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Indicator of Islamic Banking Competitiveness in the Asean Economic Community Era: Case Study of Indonesia and Malaysia

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Abstract

In facing the financial integration of ASEAN Economic community (AEC) by 2020, Islamic banks in Indonesia must have a high degree of continuity of operations in the future to ensure the existence of business continuity and increase the share of the national banking system in addition to ensuring increased amount of assets. This study is conducted to analyze the level of competition among Islamic banks in Indonesia and Malaysia are judged based on the sound aspects of the bank, efficiency, profitability, productivity and model of the external economic conditions. This study uses data of annual financial statements from 10 Islamic banks in Indonesia and 10 Islamic banks in Malaysia. The results of this study indicate that Islamic banking in Malaysia are relatively better prepared compared to Islamic Banks in Indonesia. Islamic Banks in Malaysia possessed many derivative instruments and liquidities. The regulations of the government tend to fully support development of Islamic finance, low level of non-performing financing (NPF), and Malaysia People interested to makes Islamic banks would be better to compete with overseas Islamic banks in the era of financial integration in the ASEAN Economic Community (AEC) in 2020. Related to performance of Malaysian Islamic Banks, Indonesian Government must imposed new policies in order to create innovation and create new product with more flexible in implementing to customers.

Keywords: Sound level of bank, efficiency, productivity, profitability
JEL Classification: E50, G21

1. Introduction

The Islamic banking industry in Indonesia is rapidly growing during period of 2008 to 2013 before the growth have been being stagnant since 2014. The stagnation in Islamic banking growth is to affect on the decline assets of Islamic banks compare to conventional banks 2015. The growth of Islamic banking assets and market share in Indonesia can be seen in Table 1.1 as follow:

Table 1: Market Share of Islamic Banking in Indonesia 2011-2015

Total Assets	2011	2012	2013	2014	May-2015
National (IDR Billion)	3,652,832	4,262,587	4,954,467	5,615,150	5,837,720
Islamic Banking (IDR Billion)	145,467	195,018	242,376	272,343	272,389
Share of Islamic Banking (%)	3.98	4.58	4.89	4.85	4.67
Growth (%)	49.17	34.06	24.28	12.36	0.02

Source : Financial Services Authority 2016, Data Processed.

Islamic banking in Indonesia is expected to achieve to qualification standard of Qualified ASEAN Bank (QAB) in order to compete with among Islamic Banks in ASEAN Region. Almekinders (2015) stated that the financial integration of ASEAN can work with three dimensional frameworks which should to be completed, namely the equal access, equal treatment, and equal environment. Banks in ASEAN region have to meet strong and sound of capital, meet the prudential regulations at the host country, and having a large market share at the country of origin. Implication of financial integration, banking liberalization make tight competition in the banking sector among ASEAN Countries following QAB Criteria including Islamic Banks.

Malaysia has 16 Islamic banks, several of those have big assets and strong capital to qualify as QAB. On the other hand, the government of Malaysia is ambitious for Malaysia to become the world's Islamic Financial Center. Indonesia is one of the potential market for Malaysian Islamic banks considering the enormous Muslim population. Islamic Banking in Malaysia has more advanced than in Indonesia. Although the growth of Islamic banking in Malaysia is lower than in Indonesia, the market share of Islamic banking in Malaysia at December 2015 has reached 22.77% of the national banking system (Bank Negara Malaysia: 2016). The growth of Islamic banking assets and market share in Malaysia can be seen in Table 1.2 as follow:

Table 2: Market Share of Islamic Banking in Malaysia 2011-2015

Total Assets	2011	2012	2013	2014	Mei-2015
National (RM Million)	1,781,863	1,875,773	2,043,367	2,219,371	2,279,331
Islamic Banking (RM Million)	328,649	375,954	426,641	477,055	510,394
Share of Islamic Banking (%)	18.44	20.04	20.88	21.50	22.39
Growth (%)	22.80	14.39	13.48	11.82	6.99

Source : Bank Negara Malaysia 2016, data processed.

The Expansion of Malaysian Islamic banks to Indonesia are derived by several advantages such as larger assets, stronger capital, more experience in Islamic banks, strong support from Government, and big market customer in Indonesia. The Possibility of expansion should be aware by Islamic Banks and Indonesian Government based on the Table 1.2. Therefore, it is necessary to analyze the indicators that can be used as a reference to anticipate the expansion of Islamic banks from ASEAN countries, especially from Malaysia to Indonesia.

In the beginning of financial integration of the ASEAN Economic Community (MEA) by 2020, Islamic banks in Indonesia must ensure the sustainability of the business and enlarge the market share. Therefore, this study was conducted to analyze the competitiveness level of Islamic banks in Indonesia and Malaysia based on the evaluation of the soundness levels of efficiency, profitability, and productivity.

The comparison of competitiveness level of Islamic Banks in Indonesia and Malaysia is expected to be a guideline for all Islamic banks shareholders and managers in order to manage their businesses. Furthermore, this research is also expected to be a guideline for government to arrange what kind of policies in facing the ASEAN Financial Integration at 2020. The problem identification in this research are:

- How does Islamic banks performance in Indonesia comparing to the Islamic banks performance in Malaysia which can be seen from the performance of individual Islamic banks?
- Is Islamic banking industry in Indonesia ready to facing ASEAN Financial Integration at 2020 which can be seen from the performance in recent years after comparing with performance of Islamic banking industry in Malaysia?.
- What kind of policy implementation can be proposed to Indonesian Government in order to prepare high level performance of Islamic bank following QAB criteria in the ASEAN Financial Integration at 2020?

2. Previous Research

This study demonstrate level of soundness, level of efficiency, level of profitability, and level of productivity by mapping performance of Islamic banks in Indonesia which are conducted by many researchers. The study that mapping between the soundness, profitability, and efficiency in Islamic banks in Indonesia have conducted by many researchers. Hosen and Rahmawati (2016) measured the levels of efficiency at Islamic banks in Indonesia using parametric method with *stochastic frontier approach* (SFA), this study also measured the levels of profitability and the level of soundness then comparing the results of tools analysis. The level of Islamic banking soundness in the study was using CAMEL method. The results of study showed that the level of efficiency were in line with the level of profitability of Islamic banks, meanwhile the level of soundness were not inline to the level of efficiency and profitability of Islamic banks in Indonesia.

Firdaus and Hosen (2013) studied the relationship between the soundness and the efficiency levels of Islamic banks using Data Envelopment Analysis (DEA) which are non-parametric method. The results of the study indicated that the difference relationship significantly between the level of efficiency using DEA and the level of soundness using CAMEL. Therefore, the study proposed to modify CAMEL method with replacing the existing ratio of efficiency in CAMEL to the new one. CAMEL method use Operational Expenses Ratio (OER) rather than *frontier approach* which estimate multi input and output. The OER ratio only estimated single input and output so that the efficiency estimation could not be seen serial time series with fluctuation. The results of the modification of CAMEL method by replacing the efficiency measurement showed that Islamic banks enjoy the improvement of the level of soundness.

Wahab *et al.* (2014) studied about the comparison of the performance of conventional banks and Islamic banks in Indonesia based on the measurement of level of efficiency and level of profitability with 10 number of sample each bank. The results of study indicated that conventional banks have better technical efficiency than Islamic banks due to inefficiencies in the use of input variables at Islamic banks, such as third party funds, labor costs, and fixed assets. In conclusion, the conventional banks were better than Islamic banks both using the model of *return on assets* (ROA) and *return on equity* (ROE) as dependent variables.

The study about the comparison of level of efficiency between conventional banks and Islamic banks was also conducted by Hosen *et. al.* (2016) which put four biggest conventional banks and Islamic banks in Indonesia as samples. The results of study indicated that there is no significant differences between the levels of efficiency of conventional banks with the level of efficiency of Islamic banks both based on *constant return to scale* (CRS) and *variable return to scale* (VRS). Furthermore, *paired samples T-test* showed that there are differences in the levels of efficiency using CRS and VRS assumptions. The study also showed that variables of fixed assets (technology) and labor fees are the most influential to affect the levels of efficiency based on CRS and VRS assumptions.

Muhari and Hosen (2013) compared to study about efficiency of Islamic rural banks (IRB) in Indonesia by using stochastic frontier approach (SFA) as parametric method and data envelopment analysis (DEA) as non-parametric method. Besides comparing these two methods, the study compared

to each efficiency methods to the level of bank soundness. The results of study showed that the evaluation of banking soundness using CAMEL method especially in deciding weight of each component. Instead of using OER, the efficiency measurement in the CAMEL method could be replaced by parametric measurement such as DEA or SFA or even combination of both. Further study by Hosen and Muhari (2014) indicated similar result that IRB, which have good soundness, did not represent better level of efficiency, this means that the soundness of Islamic banks is not in line with level of efficiency. Nevertheless, the performance of each IRB in Indonesia should be seen from their geographic condition especially in the region which far from the cities (Muhari and Hosen, 2015).

Research on mapping efficiency and profitability was conducted by Warninda and Hosen (2014) where IRB with high level of efficiency were not necessarily achieved better profitability. Similar study with the larger samples and longer periods conducted by Warninda and Hosen (2015) showed that correlation between profitability and efficiency was negative based on efficiency-profitability matrix.

One method for measuring the performance of the bank is using the CAMEL which is abbreviation for *capital, assets, management, earnings, and liquidity*. In this method, the components measure the performance of Islamic banking indicators such as capital resilience, assets quality, management performance, the level of earning and liquidity based on Bank Indonesia Regulation Number in PBI Number 9/1/PBI/2007. In addition, the regulation has included the measurement for sensitivity to market risk as well. Moreover, it is also contained the evaluation for social responsibility reports such as the ratio of *Corporate Social Responsibility* (CSR) level and zakat included in indicator. In general, International banking authorities adopted a CAMEL framework as one of the method to evaluate the soundness of banks (Bank Indonesia, 2004), as Whalen and Thomson (1988) previously stated that CAMEL can be predicting the bank soundness in high precision based on their research.

CAMEL method consists of many financial ratios which have some weaknesses. Ehradrt & Brigham (2011) revealed the limitations of ratio analysis, including difficulties in analyzing companies with many divisions and subsidiaries, a trend for comparison against the average ratio, and the seasonal factors.

In addition, the Hosen and Muhari (2013) and Muhari and Hosen (2014) suggested that the CAMEL analysis must considered the efficiency of using the approach of input-output analysts based on linear programming on the analysis, because some cases several banks operated in inefficient performance but they have a high rate soundness of banks. The method based on ratio analysis, it is limited to provide depth analysis because of single input-output oriented in the method. Therefore, the using of Data Envelopment Analysis (DEA) is able to use multiple input or output to estimate the level of efficiency on Islamic Banks in Indonesia and Malaysia.

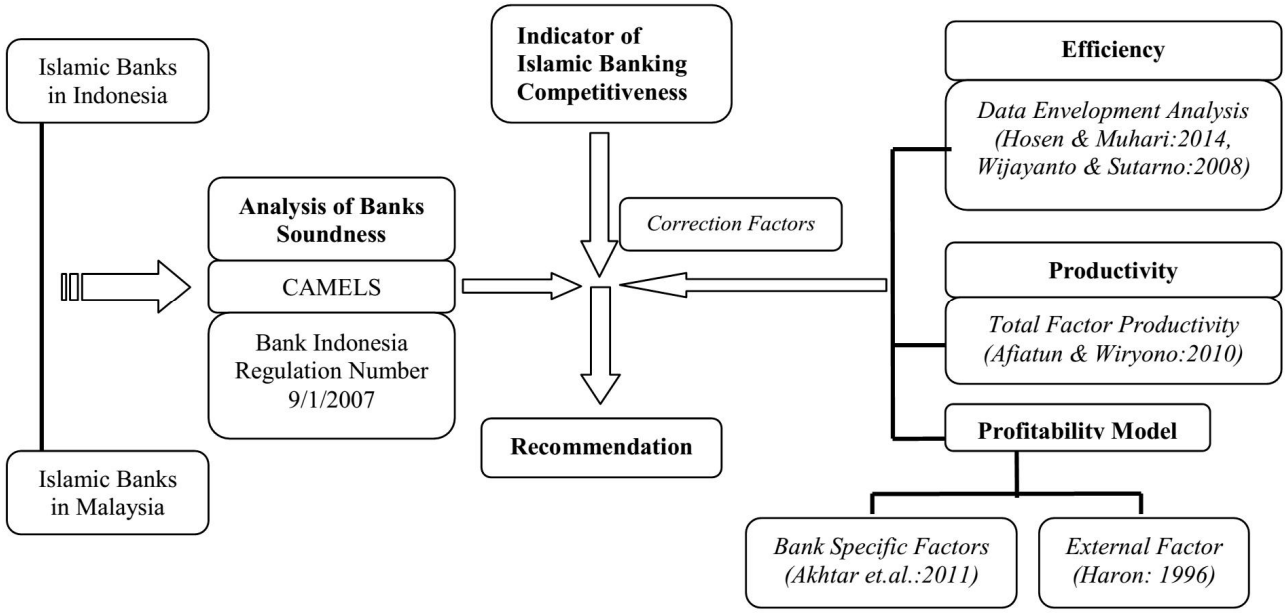
This study measures for productivity of Islamic banks. Measuring productivity is quite simple when only a single output is produced with single input. Output per unit of input is a comprehensive measure of the level of productivity and it can be used in comparing the performance firms or industries. However, it is a little bit more complex when multiple outputs are produced using multiple inputs (Coelli *et. al.,* 2005). In this study Total Factor Productivity (TFP) used to measure the productivity of Islamic Banking in Indonesia and Malaysia.

Coelli *et al.* (2005) stated that *"TFP measures account for the use of a number of factor inputs in production and, therefore, are more suitable for performance measurement and comparisons across firms and for given firm over time. In the presence of multiple outputs and inputs, total factor productivity may be defined as a ratio of aggregate output produced relative to aggregate input used. Aggregation of outputs and inputs immediately gives rise to index number problem.*"

The efficient and productive of Islamic banking management are intended to keep the level of profitability in order to maintain the sustainability thus benefiting customers and shareholders. The increasing levels of profitability at Islamic banking have a positive impact on the development of Islamic banks for freely expanding. There are many models used to measure the profitability of Islamic

banks, but they are not enclosed variable of efficiency using DEA and productivity using TFP in the models.

In this study, the profitability model for bank specific is adopted the study by Akthar *et al.* (2011), while the profitability model for external factor is adopted the study by Haron (1996), finally the profitability model enclosed the efficiency (DEA) and productivity (TFP) estimation in the model. The use of this model is expected to be a correction to the existing CAMEL method. The framework of this study can be described as follows:



3. Research Method

3.1. Description of Data

The samples of study are Islamic banks in Indonesia and Malaysia in the period of 2012 to 2014. The data is obtained from annual report of each banks in Indonesia and Malaysia in the period of study where taken from banks' official website. We also collecte some macroeconomics data from central bank of Indonesia and Malaysia through their official websites. The numbers of samples in this study are 10 Indonesian Islamic banks and 10 Islamic banks in Malaysia. The Islamic banks which conducted in this study are as follow:

Table 3: List of Islamic Banks

No	Indonesia	No	Malaysia
1	Bank BCA Syariah (BCAS)	1	Affin Bank (AFB)
2	Bank BNI Syariah (BNIS)	2	Alliance Islamic Bank (AIB)
3	Bank BRI Syariah (BRIS)	3	Al Rajhi Bank (ARB)
4	Bank Muamalat Indonesia (BMI)	4	Asian Finance Bank (ASB)
5	Bank Mega Syariah (BMS)	5	Bank Muamalat Malaysia (BMM)
6	Bank Syariah Bukopin (BSB)	6	Bank Islam Malaysia Berhad (BIMB)
7	Bank Syariah Mandiri (BSM)	7	CIMB Islamic (CIMBI)
8	Bank Victoria Syariah (BVCS)	8	Kuwait Finance House (KFH)
9	Maybank Syariah Indonesia (MBSI)	9	Maybank Islamic (MYBI)

No	Indonesia	No	Malaysia
10	Panin Bank Syariah (PNBS)	10	Public Islamic Bank Berhad (PIBB)

3.2. Analysis Model

The first research method used in this research is quantitative method. This paper used four tools of analysis from quantitative method to measure the competitiveness index of Islamic banks in Indonesia and Malaysia, the toll of analysis are CAMEL method to measure the soundness, DEA to measure efficiency, Malmquist TFP Index to measure productivity, and profitability model.

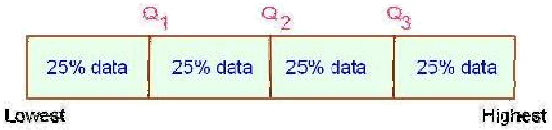
This paper analyzed Islamic banking soundness based on Bank Indonesia Regulation Number in PBI Number 9/1/PBI/2007, the components that measured are capital resilience, assets quality, management performance, the level of earning and liquidity, and sensitivity to the market risks. Each component have some indicators, the numbers of indicator for each components are:

Table 4: CAMEL Indicators

Components	No	Indicators
Equity	**1**	Capital Adequacy Ratio (CAR)
	2	Growth Trend of CAR
	3	Internal Bank's ability to add capital
	4	Retained Earnings Ratio
	5	Intensity of Functions of Bank Syariah Agency
	6	Core Capital compared to Mudharabah Fund
	7	Dividend Pay Out Ratio
	8	Access to Capital Resources
Assets	**9**	Quality of Earning Assets
	10	The amount of Non-Performing Financing
	11	Projected Quality of Productive Assets
	12	Ratio of Asset Trading, Derivatives and FVO to Total Assets
Management	**13**	Profit Margin Ratio
Earnings	**14**	Net Operating Revenue
	15	Return on Assets
	16	Operational Efficiency Ratio
	17	Income Generating Ratio
	18	Diversified Revenue
	19	Primary Operating Revenue Projection
	20	Primary Net Margin Operating Ratio
	21	Return on Equity
	22	Composition of Fund Placement on Securities
	23	The amount of Profit Sharing Fund
	24	Efficiency based on DEA approach
Liquidity	**25**	The amount of Short-term Assets compared to Short-Term Liabilities
	26	Sharia Bank Capability in Meeting Short Term Liquidity Needs by Using Short Term Assets, cash and secondary reserve
	27	Dependence of Interbank Funds
Sensitivity to Market Risk	**28**	Sensitive asset to sensitive liability ratio
Social	**29**	Public Education Function

Components	No	Indicators
	30	Zakat Allocation Function

After calculating the financial ratios, the Islamic banking is ranked by the score of ratio at each indicators. The rankings is based on quartile deviation from the samples taken covering 10 Islamic banks in Indonesia and 10 Islamic banks in Malaysia. The quartiles depict the data in a study divided into 4 groups divided by a minimal to maximal number that can be showed by the graph:



Information: Lowest: smallest data, Highest: highest data, Q1: Quartile-1, Q2: Quartile-2, Q3: Quartile-3

This rating then is summed and is showed the final score of Islamic banking soundness. By knowing the position of each indicator of this CAMEL method, it can be analyzed the strength and weaknesses for each Islamic banks in Indonesia Malaysia in order to prepared them to face ASEAN Financial Integration in 2020.

To assess the soundness of banks in this study which is analyzed by the financial performance of Islamic banks from the capital, asset quality, management, profitability, liquidity, and sensitivity to market risks. To rank the best performance and the lowest, the results of the ratio in this study were divided into four quartiles of the average value of the performance of each ratio in the soundness of Islamic banks, with the top quartile (best performance) gets 4 points and the lowest quartile (lowest performance) gets point 1.

In the next stage, the analysis of efficiency, productivity, profitability model from bank specific factors and profitability model from external factors are used as correction factors for the existing methods. Efficiency is a method that is quite popular in measuring the performance of banking, especially in addressing the weaknesses the efficiency analysis which contained at CAMEL method. There are three popular approaches in measuring the efficiency of banks, namely assets approach, production approach and intermediation approach (Haddad, *et al.* :2003).

This study used the intermediation approach because it is the primary function of the banks as financial institution that involves the matching of lenders with savings to borrowers. To determine input and output variables are based on study by Vitello and Sutarno (2008) with variables output consists of total financing (y1) and total securities (v2), while input variables are fixed assets (x1), labor costs (x2) and total of third party funds (x3). Each of Decision Making Unit (DMU) is efficient if they can reach peak of 1 or100%. (Hosen & Muhari: 2014).

The next step, the results of efficiency level in the study, both technical efficiency and scale efficiency are decomposed to obtain the value of the productivity of each Islamic bank in Indonesia and Malaysia. Islamic banks who total factor productivity above 1 indicates the increasing of productivity and indicates the good ability of Islamic banks to compete (Afiatun and Wiryono: 2010).

This study also conducted the bank's profitability factors by considering the specific banking factors (Akhtar *et al.*: 2011) and external factors (Haron: 1996). In addition to get more precise profitability model, the analysis of the efficiency and productivity are included in this research model. Thus the model to be used are as follows:

Table 5: Variables of Profitability Model

Variable Type	Variable	Variable Definition
Dependent	ROA	Return on Assets
	ROE	Return on Equity
Independent	GR	Gearing Ratio (Total Debts/Equity)
	NPF	Non-Performing Financing
	AM	Assets Management (Operational Revenue/Total Assets)
	OE	Operational Cost/Total Assets
	CAR	Capital Adequacy Ratio
	MKT	Dummy variable for two market, 1=Malaysia, 0=Indonesia
	MS	Market Share to Banking System
	INT	Discount rate of each central bank
	MON	Money growth (M_2) of each countries
	CPI	Inflation of each countries
	BS	Log. Total Asset (US Dollar)
	DEA	Efficiency based on *Data Envelopment Analysis*
	TFP	Productivity based on *Total Factor Productivity*

The second research method used in this research is qualitative method. The qualitative method is a type of research which results in discoveries could not be achieved by using statistical procedures or by other quantification methods (Basrowi and Suwandi: 2008).

The addition of this qualitative method is due to many consensuses that several of the research issues are not adequately addressed through quantitative-posivistic methods, but the development of science is somewhat related to changes in the broader socio-economic field, so a qualitative approach is needed to adapt to the form of new social reality at the society (Mulyana: 2010).

The qualitative research technique used in this research is structured interview. Structured interviews are the interview method whose interviewers set their own issues and questions to be asked for the purpose of finding answers to hypotheses. This type is done in situations where all representative samples are asked with the same important question. All subjects are considered to have equal opportunityi to answer the questions (Basrowi and Suwandi, 2008).

3.3. Analysis of Data Envelopment Analysis (DEA)

DEA is a linear programming techniques for examining how particular Decison Making Unit (DMU, in this study is a bank) operates to other banks in the sample relatively. The technique cretaes a frontier set by efficient banks and compares it with inefficient banks to produce efficiency score. Furthermore, the range of efficiency score is between the numbers 0 to 1, where 1 represents the the efficient score. In DEA analysis, the efficient bank (with efficiency score 1) does not necessarily produce the maximum output level from the current input. Furthermore, this bank is the the best practice level of output compared to other banks in the sample (Yudhisthira, 2004).

Based Charnes, Cooper and Rhodes (1978), this linear program can be transformed into an ordinary linear programming (Yudhisthira, 2004):

$$Maximize\ e_s = \sum_{i=1}^{m} v_i y_{is} \tag{1}$$

$$Subject\ to \sum_{i=1}^{m} v_i y_{is} - \sum_{j=1}^{m} v_j x_{ir} \leq 0, r = 1, \ldots N;$$

$$\sum_{j=1}^{m} v_j x_{js} = 1 \wedge \upsilon_i dan\, \upsilon_j \geq 0.$$

Where y_{IS} is the amount of *i*th output produced by the *s*th bank, x_{JS} is the amount of the *j*th input used by the *s*th bank, υi is the output weight, weight νj is input. In the same way, the programming can be converted into two constraints:

$$Minimize\, \xi_s$$

$$subject\ to \sum_{r=1}^{N} \varphi_r y_{ir} \geq y_{is,} i = 1,\ldots,m; \tag{2}$$

$$\xi_s x_{js} - \sum_{r=1}^{N} \varphi_r x_{ir} \geq 0, j = 1,\ldots,n; \varphi_r \geq 0, \text{ and } 0 \leq \xi_s \leq 1.$$

Where ξ_s is the entire score of technical efficiency to the bank-s, where the value of 1 indicates the frontier.

This research used to the model assuming constant returns to scale (CRS) or a so-called model CCR (Charnes-Cooper-Rhodes). Suseno (2008) stated that there is no relationship between the level of Islamic Banks efficiency with the scale of production. Economies of scale in the banking industry is not going to scale the company due to the function of a bank have been integrated with other banks. Thus, economies of scale has shifted from companies to the functional (Firdaus and Hosen: 2013).

3.4. Analysis of Malmquist Total Productivity Index

After calculating the efficiency using DEA method, next the efficiency score from t and t+1 is decomposed, if M_0 is greater than one, then there are increasing in productivity, whereas if it is less than one, then a decline in productivity, while the estimate model is as follows:

$$m_0\left(x^{t+1}, y^{t+1} x^t, y^t\right) = \left[\frac{d_t^0\left(x^{t+1}, y^{t+1}\right)}{d_t^0\left(x^t, y^t\right)} x \frac{d_0^{t+1}\left(x^{t+1}, y^{t+1}\right)}{d_0^{t+1}\left(x^t, y^t\right)}\right]^{\frac{1}{2}} \tag{3}$$

where (x^t, y^t) and $(x^t + 1, y^t + 1)$ is a production point at t and t+1. Where m_0 (TFPCH) can be decomposed into changes in efficiency (EFCH) and technological change (TECHCH), then be applied to variable returns to scale (VRS) which is the pure efficiency (PECH) and scale efficiency (SECH), in order to get the following equation (Ngo and Nguyen, 2012):

TFPCH = EFCH x TECHCH
EFCH = PECH x SECH

4. Result and Discussion

4.1. The Soundness of Islamic Bank in Indonesia and Malaysia

4.1.1. The Soundness of Islamic Bank 2012

Table 6: The Soundness of Islamic Banks in 2012

Rank	Bank	Score	Country	Rank	Bank	Score	Country
1	BCAS	74.79	I	11	MBSI	57.83	I
2	PNBS	72.42	I	12	ARB	56.79	M
3	MYBI	71.96	M	13	BMM	55.25	M
4	PIBB	71.33	M	14	BMI	54.04	I

Rank	Bank	Score	Country	Rank	Bank	Score	Country
5	KFH	69.38	M	15	BNIS	53.58	I
6	AIB	68.96	M	16	BMS	53.38	I
7	CIMBI	67.25	M	17	BSM	52.96	I
8	BIMB	66.71	M	18	BRIS	51.71	I
9	AFB	62.50	M	19	ASB	50.79	M
10	BVCS	59.29	I	20	BSB	45.88	I

Source: data processed, *I=Indonesia, M=Malaysia

Based on the Table 6, it can be shown from rank 3 to rank 9 are Malaysian bank. However, the first and second are Islamic banks from Indonesia, namely Bank BCA Syariah and Bank Panin Syariah, while the Victoria Islamic Bank was ranked tenth. Three Islamic bank with lowest sound performance are Bank BRI Syariah, Asian Finance Bank, and Bank Syariah Bukopin. Based on the table 4.1, it can be concluded that the soundness of Islamic banks in Malaysia is much better than the Islamic banks in Indonesia in 2012.

The sound level of Islamic banks in Malaysia is better because the liquidity and sensitivity to market risks at Islamic banks in Malaysia is much better than the Islamic banks in Indonesia in 2012. The Islamic banks in Malaysia have more derivative assets products and more diverse thus Islamic banks in Malaysia have liquid instruments which can be used to anticipate the withdrawal of funds or needs of cash in large amount of money.

In terms of sensitivity to market risks, only 3 of 10 Islamic banks in Malaysia who have *negative relative gap*, while in Indonesia all of the Islamic banks have *negative relative gap*. The *negative relative gap* is indicating that Islamic banks are vulnerable to the changes in interest rates. *Negative relative gap* occurs because financing cannot be re-pricing such as bai' contract based like murabahah financing which is much higher than the savings that using profit-loss sharing based contract like mudharabah which is flexible on interest rates. Nowadays, the structure of Assets-Liability in Islamic banks Indonesia is dominated by murabahah in assets and mudharabah in Lquidity lead to causing wider negative relative gap in Islamic banks.

4.1.2. The Soundness of Islamic Bank 2013

Table 7: The Soundness of Islamic Banks in 2013

Rank	Bank	Score	Country	Rank	Bank	Score	Country
1	BCAS	73.96	I	11	BNIS	58.17	I
2	PIBB	72.46	M	12	BMI	57.92	I
3	AIB	68.00	M	13	ARB	54.63	M
4	KFH	67.29	M	14	MYBS	54.25	I
5	BIMB	66.71	M	15	BMM	53.50	M
6	MYBI	64.79	M	16	ASB	53.38	M
7	CIMBI	62.38	M	17	BMS	50.13	I
8	BVCS	61.25	I	18	BRIS	49.63	I
9	AFB	58.71	M	19	BSM	46.88	I
10	PNBS	58.21	I	20	BSB	41.29	I

Source: data processed, *I=Indonesia, M=Malaysia

Based on the table 7, it can be shown from rank 2 to rank 7, and rank 9 are Malaysian bank. However, the first rank is an Islamic bank from Indonesia, namely Bank BCA Syariah, while Bank Victoria Syariah and Bank Panin Syariah rank 8 and 10, respectively. Three Islamic bank with lowest sound performance are Indonesian Islamic banks namely Bank BRI Syariah, Bank Syariah Mandiri and Bank Syariah Bukopin. Based on the Table 4.2, it can be concluded that the soundness of Islamic banks in Malaysia is much better than the Islamic banks in Indonesia.

The sound level of Islamic banks in Malaysia is better because the liquidity and sensitivity to market risks of Islamic banks in Malaysia is much better than the Islamic banks in

Indonesia in 2013. Other factors that influence the better sound of Islamic banks in Malaysia in 2013 are the quality of the assets managed by Islamic banks in Malaysia was better than the Islamic banks in Indonesia. This is reflected in the level of NPF from Islamic banks in Malaysia were lower when compared to level of NPF at Islamic banks in Indonesia.

4.1.3. The Soundness of Islamic Bank 2014

Table 8: The Soundness of Islamic Banks in 2014

Rank	Bank	Score	Country	Rank	Bank	Score	Country
1	BCAS	75.08	I	11	BNIS	58.83	I
2	MYBI	70.92	M	12	KFH	58.79	M
3	PIBB	69.79	M	13	BMM	56.29	M
4	CIMBI	68.71	M	14	MYBS	55.25	I
5	BIMB	68.58	M	15	BSM	55.08	I
6	AFB	66.29	M	16	BRIS	54.08	I
7	ARB	65.71	M	17	BMS	51.50	I
8	PNBS	65.46	I	18	BVCS	51.08	I
9	AFB	65.00	M	19	BSB	48.54	I
10	AIB	63.92	M	20	BMI	47.88	I

Source: data processed, *I=Indonesia, M=Malaysia

Based on the Table 8, it can be shown from rank 2 to rank 7, and rank 9 to rank 10 are Malaysian bank. However, the first rank is an Islamic bank from Indonesia, namely Bank BCA Syariah and while Panin Bank Syariah is ranked at 8. Three Islamic banks with lowest sound performance are Indonesian Islamic banks namely Bank Victoria Syariah, Bank Syariah Bukopin, and Bank Muamalat Indonesia. Based on the Table 4.2 it can be concluded that the soundness of Islamic banks in Malaysia is much better than the Islamic banks in Indonesia.

The sound level of Islamic banks in Malaysia much better because the liquidity and sensitivity to market risks Islamic banks in Malaysia is much better than the Islamic banks in Indonesia in 2014. Other factors that influence the sound of Islamic banks in Malaysia is better than in Indonesia was the quality of the assets managed by Islamic banks in Malaysia was better than the Islamic banks in Indonesia.

In 2014, the profitability of Islamic banks in Malaysia showed a better performance when compared to the Islamic banks in Indonesia. Because of the decline in macroeconomic in Indonesia and declining quality of assets at Islamic banks in Indonesia, these decline the profitability of Islamic banks.

Based on the analysis of the soundness of Islamic banks in Indonesia and Malaysia, it can be concluded that the performance of Islamic banks in Indonesia has decreased from 2012 to 2014, except bank BCA Syariah. In the same period, the performance of Islamic banks in Malaysia also suffer from declination, but the decline experienced by the Islamic Bank in Indonesia is sharper. In 2012 the Islamic banks in Indonesia on average are less perform only in liquidity and market sensitivity variables as compared with Islamic banks from Malaysia. In 2013, the asset quality then less perform too than Islamic banks in Malaysia, until in 2014 the profitability of Islamic banks in Indonesia have lower performance than Islamic bank in Malaysia.

It can be shown from 2012 to 2014, the Islamic Bank in Malaysia are more soundness because they have more liquidity instruments compared to the Islamic banks in Indonesia. In addition, the Islamic Banks in Malaysia are relatively strength in the face ASEAN Financial Integration given more diversified financial asset that can be in re-pricing such as mudharaba, Ijara and Ijara muntahiya bit Tamlik (IMBT). On the other hand, all Islamic banks in Indonesia from 2012 to 2014 have assets which could not be re-pricing since many usages of murabahah contract in financing, while the funding is used mudharaba contract.

Thus, if the interest rate increases, the Islamic banks the revenue sharing for third party fund increases too because it is peers to the conventional banks, while at the same time financing based on murabaha contract could not be in re-pricing so that it increases the risks and can make lower the level of Net Operating Margin (NOM) of Islamic banks in Indonesia. At the end of 2014, there were five Islamic banks that have positive relative gap in the sample namely Maybank Islamic, KFH Bank, Affin Bank, Alliance Islamic Bank, and Asian Finance Bank, which are the fifth bank have resistance to the market which is quite strong.

In terms of liquidity, Islamic Banks in Indonesia is still shortage of liquidity instruments when compared with Islamic banks in Malaysia. It can be seen from the liquidity score of Islamic banks in Malaysia were higher than the Islamic banks in Indonesia. Islamic banks in Malaysia have more diversified liquidity instruments than Islamic banks in Indonesia. One of the instruments are often using in Malaysia as an liquidity instrument which is a murabaha commodities but it is not currently used in Indonesia. With this murabaha commodities, Islamic banks in Malaysia have sufficient liquidity instruments to anticipate business risks that might occurs.

4.2. Efficiency of Islamic Bank in Indonesia and Malaysia

Table 9: Analysis of Efficiency Levels of Islamic Banks in Indonesia and Malaysia in Period 2012 to 2014

No	Bank	2012	2013	2014
1	BSM	1.000	1.000	1.000
2	BMI	0.530	1.000	1.000
3	BRIS	0.709	1.000	0.662
4	BNIS	1.000	1.000	1.000
5	BMS	1.000	1.000	1.000
6	BSB	0.795	1.000	0.501
7	BCAS	0.843	1.000	0.877
8	PNBS	1.000	1.000	0.536
9	BVCS	0.537	0.098	1.000
10	MYBS	0.674	0.126	1.000
11	AFB	1.000	1.000	1.000
12	AIB	1.000	1.000	1.000
13	ARB	0.794	0.503	0.452
14	ASB	1.000	1.000	1.000
15	BMM	0.717	0.689	1.000
16	BIMB	0.864	1.000	0.864
17	KFH	0.840	1.000	1.000
18	PIBB	1.000	0.858	1.000
19	MYBI	1.000	1.000	0.854
20	CIMBI	0.918	1.000	0.565

Source: data processed

Based on the Table 9, in 2012, 4 of the 10 Islamic Bank in Indonesia have perfect efficiency scores (100%), the banks are the Bank Syariah Mandiri, Bank BNI Syariah, Bank Mega Syariah and Bank Panin Syariah. In 2013 only two Islamic banks in Indonesia are inefficient, namely Bank Victoria Syariah (9.8%) and Maybank Syariah (12.6%). While in 2014 there were four Islamic banks in Indonesia which is inefficient because it does not reach 100%, namely Bank BRI Syariah (66.2%), Bank Syariah Bukopin (50.1%), Bank BCA Syariah (87.7%), and Panin Bank Syariah (53.6%). During period 2012 to 2014 only the Bank Syariah Mandiri, Bank BNI Syariah and Bank Mega Syariah have consecutive efficient scores (100%).

In 2012, 5 of the 10 Islamic Bank in Malaysia have perfect efficiency scores (100%), namely Affin Bank, Alliance Islamic Bank, Asian Finance Bank, Public Islamic Bank Berhad (PIBB) and Maybank Islamic. In 2013 only three Islamic banks in Malaysia are inefficient, namely Al Rajhi Bank (50.3%), Bank Muamalat Malaysia (68.9%), and PIBB (85.8%). In 2014 there are three Islamic banks

in Malaysia are inefficient, namely Al Rajhi Bank (45.2%), BIMB (86.4%), CIMB Islamic (56.5%), and Maybank Islamic (85.4%). During the period of 2012 to 2014 only Affin Bank, Alliance Islamic Bank, and the Asian Finance Bank which have consecutive efficiency scores (100%).

4.3. Productivity of Islamic Bank in Indonesia and Malaysia

Table 10: The Average of *Total Factor Productivity* (TFP) of Islamic Banks in Period of 2012 to 2014

Rank	Bank	Efficiency Change	Technical Change	Pure Efficiency Change	Scale Efficiency Change	TFP Change
1	BVCS	5.171	1.503	4.776	1.403	3.218
2	MYBS	4.067	2.548	3.049	1.223	2.467
3	CIMBI	0.828	2.045	0.858	0.946	2.125
4	MYBI	0.927	1.828	1.000	0.927	1.813
5	BSM	1.000	1.738	1.000	1.000	1.738
6	BMI	1.443	0.938	1.000	1.443	1.540
7	PIBB	1.012	1.720	1.000	1.012	1.527
8	BMM	1.206	1.078	1.110	1.121	1.296
9	AFB	1.000	1.241	1.000	1.000	1.241
10	KFH	1.095	1.098	1.090	1.005	1.212
11	BMS	1.000	1.135	1.000	1.000	1.135
12	BCAS	1.032	1.059	0.956	1.075	1.109
13	BIMB	1.011	0.954	0.932	1.079	0.979
14	BNIS	1.000	0.960	1.000	1.000	0.960
15	ASB	1.000	0.944	1.000	1.000	0.944
16	BSB	0.880	1.142	0.756	1.119	0.936
17	AIB	1.000	0.925	1.000	1.000	0.925
18	BRIS	1.036	0.976	1.032	1.003	0.884
19	ARB	0.766	1.065	0.695	1.120	0.824
20	PNBS	0.768	0.968	1.000	0.768	0.732
	Mean of TFP 2013	0.894	1.383	0.805	1.111	1.236
	Mean of TFP 2014	1.109	0.819	1.132	0.980	0.909

Source: data processed

Based on the Table 10, the score of Malmquist TFP Index value above 1 shows that Islamic banks have increased the productivity level, while the value malmquist TFP Index below 1 indicates decreasing of productivity level. In the above table can be seen there are eight Islamic banks whose productivity is below 1, where 4 of them are from Malaysian banks and 4 Islamic banks from Indonesia. While Victoria Islamic Bank, Maybank Islamic and CIMB Islamic having the highest Malmquist Index among the other banks. From the *Malmquist* TFP can be seen that both the Islamic banks in Indonesia and Malaysia have the same proportion in the ranking of malmquist TFP.

The increasing of productivity from Bank Victoria Syariah and Maybank Syariah caused by the changes in the relative efficiency and pure efficiency levels change both of two banks compared to other *peers* banks in the study. While they are increasing the level of the productivity from Maybank Islamic and CIMB Islamic caused by the changes in technical efficiency of each bank are higher when compared to other peers banks in the study.

4.4. Profitability Model of Islamic Bank

4.4.1. ROA Model

Profitability model by ROA in Indonesia and Malaysia can be formulate as:

$$ROA = 0.0204 - 0.00019_{GR} + 0.5559_{AM}* - 0.6198_{OE}** + 0.0037_{CAR} - 0.0021_{DEA} - 0.0142_{INT} + 0.028_{SHR} - 5.233\text{-}09e_{M2} - 0.0079_{INF} - 4.727e\text{-}05_{lnAST} + \varepsilon$$

: significance at 10%, **: significance at 5

R-Squared: 0.809125, F: 4.385212* (*p-value: 0.000063)

4.4.1.1. Regression Coefficients and F-test

The Adjusted (R^2) of ROA model is 0.8091, it means the ability of gearing ratio (GR), assets management (AM), operating expense (OE), capital adequacy ratio (CAR), efficiency DEA (DEA), dummy country (MKT), discount rate (INT), share to the national banking (SHR), money supply (M2), inflation (INF), and LN assets (USD) in explaining changes in profitability (ROA) of Islamic banks in Indonesia and Malaysia is 80.91%, while the remaining 19.09% is explained by other variables outside the model. Prob (F-statistic) in the model are 0.0000 (prob. < 0.05), which means that all independent variables in this study are significant affected to ROA simultaneously.

4.4.1.2. t-test

The variables of assets management (AM) and operating expenses (OE) are significant at level 10% and 5%, respectively. This indicates that assets management and operating expenses are significant affected to ROA statistically and partially. The other variables are not affected to ROA statistically and partially because their probability value are not significance at any level.

AM has coefficient value at 0.5559, it means that if AM increase 1%, ROA increase 0.56%, *cateris paribus.* Positive coefficient indicates that there is a positive correlation between the variables of AM and ROA, the higher the value of AM, the higher the value of ROA, and *vice versa.*

OE has coefficient value at -0.6198, it means that if OE increase 1%, ROA decrease 0.62%, *cateris paribus.* Negative coefficient indicates that there is a negative correlation between the variables of OE and ROA, the higher the value of OE, the higher the value of ROA, and *vice versa.*

4.4.2. ROE Model

Profitability model by ROE in Indonesia and Malaysia can be formulate as:

$$ROE = -0.7769^{*}+0.5684_{GR}^{***}+3.6525_{AM}^{***}-4.0931_{OE}^{**}+0.3720_{CAR}^{**}-0.0092_{DEA}$$
$$-1.0039_{MKT}^{***}+8.997_{INT}-2.5488_{SHR}^{**}-3.57624e\text{-}07_{M2}+0.1897_{INF}-0.072_{lnAST}^{***}+\varepsilon$$

: significance at 10%, **: significance at 5*, *: significance at 1%*

R-Squared: 0.682628, F: 9.385635* (*p-value: 1.07e-08)

4.4.2.1. Regression Coefficients and F-test

The Adjusted (R^2) of ROE model is 0.6826, it means the ability of gearing ratio (GR), assets management (AM), operating expense (OE), capital adequacy ratio (CAR), efficiency DEA (DEA), dummy country (MKT) discount rate (INT), share to the national banking (SHR), money supply (M2), inflation, and LN assets (USD) in explaining changes in profitability (ROE) of Islamic banks in Indonesia and Malaysia is 68.26%, while the remaining 31.74% is explained by other variables outside the model. Prob (F-statistic) in the model are 0.0000 (prob. < 0.05), which means that all independent variables in this study are significant affected to ROE simultaneously.

4.4.2.2. t-test

The variables of gearing ratio (GR), assets management (AM), operating expense (OE), capital adequacy ratio (CAR), efficiency DEA (DEA), dummy country (MKT), discount rate (INT), share to the national banking (SHR), money supply (M2), inflation (INF), and LN assets (USD) are significant at level 1%, 1%, 5%, 5%, 1%, 5%, and 1%, respectively. This indicates that those variables are significant affected to ROE statistically and partially. The other variables are not affected to ROA statistically and partially because their probability value are not significance at any level.

GR has coefficient value at 0.5684, it means that if GR increase 1%, ROE increase 0.57%, *cateris paribus.* Positive coefficient indicates that there is a positive correlation between the variables of GR and ROE, the higher the value of ROE, the higher the value of ROA, and *vice versa.*

AM has coefficient value at 3.6525, it means that if AM increase 1%, ROE increase 3.65%, *cateris paribus.* Positive coefficient indicates that there is a positive correlation between the variables of AM and ROE, the higher the value of AM, the higher the value of ROE, and *vice versa*

OE has coefficient value at -4.0931, it means that if OE increase 1%, ROE decrease 4.1%, *cateris paribus.* Negative coefficient indicates that there is a negative correlation between the variables of OE and ROE, the higher the value of OE, the higher the value of ROE, and *vice versa.*

CAR has coefficient value at 0.3720, it means that if CAR increase 1%, ROE increase 0.37%, *cateris paribus.* Positive coefficient indicates that there is a positive correlation between the variables of CAR and ROE, the higher the value of CAR, the higher the value of ROE, and *vice versa.*

MKT has coefficient value at -1.0039, it means that Islamic banks in Indonesia have higher rate of profitability than Islamic banks in Malaysia (Malaysia=1, Indonesia=0). SHR has coefficient value at -2.5488, it means that if SHR increase 1%, ROE decrease 0.62%, *cateris paribus.* Negative coefficient indicates that there is a negative correlation between the variables of SHR and ROE, the higher the value of SHR, the higher the value of ROE, and *vice versa.*

AST has coefficient value at -0.072, it means that if AST increase 1%, ROE decrease 0.62%, *cateris paribus.* Negative coefficient indicates that there is a negative correlation between the variables of AST and ROE, the higher the value of AST, the higher the value of ROE, and *vice versa.*

4.5. Discussion

The soundness level Islamic bank in Malaysia is better than in Indonesia because the liquidity and sensitivity to market risks at Islamic banks in Malaysia is much better than the Islamic banks in Indonesia in 2012. The Islamic banks in Malaysia have more products diversification thus Islamic banks in Malaysia have many liquid instruments which can be used to anticipate the withdrawal of funds or needs of cash in large amount of money.

In terms of sensitivity to market risks, only 3 of 10 Islamic banks in Malaysia who have *negative relative gap*, while in Indonesia all of the Islamic banks have *negative relative gap*. The *negative relative gap* is indicating that Islamic banks are vulnerable to the changes in interest rates. *Negative relative gap* occurs because financing couldf not be re-pricing such as bai' contract based like murabaha financing which is much higher than the savings that using profit-loss sharing based contract like mudharabah which is flexible on interest rates. Nowadays, the structure of Assets-Liability in Islamic banks Indonesia is dominated by murabahah in assets and mudarabah in liquidity lead to causing wider negative relative gap in Islamic banks.

The soundness level of Islamic banks in Malaysia is better than Islamic banks in Indonesia because the liquidity and sensitivity to market risks of Islamic banks in Malaysia is much better than the Islamic banks in Indonesia in 2013. Other factors that influence the better sound of Islamic banks in Malaysia in 2013 are the quality of the assets managed by Islamic banks in Malaysia was better than the Islamic banks in Indonesia. This is reflected in the level of NPF from Islamic banks in Malaysia were lower when compared to level of NPF at Islamic banks in Indonesia.

In 2014, the profitability of Islamic banks in Malaysia showed a better performance when compared to the Islamic banks in Indonesia. Because the decline macroeconomic level in Indonesia and decline quality of assets at Islamic banks in Indonesia are decline the profitability of Islamic banks.

When viewed from 2012 and to 2014, the Islamic Bank in Malaysia are more soundness because they have more liquidity instruments compared to the Islamic banks in Indonesia. In addition, the Islamic Banks in Malaysia are relatively strength in the face of ASEAN Financial Integration given more diversified financial asset that can be in re-pricing such as mudharaba, Ijara and Ijara muntahiya bit Tamlik (IMBT). On the other hand, all Islamic banks in Indonesia from 2012 to 2014 have assets

that could not be re-pricing since many customers are used to murabahah in financing, while the funding are used mudharaba contract.

In terms of liquidity, Islamic Banks in Indonesia are still shortage of liquidity instruments when compared with Islamic banks in Malaysia. It can be seen from the liquidity scores of Islamic banks in Malaysia are higher than the Islamic banks in Indonesia. Islamic banks in Malaysia have more diversified liquidity instruments than Islamic banks in Indonesia. One of the instruments are often using in Malaysia as an liquidity instrument which is a murabaha commodities but it is not currently used in Indonesia. With this murabaha commodities, Islamic banks in Malaysia have sufficient liquidity instruments to anticipate business risks that might occurres.

Regulator in particular the Financial Services Authority (FSA), Bank Indonesia (BI) and the Ministry of Finance must accommodate the needs of the Islamic financial industry. This can be done by providing incentives such as down payment discount or tax incentives. Liquidity instruments of Islamic banks in Indonesia are still low compared to Malaysia. Commodity stocks which have been stated by fatwa of Indonesian Council of Ulama (ICU) was not allowed to operate by the Regulator, but it is urgently needed by the Islamic finance industry. As a comparison, Islamic banks in Malaysia benefited greatly from the liquidity instrument, such as sharia commodities. Therefore, the regulator is expected to allow this liquidity instruments because it is innovative product to develop Islamic financial industries.

Islamic Banking in Malaysia are relatively more well-preparation compared to Indonesia. Islamic banks in Malaysia have more derivative and liquidity instruments, the regulation of the government is very supportive and accommodative, the Non-Performing Financing is Low, and the public of Malaysia have high attention and interest which makes Islamic banks in Malaysia are ready to compete in the era of financial integration in the ASEAN Economic Community (AEC) in 2020.

The Regulators in Malaysia have clear policy and well-preparation planning so it can be a major influence to the rapid development of Islamic banks in Malaysia. The Regulators supervised every aspect of the Islamic financial businesses ranging from the recruitment of human resources to financial product innovation. In addition, Islamic banks in Malaysia are began to see expansion opportunities in the global market given the small of its domestic market. Indonesia is one of the country that they intend to enter the Islamic banking market.

Performance of Islamic banking in Indonesia is still need improvement in order to compete amid financial integration in the ASEAN Economic Community (AEC) by 2020. Performance of Islamic banking in Indonesia in the aspect of quality of assets, quality of financing, and liquidity are needs to concern, especially towards the risk of increasing interest rate in the financial markets where Islamic banks still benchmarking to interest rate. In the other hand Islamic banks needs more liquidity to anticipate the risk of withdrawal of funds from customers and to meet short-term funding requirements, however Islamic banks in Indonesia are lack of liquidity instrument in Islamic financial market.

In addition, Islamic banks in Indonesia are very sensitive to market risks, when estimate the relative gap on Islamic banks in Indonesia, almost all of them are negative in the periods of study because the financing fund are using sale contract (bai') which unable to change margin or rate, this lead to Islamic banks in Indonesia are very sensitive in change of interest rates on financial markets.

5. Conclusion and Recommendation

5.1. Conclusion

1. Islamic Banks in Malaysia are relatively more well-preparation compared to Indonesia. It can be seen that Islamic banks in Malaysia have more derivative and liquidity instruments, the regulation of the government are very intensive to support industries and anticipative market, the low of Non-Performing Financing and the public of Malaysia have high attention and

interest which makes Islamic banks in Malaysia are ready to compete in the era of financial integration in the ASEAN Economic Community (AEC) in 2020.

2. Performance of Islamic banking in Indonesia is still need improvement in order to compete amid financial integration in the ASEAN Economic Community (AEC) by 2020. Performance of Islamic banking in Indonesia in the aspects of quality of assets, quality of financing, and liquidity are need to be concerned, especially towards the risk of increasing interest rate in the financial markets where Islamic banks are still benchmarking to interest rate. In the other hand Islamic banks need more liquidity to anticipate the risk of withdrawal of funds from customers and to meet short-term funding requirements, however, Islamic banks in Indonesia are lack of liquidity instrument in Islamic financial market. Islamic Banks in Indonesia need to be supported by the government with enable them to run business more freely without abandoning prudential principles in order to give them chance in innovating their businesses. The implementation of the policies should accommodate the needs of the Islamic banks nowadays.

5.2. Implication and Recommendations

1. In calculating the soundness of banks through CAMEL method, it is more effective and accurate if the ranks of financial ratios compared each other with the Islamic banks in sample, given the method of calculating efficiency by DEA and productivity by Malmquist TFP compare one unit or entity to another *peer,* therefore it can be seen which units are above or below the average.
2. Regulator in particular the Financial Services Authority (FSA), Bank Indonesia (BI) and the Ministry of Finance must accommodate the needs of the Islamic financial industry. This can be done by providing system of incentives such as down payment discount or tax incentives.
3. Liquidity instruments of Islamic banks in Indonesia are still low compared to Malaysia. Commodity stocks which have been stated by fatwa of Indonesian Council of Ulama (ICU) was not allowed to operate by the Regulator, but it is urgently needed by the Islamic finance industry. As a comparison, Islamic banks in Malaysia benefited greatly from the liquidity instrument, such as sharia commodity. Therefore, the regulator is expected to allow this liquidity instruments because it is innovative product to develop Islamic financial industries.
4. The Islamic banks in Indonesia need to gradually diversify their financing product by shift to the contracts of financing to profit-loss sharing contract and lease contract because these two contracts are more resilience than bai' contract in terms of their respond to interest rate changes.
5. For further research, it is need to compare deeply about the efficiency of fund management between Islamic Finance in Indonesia and Malaysia to get more explanation why Islamic banks in Malaysia have greater profitability with lower cost of funding

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