INTELLECTUAL CAPITAL AND BANKS PERFORMANCE: THE EMPIRICAL EVIDENCES FROM INDONESIAN ISLAMIC AND CONVENTIONAL BANKS

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ABSTRACT
Purpose- This study examines the influence of intellectual capital (IC) on bank performance measured by ROA, ROE and NIM.
Methodology- This study explores purposive sampling methods. Finannly, 10 Islamic banks and 30 Conventional banks were selected as a sample of this study for the period 2012-2016.
Findings- This study found that IC positively effect on bank performance that measured by ROA, ROE and NIM. In the context of IC dimensions, this study shows that HCE and CEE positively effect on bank performance that measured by ROA, ROE and NIM. Meanwhile, SCE positively affect to bank performance that measured by ROA only. The results of the study are sensitive to samples. For Islamic banks sub sample, this study found that IC positively effect on ROA, but it does not affect to ROE and NIM. HCE positively effect on ROA, but HCE negatively influence on ROE and HCE has no effect on the NIM. SCE negatively effect on ROA and ROE, but SCE has no effect on NIM. CEE Capital has a positive effect on ROA and NIM, but CEE has a negative effect on ROE. For conventional banks, IC has a positive effect on ROA and ROE, but IC does not affect the NIM. HCE and CEE have a positive effect on ROA, ROE and NIM. SCE has a positive effect on ROE, but SCE has a negative effect on the ROA and NIM
Conclusion- These findings indicate the optimum intellectual capital will be followed by better bank performance. However, the influencing of IC on bank performance is very susceptible to measurement and the sample.

Keywords: Intellectual capital, human capital, structural capital, customer capital, bank performance.
JEL Codes: G21, M41, L25

1. INTRODUCTION

Banks will be able to play a strategic and very important role in supporting the economic growth and stability of a country properly, since the banks achieve the optimum profitability. Unfortunately, some empirical and anecdotal evidence indicates that some banks are not always report the good performance, even some banks are bankrupt because of the relatively high competition in the banking industry. Therefore, banks must have sufficient tangible and intangible assets to support their efforts to win the competition. Moreover, the banks which are able to maximize their resources including intellectual capital will get advantages in competing and will achieve better performance. Gogan *et al.*, (2016) state that intangible assets such as knowledge, information technology and intellectual skills are now the main resources needed by organizations to operate effectively and to obtain sustainable competitive advantages. Moreover, El-Bannany (2008) highlighted that intellectual capital (IC) is an important tool in improving the quality of services provided to customers. Mondal and Ghosh (2012) conclude that banks business goals achievement is not only determined by both tangible resources and intangible assets. Al-Musali and Ismail (2014) argue that IC become a key factor in business success, especially in maintaining competitive advantage which ultimately it has an impact on BP. Moreover, Bontis (1998) classifies IC into human capital (HC), structural capital (CS) and customer capital (CC).

Some previous studies have examined the effect of IC on financial performance (FP) which shows inconsistent results. Puntillo (2009) and Mondal and Ghosh (2012) found that IC has no effect on FP in terms of ROI, ROA, and ROE proxies. However,

Nimtrakoon (2015) and Nawaz and Haniffa (2017) found that IC has a significant positive relationship with ROA and NIM proxies. Moreover, in term of the IC dimensions including Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE), Nawaz and Haniffa (2017) found that HCE and CEE have a positive effect on ROA. While SCE does not have a significant relationship with FP. Janosevic et al., (2013) found that HCE and SCE have a significant effect on ROA and ROE, while CEE has only a significant effect on ROE. Furthermore, Mondal and Ghosh (2012) concluded that HCE has a positive relationship that is almost significant with ROA and ROE, while SCE and CEE have a positive relationship to Turn Over Asset (ATO).

Based on the inconsistency of previous research results, this study will re-examine the influence of IC measured using VAICTM on BP with proxy ROA, ROE and NIM of Indonesian Islamic and conventional banks.

The rest of this paper contains five sections. Section 2 provides literature review on intellectual capital concept and hypothesis. Development for the relationship between intellectual capital and bank performance. Section 3 describes our data and analyses that consist of sample selections, data, and variables measurement. Section 4 reports the findings of this study including descriptive statistics, correlation analysis, and multiple regressions analysis for hypothesis testing. Section 5 discus and section 6 concludes.

2. LITERATURE REVIEW

2.1. Intellectual Capital Concept

The concepts of IC are defined differently in various disciplines and perspectives, including finance and accounting. Stewart (1997) defines IC as the number of personalities in companies that have knowledge, information, intellectual property, and experience that can be used to create corporate wealth. Riahi-Belkaoui (2003) explains that IC is a combination of human capital, structural capital and customer capital. He further explained that (1) human capital produces innovation, (2) structural capital is the knowledge owned by the company in terms of technology, strategy and culture, data, routine and organizational procedures, and (3) customer capital is the corporate value of the franchise and ongoing relationships with customers and other interested parties. Mondal and Ghosh (2012) state that IC refers to intangible assets or corporate intangible business factors, which have a significant impact on overall business performance even though they are not explicitly listed on the balance sheet.

Bontis (1998), and Stewart (1997) classify IC into three components, namely human capital, structural capital and customer capital, while O'Donnell and O'Regan (2000) classify IC into people, internal structure and external structure. Some prvious studies measure the IC uses monetary perspectives, namely Value Added Intellectual Coefficient (VAIC) developed by Pulic (1998). According to Pulic (2000) VAIC is a method designed to help managers take advantage of their company's potential, based on current business performance. Furthermore, Stahle et al., (2011) conclude that VAIC method intend to measure the extent to which companies can generate added value based on intellectual efficiency or intellectual resources. Value added is an indicator of the goals of business success and shows the company's ability to create value, which needs to include investment in resources (Pulic 2004).

The VAIC method consists of three dimensions, namely Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE) and Capital Employed Efficiency (CEE). Human Capital Efficiency (HCE) is the company's ability to obtain value added from the costs incurred for labor. Structural Capital Efficiency (SCE) measures the amount of SC needed by the company to produce 1 Dollar from value added. Capital Employed Efficiency (CEE) is the company's ability to generate value added from the capital used.

Meanwhile, Chan (2009) states that the using of VAIC in measuring IC is an effective method because this method offers several advantages, namely: (1) This method produces quantitative and objective measurements, (2) Provides indicators that are relevant, useful, and have information for all stakeholders who can identify and compare the key components of IC to assess the company's financial performance, (3) Use financially oriented steps so that each calculated indicator, relation or ratio can be used for comparison with financial indicators traditionally commonly found in business, (4) Using a relatively simple and easy procedure in calculating the required index, (5) Producing standard measurement forms, and (6) Treating HC as the most important source of IC, which consistent with all the main definitions of IC found in the literature.

The human capital are supported by (1) knowledge created and stored by company employees, and embodiment, empowerment and infrastructure (Nawaz and Haniffa, 2017). Joshi et al. (2013) states that structural capital can be defined as knowledge created by an organization and cannot be separated from the entity. Structural capital consists of patents, databases, information technology systems, trademarks, organizational culture, and company operational systems. According to Bontis (1998) knowledge of marketing channels and customer relations is the main theme of customer capital. Stewart (1998) states that customer capital is the value of organizational relationships with people who do business with it. Joshi et al. (2013) explain that companies benefit

when building customer capital, such as customer loyalty and brand, customer satisfaction, image market and goodwill, the power to negotiate, strategic alliances and coalitions.

2.2. Intellectual Capital and Performance

Resource Based Theory (RBT), states that companies which can utilize their resources effectively, they will gain a competitive advantage. Barney (1991) concluded RBT recognizes intangible assets as important factors that help companies in generating sustainable competitive advantages, in order to create their superior performance.

The RBT also explains that one of the resources that the company needs to use is IC. It is important for a company to be able to use IC effectively because IC has an important role in achieving competitive advantage and improving the company's performance. Nawaz and Haniffa (2017) state that the higher the company's IC, the more successful the company will be and the greater the opportunity to gain competitive advantage.

Companies that are able to utilize well-owned resources will be able to produce competitive advantages, so companies can create opportunities to obtain good financial performance. Mondal and Ghosh (2012) state that generally, the term IC is used to refer to non-tangible assets that have a significant impact on overall business performance and success even though they are not explicitly listed in the balance sheet. IC measurement can be done using VAIC developed by Pulic. The dimensions of VAIC consist of Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE).

Nawaz and Haniffa (2017), Al-Musali and Ismail (2014), Nimtrakoon (2015), Razafindrambinina and Anggereni (2011) and Chen, et al.(2005) found a positive relationship between IC as measured by VAIC and firm performance. Furthermore, for each dimension of VAIC, HCE has a positive effect on firm performance (Nawaz and Haniffa (2017); Mondal and Ghosh (2012); Nimtrakoon (2015); Al-Musali and Ismail (2014); Janosevic et al. (2013) and Chen et al., (2005)), SCE also has a positive effect on firm performance (Janosevic et al., (2013); Mondal and Ghosh (2012); Razafindrambinina and Anggreni (2011); Chan (2009) and Chen et al. (2005)), and CEE also positively relate to firm performance (Nawaz and Haniffa (2017), Mondal and Ghosh (2012), Nimtrakoon (2015), Dzenopoljac et al., (2016), Al-Musali and Ismail (2014), Chan (2009), Chen et al., (2005), Janosevic et al., (2013), Puntillo (2009), Razafindrambinina and Anggreni (2011)). Based on the results of previous research and RBT, we come up with hypothesis as follows:

H1   : Intellectual Capital positively influences bank performance.

H1a   : Human Capital Efficiency positively influences bank performance.

H1b   : Structural Capital Efficiency positively influences bank performance.

H1c   : Capital Employed Efficiency positively influences bank performance

3. DATA AND METHODOLOGY

3.1. Sample and Data

The Sample of this study consists of conventional banks that listed on the Indonesia Stock Exchange (IDX) and all Indonesian Islamic banks for periods 2012-2016. Table 1 shows the sample selection process The reasons for determining 2012 as the initial period of observation are in accordance with International Financial Reporting Standards (IFRS) which began to apply in Indonesia to in 2012 as a whole or full adoption (Indonesian Institute of Accountants, 2009)..

Table 1: Sample Selection

No	Indicators	Total
1	Listed conventional Banks and Indonesian Islamic banks	53
2	Banks have no complete reports or complete data during 2012-2016	(13)
3	The number of banks as a final sample	40
4	Total observations for 5 years	200

3.2. Variables Measurement

The dependent variable in this study is bank performance which is measured using 3 proxies. The first is Return on Assets (ROA) which is calculated as the ratio between net income and total assets of a bank, second is Return on Equity (ROE) obtained by

dividing net income with shareholders equity of a bank, and third is the Net Interest Margin (NIM) ratio of interest income / income from profit loss sharing to the average of productive assets.

The independent variable in this study is intellectual capital (IC) which is measured by the Value Added Intellectual Coefficient (VAIC) method developed by Pulic (2000). Zeghal and Maaloul (2010) state that this method is very important because it allows us to measure contributions from every resource - human, structural, physical and financial - to create added value by the company. There are three dimensions of VAIC namely Human Capital Efficiency (HCE), Structural Capital Efficiency (SCE), and Capital Employed Efficiency (CEE). Moreover, Pulic (2004) highlighted six steps to calculate VAIC. Firstly, obtaining value added (VA). The VA can be obtains by subtracting total income with operating expenses except employee expenses (Nawaz and Haniffa, 2017). The VA can be calculated from the bank financial statements in the following manner:

Value added = operating profit + employee expenses + depreciation + amortization.

Secondly, obtaining the HCE coefficient using formula:

HCE = VA / HC

Where HC refers to employees' wages and salaries paid annually

Thirdly, determining SCE coefficient uses the equation:

SCE = SC / VA

Where SC is calculated by subtracting HC costs from VA

Fourthly, determine the IC efficiency that represents the summary of HC and SC efficiencies. So IC efficiency obtained by summing HCE and SCE as follows:

ICE = HCE + SCE

Fifthly, calculate CEE or the efficiency of using physical capital in a bank, represents the ratio between VA and net assets:

CEE = VA / CE

Where the CE is also known as company's net assets

Lastly, Calculate the VAIC by summing the ICE and CEE.

4. FINDINGS

4.1. Descriptive Statistics

This section presents the values for minimum, maximum, mean, and standard deviation for each of used variables in the research (Table 2).

Table 2: Descriptive Statistics

Variables	Minimum	Maximum	Mean	Std, Deviation
ROA	-0,2013	0,0515	0,0100	0,0281
ROE	-1,4248	0,8379	0,0702	0,2017
NIM	0,0024	0,7099	0,0555	0,0519
VAIC	-3,7624	13,4016	3,1437	1,9329
HCE	-4,1431	12,3028	2,3058	1,7165
SCE	-3,9966	5,5211	0,5538	0,7032
CEE	-0,6852	1,9003	0,2842	0,2517
Size	27,3355	34,5768	30,8908	1,7659
Lev	0,0403	0,9479	0,6749	0,3158

4.2. Correlation

The results of the correlation analysis depicted in Table 3. Table 3 panel A showed that the HCE component positively correlate to ROA and ROE. The table also presented that CCE has the positive correlation with ROA, ROE, and NIM. However, the SCE

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negatively correlates with ROE. This study also found that VAIC positively correlates with ROA and ROE. While, correlation analysis among independent variables was shown in Table. 3 Panel B, where there is no strong correlations among independent variables. It indicates there is no multicolinearity problem in this study.

Table 3: Pearson Correlation

Panel. A. Correlation between Independent and Dependent variables

	ROA	ROE	NIM
HCE	0.331**	0.351**	0.087
SCE	-0.191**	0.017	-0.069
CEE	0.198**	0.292**	0.270**

Panel. B. Correlation among Independent variables

	HCE	SCE	CEE
HCE	1		
SCE	0.024	1	
CEE	0.277**	-0.186**	1

4.3. Multiple Regressions Results

Multiple linear regression analysis was used to assess the influencing VAIC and its components on the bank performance measurement. Since there are three dependent variables two groups independent variables in the research, six distinct multiple regression models were identified as follows:

Model 1a : ROA = α + β1VAIC + β2Size + β3Lev + ε

Model 1b : ROE = α + β1VAIC + β2Size + β3Lev + ε

Model 1c : NIM = α + β1VAIC + β2Size + β3Lev + ε

Model 2a : ROA = α + β1HCE + β2SCE +β3CEE + β4Size + β5Lev + ε

Model 2b : ROE = α + β1HCE + β2SCE +β3CEE + β4Size + β5Lev + ε

Model 2c : NIM = α + β1HCE + β2SCE +β3CEE + β4Size + β5Lev + ε

The results are provided in Table 4 reveals the quality of the model and the influence of VAIC on ROA, ROE, and NIM as well. Table 4, the presented regression model has a low degree of fit because the R^2 value around 0.177, 0.197, and 0.038 respectively for model 1a, model 1b, and model 1c. after controlling for firm size and leverage. The model also shows that VAIC have a positive significant impact on ROA, ROE, and NIM. Therefore, hypothesis 1 is supported.

Table 4: Multiple Regression Results for VAIC

	ROA			ROE			NIM		
Variables	**Coef**	**t**	**Sig.**	**Coef.**	**t**	**Sig.**	**Coef**	**t**	**Sig.**
Constant	-0.169	-4.997	0.000***	-0.958	-3.966	0.000***	-5,932	-9,291	0,000***
VAIC	0.002	2.368	0.019**	0.031	4.387	0.000***	0,156	2,257	0,025**
Size	0.006	4.788	0.000***	0.031	3.748	0.000***	0,151	2,927	0,004***
Lev	0.001	0.051	0.959	-0.040	-0.889	0.375	-0,024	-0,394	0,694
R-Squared		0.177			0.197			0.038	
Adjusted R-Squared		0.165			0.174			0.024	
F		14,091			14.980			2.547	
Sig		0.000***			0.000***			0.057*	

Note: ***significant at the 0.01 level , **significant at the 0.05 level, *significant at the 0.10 level.

The second regression models is run to examine the influence of individual intelectual capital component (HCE, SCE, and CEE) on ROA, ROE, and NIM. Table 5, still presents regression model has a low degree of fit because the R^2 value around 0.257, 0.220, and 0.095 respectively for model 2a, model 2b, and model 2c. after controlling for firm size and leverage. The table also showed that

HCE positively influence ROA and ROE. While, CEE positively affect ROA and NIM. In contrast, SCE has a negative impact to ROA. Therefore, hypothesis 1a and Ic are supported but hypothesis 1b is not supported

Table 5: Multiple Regression Results for VAIC Components

	ROA			ROE			NIM		
Variables	**Coef**	**t**	**Sig.**	**Coef.**	**t**	**Sig.**	**Coef**	**t**	**Sig.**
Constant	-0.155	-4.765	0.000***	-0.923	-3.862	0.000***	-0.092	-1.385	0.168
HCE	0.004	3.458	0.001***	0.027	3.367	0.001***	0.000	-0.168	0.867
SCE	-0.008	-3.133	0.002***	0.013	0.686	0.493	-0.001	-0.284	0.776
CEE	0.007	0.986	0.325	0.166	3.054	0.003***	0.051	3.379	0.001***
Size	0.005	4.545	0.000***	0.029	3.519	0.001***	0.005	2.067	0.040**
Lev	0.003	0.470	0.639	-0.022	-0.501	0.617	-0.016	-1.283	0.201
R-Squared	0..257			0.220			0.095		
Adjusted R-Squared	0..238			0.200			0.072		
F	13.445			10.963			4.062		
Sig	0.000***			0,000***			0,002***		

Note: ***significant at the 0.01 level , **significant at the 0.05 level, *significant at the 0.10 level.

4.4. Additional Multiple Regressions Analysis for Sub-samples

This conducts the additional multiple regressions analysis for sub sample Islamic bank and subsample conventional banks for model 1 and model 2. Table 6 reveals the quality of the model 1, as well as the influence of VAIC on ROA, ROE, and NIM for subsample Islmaic banks. The Table presented that the regression model has a low degree of fit because the R^2 value around 0.111, 0.265, and 0.143 respectively for model 1a, model 1b, and model 1c, after controlling for firm size and leverage. The model also shows that VAIC have a significant negatively impact on ROE. Therefore, hypothesis 1 is not supported.

Table 6: Multiple Regression Results for VAIC of Islamic Banks

	ROA			ROE			NIM		
Variables	**Coef**	**t**	**Sig.**	**Coef.**	**t**	**Sig.**	**Coef**	**t**	**Sig.**
Constant	-0.215	-1.853	0.070*	-1.400	-3.195	0.003***	0.004	0.051	0.959
VAIC	-0.003	-1.041	0.303	-0.012	-1.174	0.247	0.000	-0.291	0.772
Size	0.007	1.903	0.063*	0.047	3.199	0.002***	0.001	0.510	0.613
Lev	0.016	0.188	0.852	0.410	1.280	0.207	0.137	2.556	0.014*
R-Squared	0.111			0.265			0.143		
Adjusted R-Squared	0.053			0.217			0.087		
F	1,916			5.525			2.550		
Sig	0.140			0.000***			0.057*		

Note: ***significant at the 0.01 level , **significant at the 0.05 level, *significant at the 0.10 level.

While for conventional bank (Table 7) the R^2 value around 0.285, 0.252 and 0.040 respectively for model 1a, model 1b, and model 1c. The results also show that VAIC positively influence on ROA and ROE. Therefore, hypothesis 1 is supported

Table 7: Multiple Regression Results for VAIC of Conventional Banks

	ROA			ROE			NIM		
Variables	**Coef**	**t**	**Sig.**	**Coef.**	**t**	**Sig.**	**Coef**	**t**	**Sig.**
Constant	-0.122	-3.796	0.000***	-0.622	-2.102	0.037**	-0.136	-1.495	0.137
VAIC	0.004	4.849	0.000***	0.049	5.723	0.000***	0.002	0.713	0.477
Size	0.004	3.916	0.000***	0.018	1.912	0.058*	0.006	1.978	0.050**
Lev	-0.009	-0.654	0.514	-0.040	-.305	0.761	0.000	0.006	0.995
R-Squared	0.285			0.252			0.040		
Adjusted R-Squared	0.270			0.237			0.021		

F	19,380	16.434	2.053
Sig	0.000***	0.000***	0.100*

Note: ***significant at the 0.01 level , **significant at the 0.05 level, *significant at the 0.10 level.

This study also examine the influence of VAIC components on the performance of Islamic and conventional banks sub samples. The results of multiple regressions for Islamic bank and conventional banks sub samples are presented in Table 8 and Table 9 respectively. Table 8 shows that CEE positively associate with NIM only and HCE negatively relate to NIM. Therefore, hypothesis 1c is supported. However, hypothesis 1a and 1b are not supported

Table 8: Multiple Regression Results for VAIC Components of Islamic Banks

	ROA			ROE			NIM		
Variables	Coef	t	Sig.	Coef.	t	Sig.	Coef	t	Sig.
Constant	-0.225	-1.652	0.106	-1.180	-2.322	0.025**	0.125	1.645	0.107
HCE	-0.003	-0.604	0.549	-0.027	-1.473	0.148	-0.006	-2.105	0.041**
SCE	-0.001	-0.290	0.773	-0.005	-0.255	0.800	-0.003	-1.063	0.294
CEE	-0.007	-0.266	0.792	0070	0.735	0.466	0.047	3.264	0.002***
Size	0.008	1.698	0.097*	0.040	2.329	0.025**	-0.003	-1.123	0.267
Lev	0.018	0.206	0.838	0.392	1.204	0.235	0.122	2.505	0.016
R-Squared	0..114			0.291			0.326		
Adjusted R-Squared	0..013			0.199			0.249		
F	1.128			3.438			4.256		
Sig	0.360			0,010***			0,002***		

Note: ***significant at the 0.01 level , **significant at the 0.05 level, *significant at the 0.10 level.

Table 9 provides the empirical evidence on HCE influence to ROA and ROE, while CEE has a positive impact to ROA, ROE, and NIM. In contrast, SCE negatively relate to ROA. Therefore, hypothesis 1a and 1c are supported. However, hypothesis 1b is not supported

Table 9: Multiple Regression Results for VAIC Components of Conventional Banks

	ROA			ROE			NIM		
Variables	Coef	t	Sig.	Coef.	t	Sig.	Coef	t	Sig.
Constant	-0.112	-4.203	0.000***	-0.599	-2.099	0.038**	-0.129	-1.451	0.149
HCE	0.006	6.702	0.000***	0.040	4.469	0.000***	-0.000	-.022	0.982
SCE	-0.014	-5.196	0.000***	0.054	1.887	0.061*	0.000	.050	0.960
CEE	0.016	2.529	0.013**	0.284	4.200	0.000***	0.062	2.944	0.004***
Size	0.004	4.429	0.000***	0.018	1.921	0.057*	0.006	1.965	0.051*
Lev	-0.006	-0.491	0.624	-0.100	-0.777	0.438	-0.014	-0.351	0.726
R-Squared	0..513			0.314			0.099		
Adjusted R-Squared	0..496			0.290			0.068		
F	30.387			13.189			3.156		
Sig	0.000***			0,000***			0,010***		

Note: ***significant at the 0.01 level , **significant at the 0.05 level, *significant at the 0.10 level.

5. DISCUSSIONS

(This study examines the influence of IC on bank performance proxied by ROA, ROE and NIM. This study found that IC positively effect on bank performance with the proxy ROA, ROE and NIM. In the context of IC dimensions, HCE and CEE positively effect on bank performance proxied by ROA, ROE and NIM. While SCE only positively effect on ROA. The results of the study are sensitive to samples. For Islamic banks subsample, this study found that IC positively effect on ROA, but it does not affect to ROE and NIM. HCE positively effect on ROA, but HCE negatively influence on ROE and HCE has no effect on the NIM. SCE negatively effect on ROA and ROE, but SCE has no effect on NIM. CEE Capital has a positive effect on ROA and NIM, but CEE has a negative effect on ROE. For conventional banks, IC has a positive effect on ROA and ROE, but IC does not affect the NIM. HCE and CEE have a positive effect on ROA, ROE and NIM. SCE has a positive effect on ROE, but SCE has a negative effect on the ROA and NIM.

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Mostly the findings of this study align with what some previous studies found. However for SCE components, this study found the different results from those of previous studies found such as Janosevic et al., (2013), Mondal and Ghosh (2012), Razafindrambinina and Anggreni (2011), Chan (2009) and Chen (2005))..

6. CONCLUSION

This study found that intellectual capital positively effect on Indonesian bank performance. Moreover, this study also found human capital and capital employed positively effect on bank performance. While, this study found that structure capital only positively effect on ROA. However, when this study examine the influence of intellectual capital on the performance of Islamic and conventional banks separately, this study found that intellectual capital negatively affect Islamic bank performance for ROA proxy only and intellectual capital positively effect on conventional bank performance ROA and ROE proxies. These findings indicate the optimum intellectual capital will be followed by better bank performance.

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