	3.29	Fairly High
ICB4	1	1	4	3	5	5	3.17	Fairly High
ICB5	3	1	3.75	1	5	5	3.13	Fairly High
ICB6	2	1	3.75	2	5	5	3.13	Fairly High
ICB7	3	0	4	3	5	5	3.33	Fairly High
ICB8	1	0	2	2	5	5	2.5	Medium
ICB9	4	1	3	1	5	5	3.17	Fairly High
ICB10	2	1	2.25	1	5	5	2.71	Fairly High
ICB11	1	1	3.75	0	5	5	2.63	Fairly High
IFPI	Average	of Islam	ic Comm	ercial Ba	nk di Iı	ndonesia	3.03	Fairly High

 Table 18. Predicate Assessment of IFPI result in Islamic Commercial Bank

## Panel Data Regression Analysis Result Selection Of Panel Data Regression Model Result

## 1) Chow Test Result

The chow test was conducted to compare or choose the most appropriate between the Common Effect (CE) and Fixed Effect (FE). Based on the chow test results in Table 19, both F-test and Chi-square show 0.0000. The value is smaller than 0.05. Thus, in this case, it rejects Ho and accepts Ha. This means that the right model for this panel data regression is FE.

Redundant Fixed Effects Tests									
Equation: Untitled									
Test cross-section fixed eff	fects								
Effects Test	Statistic	d.f.	Prob.						
			0.0000						
Cross-section F	8.448178	(10,64)							
Cross-section Chi-square	63.960017	10	0.0000						

**Table 19. Chow Test Result** 

#### 2) Hausman Test Result

The Hausman test was conducted to compare or choose the best model between Fixed Effect (FE) and Random Effect (RE). Based on the results in Table 20, the random cross-section probability is 0.7847, which shows value greater than 0.05. Thus, Ho is accepted, and Ha is rejected. Therefore, the best model used is the RE model. It can be concluded that this research will be better if it uses the RE model than the CE and FE models, without further testing, namely LM test.

 Table 20. Hausman Test Result

Correlated Random Effe	Correlated Random Effects - Hausman Test								
Equation: Untitled									
Test cross-section random effects									
Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.						
Cross-section random	0.074633	1	0.7847						

A series of Chow and Hausman test results were conducted to determine the regression model that was suitable for the usage. The results of the two tests indicate that the RE regression model is the best model to use, with the regression results in Table 21 as follows:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	2.985632	0.027526	108.4668	0.0000
IIC	0.015299	0.005161	2.964599	0.0043

Based on the regression estimation results in Table 3.21, the equation is obtained as follows:

$$IFPI_{it} = 2.985632 + 0.015299 IIC_{it} + u_{it}$$

Based on the equation, it can be explained that when the IIC variable is zero, the IFPI variable is 2.985632. Meanwhile, when the IIC variable increases by one unit, the IFPI variable will increase by 0.015299.

#### **Classic Assumption Test**

1) Heteroscedasticity Test

Heteroscedasticity tests were conducted to test whether there are inequalities in residual variance from one observation to another in a regression model. In this study, the method used to detect heteroscedasticity is the Glejser method, namely by replacing variables with residual absolute values. If the value of testing hypotheses through the t-test on the independent variable < 0.05, the model would be exposed to heteroscedasticity. Conversely, if > 0.05 then the model would not expose to heteroscedasticity or means homoskedasticity.

Based on the results of heteroscedasticity test in Table 22, the t-test and its probability value more than 0.05. Thus, it can be concluded that the study was not exposed to heteroscedasticity.

		Std.	t-	
Variable	Coefficient	Error	Statistic	Prob.
С	0.241984	0.027541	8.786244	0.0000
			-	
IIC	-0.001389	0.003585	0.387290	0.6997

 Table 22. Heteroskedasticity Testing Result

#### 2) Normality Test

There are several methods that can be used to detect whether the residual has a normal distribution or vice versa, one of which is through performing the Jarque-Bera (JB) test. The conditions are as follows:

- If the probability value of the JB statistic is large or >0.05 then the residual has a normal distribution as the value of the JB statistic is close to zero. On the contrary.
- If the probability of the JB statistic is small or <0.05, the residual has an abnormal distribution because the JB statistical value is not equal to zero.

Based on the results of the normality test in Figure 1, the probability value of the JB statistic shows 0.179085, this means >0.05, it can be concluded that the data is normally distributed.

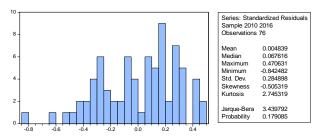


Figure 1. Normality Test Result

## TESTING AND DISCUSSION OF RESEARCH HYPOTHESES

## 1) t-Test Result

The hypothesis testing was conducted through t test. The value of t table was obtained from the t table distribution, which is seen from the value of the degree of freedom (df) and  $\alpha$ . Whereas df = n-k = 76-2 = 74, then with df 74 and  $\alpha$  = 5% (0.05) results t table of 1.9925. The results of hypothesis testing in Table 3.23 shows that t-Statistic (2.964599) is greater than t table (1.9925). It means that Ho is rejected, and Ha is accepted. Then, the probability level of 0.0043 is smaller than  $\alpha$  (0.05). It can be concluded that Islamic Intellectual Capital (IIC) has a positive and significant effect on Islamic Financial Performance Index (IFPI). The IIC coefficient is 0.015299. The condition shows that every increase in IIC in one unit will affect the increase in IFPI of 0.015299.

The result of the hypothesis testing shows that IIC has a positive and significant effect on IFPI. This is in accordance with the concept of Resource-based theory developed by Wernefelt (1984) which states that if a company is able to manage resources effectively it

will create a competitive advantage for the company. Human resources with high competence and skills are also a competitive advantage of the company. Thus, if the company can have a well management towards the potential of its employees and partners, it will improve performance of the company.

This research describes human resources through IIC variables. The company performance is measured based on IFPI. The results of this study are in line with researches conducted by Andraeny & Putri (2017), Siswanti, Salim, Sukoharsono & Aisjah (2017), Pramitasari & Wahidahwati (2016) and Harianto & Syafruddin (2013) which show that IIC has a positive effect on IFPI. It means that if the company manages well of its intellectual capital, it will have added value which can create a competitive advantage of the company.

Based on research conducted by Andraeny & Putri (2017), IIC has a positive and significant influence on the IFPI of Islamic banks in Indonesia. Therefore, Islamic banks are expected to be able to effectively manage their resources to produce better financial performance. Furthermore, the research findings conducted by Siswanti, Salim, Sukoharsono & Aisjah (2017) show that IIC has a significant impact on IFPI. The difference in the research is the used IFPI indicator is the murabahah ratio.

The research conducted by Pramitasari & Wahidahwati (2016) shows that there is a direct and positive influence between IC and IFPI. It means that IFPI of Islamic banking can control IC in its operational operations. The research conducted by Harianto & Syafruddin (2013) shows that IC influences the Islamic banking IFPI for the period of 2008-2011. The difference in the study is IC was measured by the VAIC model, while in this study using iB-VAIC in measuring the IC. In addition, the used IFPI indicators are only PSR, ZPR, EDR and PH.

Thus, based on the findings from this research which are then linked to theoretical concepts and supported by empirical facts from previous research, it can be concluded that IIC has a positive and significant effect on IFPI ICB in Indonesia.

2) Coefficient of Determination (R2)

R-Square (R2) or the coefficient of determination shows how much influence the independent variable has on the dependent variable. The range of R2 values from zero to one (0 < R2 < 1). In this regression equation, the R2 values 0.591067, meaning that the level of closeness of the effect of the IIC variable on the IFPI variable is 59.1067%, while the remaining 40.8933% is influenced by other variables. The value of 59.1067% means the influence of the IIC variable on the IFPI variable is at a moderate level, where the value of R2 which approaches 1 means the effect of variable X on Y is getting stronger.

Based on the result of this study, the implication is that when Islamic Intellectual Capital rate is good, it makes Islamic Financial Performance Index is good also. Thus, Islamic Commercial Bank should improve Intellectual Capital in order to increase financial performance of Islamic Financial Performance Index.

## CONCLUSION

This study concludes that the financial performance of Islamic Commercial Banks in Indonesia based on the Islamic Financial Performance Index has a fairly high level. In addition, Islamic Intellectual Capital has a positive and significant influence on the Islamic Financial Performance Index of Islamic Commercial Banks in Indonesia. This shows that when the quality of employees, technology, operational systems and good relations of Islamic banks and their partners are high, those factors will encourage Islamic banks to have high financial performance based on Islamic Financial Performance Index.

## 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, 98-110.
- Ali, M., Puah, C.-H., Ali, A., Raza, S. A., & Ayob, N. (2022). Green intellectual capital, green HRM and green social identity toward sustainable environment: a new integrated framework for Islamic banks. *International Journal of Manpower*, 43(3), 614–638. https://doi.org/10.1108/IJM-04-2020-0185
- Andraeny, D. & Putri, D. D., (2017). Islamicity Financial Performance Index in Indonesian Islamic Banks. *Shirkah Journal of Economics and Business*, 318-350.
- Guthrie, J., (2001). The Management, Measurement and The Reporting Intellectual Capital. Journal of Intellectual Capital, 2 (1), 27 - 41.
- Hameed, S. et al., (2004). Alternative Disclosure & Performance Measures for Islamic Bank. Department of Accounting International Islamic University Malaysia.
- Harianto, N. & Syafruddin, M., (2013). Pengaruh Modal Intelektual terhadap Kinerja Bisnis
  Bank Umum Syariah (BUS) di Indonesia. *Diponegoro Journal of Accounting* 2 (4), 2-10.
- I Sidharta, & A Affandi. (2016). The Empirical Study on Intellectual Capital Approach toward Financial Performance on Rural Banking Sectors in Indonesia. *International Journal of Economics and Financial*, 6(3), 1247–1253.
- Jan, A., Marimuthu, M., & @ Mat Isa, M. P. bin M. (2019). The nexus of sustainability practices and financial performance: From the perspective of Islamic banking. *Journal of Cleaner Production*, 228, 703–717. https://doi.org/10.1016/j.jclepro.2019.04.208

- Ledhem, M. A., & Mekidiche, M. (2020). Economic growth and financial performance of Islamic banks: a CAMELS approach. *Islamic Economic Studies*, 28(1), 47–62. https://doi.org/10.1108/IES-05-2020-0016
- Machmud, A., (2016). Analysis of Structure, Conduct and Performance of Sharia Insurance Industry in Indonesia. *International Business Management*, 10 (23), 5517-5522.
- Meilani, S. E. R., Andraeny, D. & Rahmayati, A., (2016). Analisis Kinerja Perbankan Syariah di Indonesia dengan Menggunakan Pendekatan Islamicity Indices. *Seminar Nasional dan The 3rd Call for Syariah Paper*, 22-38.
- Nawaz, T., & Haniffa, R. (2017). Determinants of financial performance of Islamic banks: an intellectual capital perspective. *Journal of Islamic Accounting and Business Research*, 8(2), 130–142. https://doi.org/10.1108/JIABR-06-2016-0071
- Ningrum, N. R. & Shiddiq, N. R., (2012). Analisis Pengaruh Intellectual Capital dan Good Corporate Governance terhadap Financial Performance. *Diponegoro Journal of Accounting 1(2)*.
- Pramitasari, W. & Wahidahwati, (2016). Analisis Pengaruh Intellectual Capital terhadap Islamic Financial Performance Index Bank Syariah. *Jurnal Ilmu dan Riset Akuntansi:* 5(7), 1-23.
- Siswanti, I., Salim, U., Sukoharsono, E. G. & Aisjah, S., (2017). A Sustainable Business Model in Islamic Bank (Review of the Scientific Literature). *Research Journal of Finance and Accounting* 8(2), 23-28.
- Siswanti, I., Salim, U., Sukoharsono, E. G. & Aisjah, S., (2017). The Impact of Islamic Corporate Governance, Islamic Intellectual Capital, and Islamic Financial Performance on Sustainable Business Islamic Bank. *International Journal of Economics and Financial Issues*, 316-323.
- Stewart, T., (1997). Intellectual Capital: The New Wealth of Organizations. New York: Doubleday/Currency.
- Ulum, I., (2013). iB-VAIC: Model Pengukuran Kinerja Intellectual Capital Perbankan Syariah di Indonesia. *Jurnal Inferensi (terakreditasi)*, 7(1), 183-204.
- Ur Rehman, A., Aslam, E., & Iqbal, A. (2022). Intellectual capital efficiency and bank performance: Evidence from islamic banks. *Borsa Istanbul Review*, 22(1), 113–121. https://doi.org/10.1016/j.bir.2021.02.004
- Wernerfelt, B., (1984). A Resource Based View of The Firm. *Strategic Management Journal*, 462-479.