Volume 2, No. 2, May - August 2017 ISSN: 2503-4235 (p); 2503-4243 (e)

Shirkah

Journal of Economics and Business

Shirkah
Journal of Economics and Business
Vol. 2, No. 2, May-August 2017
ISSN: 2503-4235 (p); 2503-4243 (e)

Shirkah Journal of Economics and Business is a peer-reviewed journal published three times a year (January-April, May-August and September-December) by Faculty of Islamic Economics and Business, Institut Agama Islam Negeri (IAIN/ State Institute for Islamic Studies) Surakarta Central Java, Indonesia. The main objective of *Shirkah* is to offer an academic space of exchange ideas and initiate the increase number of qualified article produced by postgraduate students, practitioners and academicians.

Editorial Office
Ruang Jurnal Shirkah
Ground Floor, West Gate,
Faculty of Islamic Economics and Business
IAIN Surakarta
Jln. Pandawa No. 1, Kartasura, Sukoharjo, Jawa Tengah Kode Pos. 57168
Phone (+62271) 781516 Fax: (+62271)782336
E-mail: shirkahiainsurakarta@gmail.com
Website: http://shirkah.or.id/

Shirkah
Journal of Economics and Business
Vol. 2, No. 2, May-August 2017
ISSN: 2503-4235 (p); 2503-4243 (e)

Table of Contents

Articles

Shirkah
Journal of Economics and Business
ISSN: 2503-4235 (p); 2503-4243 (e)

Efficiency versus Maqasid Sharia Index An Application on Indonesia Islamic Bank

Aam S. Rusydiana
Sharia Economic Applied Research and Training (SMART)
aamsmart@gmail.com

Irman Firmansyah
Siliwangi University Tasikmalaya

Abstract

The Development of Islamic Banking Industry in Indonesia relatively shows a good tendency. In the market, inefficiency would be the great obstacles in head to head to conventional bank. Despite of efficiency performance in Islamic Bank, Islamic Bank also must have sharia compliance performance. In doing so, it needed to identify the efficiency of Islamic Bank in Indonesia and the achievement of maslahah in term of three aspects; there is education, the creating of justice, and the attainment of welfare. This paper would try to measure the efficiency of Islamic Banking Industry with Data Envelopment Analysis (DEA) method and also to evaluate the performance by using Maqasid Sharia Index (MSI). Banxia Frontier Analyst 3.1 used in the data calculation. The calculation of the level of Islamic Bank efficiency in this study are relative, not absolute. The result of this study indicates four main findings, first, Islamic bank involve in quadran 1 is Islamic bank who reached the highest efficiency and the best performance; there are BMI and Bank Panin Sharia. Islamic bank involve in quadran 2 is Islamic bank who reached the highest efficiency and the lowest performance, there are BSM, Maybank Sharia, and Bank Sharia Bukopin. Islamic bank involve in quadran 3 is Islamic bank who reached the lowest efficiency and have a good performance, there are BRI sharia, and BCA sharia. Islamic bank involve in quadran 4 is Islamic bank who reached the lowest efficiency and the lowest performance, there are Bank Mega Sharia, Victoria Sharia, BNI Sharia, and BJB Sharia. Contribution of this paper to show the differences between Islamic banks and conventional banks.

Keywords: *maqasid* index, efficiency, DEA, Efficiency-Maqasid Quadrant (EMQ)

Introduction

The Development of Islamic Banking Industry in Indonesia relatively shows a good tendency, although seemed too slowly. Islamic Banking Statistic Data on December 2015 shows that the number of Islamic Banking in Indonesia has been reached 12 of Islamic Banking, 22 of Islamic Business Units, and 163 of Islamic Financing Bank (BPRS) with 2,301 of total office channeling in Indonesia (Financial Service Authority [OJK], 2015). Regarding to Global Islamic Finance Report (2015), Islamic Financial Industry in Indonesia has been in the top seventh of the world after Iran, Malaysia, Arab Saudi, UAE, Kuwait and Bahrain. Index score of Islamic Financial Industry in Indonesia 2015 is 24.7 in the scale of 100 and ranked 7th in the world.

Regardless of the data, target in 2016 which was formulated by Bank Indonesia to achieve 5% of market share was not satisfied. The growth occurs in Islamic Bank was not much better than the growth of market share it self. Market share target of Islamic Bank in 2015 that was not sufficient is become a phenomenon to evaluate the performance of whole Islamic Banking efficiency in Indonesia. There are some obstacles such as competitions, conversion process from Islamic Business Unit into Islamic Banking, and then it would be so many investment values to be expended. As a result, inefficiency would be the great obstacles in head to head to conventional bank.

Komaryatin (2006) explained that if the change of financial structures is occurred rapidly, then it is important to identify the cost efficiency and income. In the end of this year (2015), Islamic Banking has increased in asset and financing (see picture 1), so it's needed an investigation (research) related to the efficiency of Islamic Bank in Indonesia. This is all cause, great value of asset or financing haven't been showing great efficiency yet, to achieve maximum efficiency score, the

financial proportion in the bank must be sufficient with their need. The increasing of asset and financing in Islamic Bank can be showed in the picture 1, below:

Picture 1: The Graph of Islamic Banking Asset and Financing in Indonesia

Despite of efficiency performance in Islamic Bank, Islamic Bank also must have sharia compliance performance. Omar Mohamed in his research has formulated a beneficial measurement to evaluate the performance of Islamic Bank, which was developed based on *maqasid sharia* principles in order to establish a measurement of Islamic Bank in accordance with its objectives. Performance measurements of Islamic Bank not only focus on earnings and others financial measurement, but also infused another values from banking that reflects non profit benefit measurement in accordance to Islamic Banking objectives. The results of this research establish a financial performance measurement of Islamic Banking, called *maqasid sharia* index. This model has been widely implemented in some of literature reviews to measure Islamic Banking performance in several countries.

Maqasid Sharia Index was developed according to the three main factors; there are individual educations, the creating of justice, and the attainment of welfare. Three of these factors are complied with the main objective of *maqasid sharia*, is "Achieving the welfare and avoiding the worse". Three of these goals are universal, and then it must be set as the main goal and operational basic for each public accountable entity, not only Islamic Bank but also Conventional Bank. Maqasid Sharia Index is also related to welfare to all of stakeholders, such as shareholders or the owner of corporate. According to the background of this research as has been stated above, then it needed to identify the efficiency of Islamic Bank in Indonesia and the achievement of *maslahah* in term of three aspects, there are education, the creating of justice, and the attainment of welfare.

Efficiency is the most important thing for business entity. Efficiency concept is defined as doing something correctly (doing the thing right). Efficiency concept usually associated with the way of corporate in achieve its goals. Therefore, efficiency concept usually measured by using cost aspect as input and profit as output. Business entities are also trying to minimize cost until the minimum level to produce maximum output (profit).

Nopirin (1997) explained hat efficiency is the absence of waste cost. Komaryatin (2006) stated that efficiency is the ratio of output and input, which is associated to maximum output achievement and some inputs. It means that if ratio of output and input are increased, means that the higher efficiency is achieved, and then we can conclude that efficiency is using of best input to produce output. Efficiency concept is coming from micro economic concept, production theory. Production theory tried to maximize profit or minimize cost from producer view. Production theory explained the production frontier curve, which describe the correlation of input and output from production process. Production frontier curve

represents the maximum output level from each input using, and also represent the use of technology from a producer or industry (Ascarya and Yumanita, 2007).

Ascarya, dkk (2008) explained that frontier approach is more superior because the use of this technical program or statistics to reduce the effect from the difference of input price and other exogenous factors in influencing the observed performance. Frontier approach are divided into two kinds, there are: parametric approach and non-parametric approach. *Stochastic Frontier Approuch* (SFA), *Thick Frontier Approuch* (TFA) and *Distribution Free Approuch* (DFA) are kinds of parametric approaches, while *Data Envelopment Approuch* (DEA) and *Free Disposable Hull* (FDH) are kinds of non-parametric approaches (Syakir, 2004). Hadad et al (2003) also stated that, eventually parametric and non parametric approaches are used; they will establish the same result if analyzed samples are the same unit and using the same process productions. In economic theory, there are two kinds of efficiency; there are economic efficiency and technical efficiency. Economic efficiency is describing macro economy, while technical efficiency is describing micro economy. Technical efficiency measurement is only applied in one technical and operational relationship in process using of input into output.

Hada et al (2003) explained that there are three approaches are widely used in parametric and non parametric approaches to define the correlation of input and output in financial activities of financial institutions, there are: asset Approach, *Production Approach,* and *Intermediation Approach.* This research is using intermediation approach, because to consider the main function of bank as financial intermediation which is collect the fund from surplus unit and distribute the fund to deficit unit. Other considerations are the main characteristic of bank is doing the quality of asset transformation (*qualitative asset transformer)* from funding

which funded, even though there is no common agreement to determining current approaches used, to determine input and output variables. The question of this study is "Why Banking Industry in Indonesia relatively shows a good tendency? How the efficiency of Islamic Bank in Indonesia and the achievement of Maslahah in term of three aspects; education, the creating of justice, and the attainment of welfare?"

Data Envelopment Analysis (DEA)

Data Envelopment Analysis (DEA) is the development of linier programming according to measurement technical of relative performance from unit group input and output. DEA is a procedure which is specially formulated to measure relative efficiency a business unit (corporate) with the use of some inputs and outputs, and to combine of all these inputs and outputs are not suitable. Business unit relative efficiency is an efficiency of a corporate compared with other corporate in samples (a group of corporate are compared each other) by using the same of input and output variables.

DEA is developed by Farrel (1957) by converting the measurement of technical efficiency using one input and one output being a multiple input and output, using relative efficiency value as input ratio (single virtual input) and output (single virtual output) (Giuffrida and Gravelle, 2001; Lewis *et*, *al*. 1999; Sutawijaya and Lestari, 2009). DEA counts technical efficiency for all units. Efficiency score for each unit are relative, related to efficiency rank from other units in samples. Every single unit in samples is considered to have a positive efficiency score, and the value is between 0 to 1, and 1 reflects the perfect efficiency of a business unit. Business unit with the score of efficiency is 1 (perfect efficiency) are used to create efficiency frontier envelope. Meanwhile, other units in envelope show inefficiency units (Haddad, dkk, 2003).

Komaryatin (2006) argues that DEA can be used to measure efficiency scale. Technical efficiency total is defined as the form of increasing the sample proportion of output that to achieve the company target by consuming the same quantity of input if operated by *constant returns to scale* (CRS) assumptions. Pure technical efficiency measurement occurs by increasing output and using technology with *variable returns to scale* (VRS) assumptions. Finally, efficiency scale could be counted by ratio from technical efficiency scale total to pure technical efficiency scale. If the efficiency scale is equal to 1, then the company is operated with CRS assumption, otherwise, if the efficiency scale is vary then the company is operated with VRS assumption.

Maqasid Sharia Index

Literally, maqasid sharia is consists of two word; *maqasid* and *shari'*. *Maqasid* is plural from *maqshud* which means goals and *shari'* means the way to the source (study on maqosid syariah, 2013). In other terms, *maqasid al-syariah* means the goal from Islamic law. Ahmad Raysuni defined Maqasid Sharia as the objectives determined by Allah SWT to realize the *maslahah* of *ummah* (Raysuni, 1992). Muhammad Al-Yubi *defined maqasid sharia* as the meaning and the wisdom that determined by Allah SWT in His law, special or common, in order to realize the *maslahah* of *ummah* (Al-Yubi, 1998).

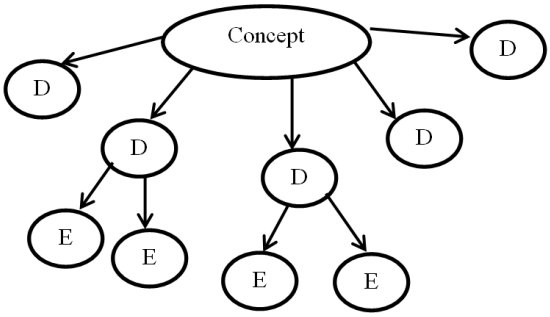
From these several expert definitions of *maqasid sharia*, as has been mentioned earlier in some of literature review by Omar and Dzuljastri (2008), we can conclude that the view of Ibnu Ashur related to the goal of sharia by creating the welfare and avoiding the worse are identically with the view of Abu Zahrah related to *maqasid sharia*, and are clearly reduced to be a few measurement. Abu Zahrah is grouping the objectives of sharia, included: 1) *Tahdhib al-Fard* (individual education), 2) *Iqamah al-Adl* (creating the justice), 3) *Jalb al-Maslahah* (welfare achievement).

Maqasid Sharia Index (MSI) is known as final goal of sharia that leads to welfare value and benefit, and also eliminates the suffering (Al-Jauziiyah, 1973; Yubi 1998; Asyur 2000; Al-Fasy 1993). Maqasid Sharia Index is performance measurement model of Islamic Banking, which is complied with the goal and Islamic Banking characteristics. MSI is developed by three main factors, there are: education, creating the justice, and welfare achievement. Three of these main factors are designed to formulate education program and training in order to increase moral value, so human resource of Islamic Banking are able to develop their skill and knowledge. Justice means that Islamic Banking has to ensure the honesty and justice in every transaction and business activity including products, all free interest activities. Islamic Banking has to develop investment project and social services to develop society welfare (study on maqosid syariah, 2013).

There are some weakness appeared if Islamic Bank just focus in performance measurement from financial aspects. First, by using financial ratio as the main factors performance measurement, manager will act only for short term goals not long term. Second, by ignoring non-financial measurement aspect and fixed assets, it will establish missing view of manager, now and future. Third, financial performance is conditioned based on past performance, thus unable to take the company to reach sustainable goals, only if the main focus from banking activity consists of benefit value, not only for shareholders but also to other interested user (Omar and Dzuljastri, 2008). Research conducted by Omar and Dzuljastri (2008) and other researches related to MSI show (Sanrego and Taufiq, 2012) that MSI approach might be alternative strategies approaches that could describe how well national banking performance, so it can be implemented in all comprehensive regulations strategies.

This research tries to introduce bank's performance measurement model according to Maqasid Sharia framework, instead of existing financial performance measurement. Literature review conducted by Mustofa Ali (2008) proved that current method to develop Islamic Banking performance measurement idea according to Maqasid Sharia framework is Sakaran method (Sakaran, 2000). Operationally, Sakaran method is able to explain the element which is measured through this research. It is obviously done by observing dimensions behavior which is described through explained concept. Those dimensions are translated into reduced elements and observable and measurable, then could form measurement indexes. According to Sakaran method, behaviors characteristic are measured and reduced into a concept, which is notated as (C). Concept is reduced into some dimensions, and then it will be easily observed and measured, and notated as (D). So, the dimensions are going to reduced back into some clearly measured elements, and notated as (E).

As already presented by Ali (2008) related to the example of Sakaran method, by describing human thirsty behavior. Thirsty behavior is concept (C) in this method. In order to be able to measured, thirsty behavior could be observed through how often somebody drink water, and in this case called (D) dimension. In order to be clearly measured, dimension is reduced into some measured elements, such as measuring how many glass of water are consumed to eliminate the thirsty. This is called by behavior measurement based on character or current criteria in Sakaran method. Sakaran method could be illustrated by picture 2 below, where D for dimension and E for element.



Picture 2: The Graph of Sakaran Method Concept

By using Sakaran method, then the objectives of bank related to Maqashid Sharia framework included: individual education, creating the justice, and achieving the welfare, are explained operationally. Every single objective is translated as concept (C). So, by the current characteristic is reduced into some measured dimensions (D). This dimension is clearly reduced into some elements, and will be easily measured (E).

Table 1. *Performance Ratio* Measurement

Concept (Goal)	Dimensions	Elements	Financial Ratio	Data Sources
1. Educating Individual	D1. Increasing the knowledge	E1. Donation for Education	R1. Donation for Education/ total income	Annual Report
		E2. Reseach	R2. Research Cost/total cost	Annual Report
	D2. Adding and Increasing the new capability and skill	E3. Training	R3. Training Cost/ total cost	Annual Report
	D3. Creating Human awareness of the existence of Islamic Bank	E4. Publicity	R4. Publicity Cost/ total cost	Annual Report

2. Creating the Justice	D4. Justice Agreement	E5. A Fair Return	R5. Profit/total Income	Annual Report
	D5. Product&Affrodable Services	E6. Affordable Cost	R6. Uncollectible Account/total investment	Annual Report
	D6. Eliminating Unjustice	E7. Free interest Banking Product	R7. Non interest income/total income	Annual Report
3. Achieving the Welfare	D7. Profitabilities	E8. Profit Ratio	R8. Net Profit/ total aktiva	Annual Report
	D8. Wealth and Profit Distributions	E9. Personal Income	R9. Zakat/net profit	Annual Report
	D9. Investment in Real Sector	E10. Real Sector Investment Ratio	R10. Financing for investment/ total financing	Annual Report

Those ratios are chosen because fulfilled some criteria in this research, there are:

1. The discussions about the objectives of Islamic bank are considered closer to the Islamic value and also could be reflected by those ratios. Dimension and element are easily identified through those goals.
2. Some of literatures review which are inspecting the same problems are also using the same ratio in measurement, not only for Islamic bank but also for conventional bank. So it can be implemented in both institutions (al-Osaymy et al., 2004; Hameed et al., 2006: Ali Khass, 1996).
3. Data are collected by researcher are easier, because the source of data is banking annual report.

4. The probability to measure concept implementation of *maqasid sharia* is being more accurate by using those ratios.

The ratios which are presented in table 1 have been fulfilled *maqashid sharia* criteria. Those ratios descriptions and their correlations with *maqasid sharia* framework are:

a. The first goal is individual education described by R1; Donation for Education/ total income. R2; Research Cost/total cost. R3; Training Cost/ total cost. R4; Publicity Cost/ total cost. The interpretations of these four ratios are if ratio value is increasing, or if the allocations of the fund to fulfill these four indicators are increasing, then the goal achievement of *maqasid sharia* in Islamic Bank are also increasing.
b. The second goal is creating the justice, described by R5; Profit/total Incom. R6; Uncollectible Account/total investment. R7; Non interest income/total income. The goal of creating the justice by Islamic Bank and Conventional Bank are better if R5 is getting lower. Means that if profit accepted by the bank are getting lower compared to total income, than the banking are valued highly implemented the goal of justice. As well as R6 is getting lower, then the goal of of justice in national banking is highly valued. Means if uncollectable financing in national banking is lower compared to total investment distributed, then the goal of justice is getting better, because reducing the gap of income distribution. In otherwise, the achievement of national banking is considered getting better if R7 are highly valued. Means that if non interest investment distributed by national banking are increasing compared to total investment, than the goal of justice is getting better according to *maqasid sharia*.
c. The third goal is achieving the welfare (*maslahah*), described trough R8; Net Profit/total activa. R9; Zakat/net profit. R10; Financing for investment/total financing. The goal of welfare would be achieved by

national banking only if the value of R8, R9, & R10 is increasing. Means that if net income, zakat and sector real investment are increasing, then support of national banking to create the *maslahah* are increasing.

Efficiency Analysis

Charnes, Cooper and Rhodes (1978) developed DEA by method of *constant return to scale* (CRS) and then developed by Banker, Charnes dan Cooper by method of *variable return to scale* (VRS) and finally popular with CCR (Charnes-Cooper-Rhodes) and BCC (Banker-Charnes-Cooper) model. DEA is procedure, specifically formulated to measure relative efficiency in a bank which is using multiple input and output. Islamic Banking Efficiency measurement in this research is conducting by counting the ratio of output and input. *Data Envelopment Analysis* (DEA) will compute the period of Islamic Bank by using input *n* to produce different output *m* (Komaryatin, 2006). Efficiency in every period of Islamic Bank is computed by linier programming by maximizing weighted total output from period of Islamic Bank *s*. The restricted of total amount of weighted input must be equal to 1 to all bank, and total output reduced by weighted total input must be less or equal to 0. It means that all period of Islamic Bank is considered as well as or below the frontier performance reference (Komaryatin, 2006).

Data Envelopment Analysis (DEA) will compute the value of *hs*, where *hs* is the efficiency score for each period of Islamic bank. *Data Envelopment Analysis* maximize the value of *hs*, where *hs* is sum multiplication between weight of output *i* and total output *i* in *s* period of Islamic Bank.

$$h_s = \frac{\sum_{i=1}^{m} u_i y_{is}}{\sum_{j=1}^{n} v_j x_{js}}$$

Where:

hs = bank efficiencys
m = observed output bank *s*
n = observed input bank *s*
yis = total output *i* produced by bank *s*
xjs = total input *j* used bank *s*
ui = weighted output i produced by bank s
vj = weighted input *j* given bybank *s*dan*i* computed from 1 to*m*and*j* computed from 1 to*n*

The formulation above shows the use of one input variable and one output variable. Efficiency ratio (*hs*) to be maximized by restricting as follows (Sutawijaya dan Lestari, 2009):

$$\text{Max } h_s = \frac{\sum_{i=1}^{m} u_i y_{is}}{\sum_{j=1}^{n} v_j x_{js}} \quad \leq 1 \text{ ; r = 1, ..., N.}$$

Where u_i and vj ≥ 0

From the formulation above, where N represent total amount of bank in samples and *r* is the type of bank sampled in this research. Inequality of first formula explained that the ratio of others DMU no more than 1, meanwhile second formula weighted non-negative (positive). Ratio value might be varying from 0 to 1. The bank will be considered as efficient unit only if a ratio value nearly 1 or 100%, otherwise if a ratio value nearly 0 shows bank efficiency is getting lower. In DEA, every bank could define their weight and ensure that the chosen weighting will result the best performance measurement (Sutawijaya and Lestari, 2009). *Banxia Frontier Analyst 3 softwares* is used to analyze technical efficiency in this research, and to measure stability on its efficiency, we used standard deviation approach, which is computed by formula as follows:

$$s = \sqrt{\frac{n\sum_{i=1}^{n} x_i^2 - (\sum_{i=1}^{n} x_1)^2}{n(n-1)}}$$

Where:
S = Deviation Standard
n = Total year of analysis
x = Efficiency Score

Maqashid Syariah Index Analysis

National banking industry performance measurement used in this study is according to *maqasid sharia* framework. In this study, ratios used as already mentioned earlier in table 1 are conducted from literature review of Mustofa Omar and Dzuljastri (2008). They verify the measurement used to some of Islamic scholar in Middle east and Malaysia, who are expert in both studies, Islamic banking studies and conventional banking studies. Confirmation is conducted in two steps. The first step is doing in-depth interview to 12 experts of Islamic Banking studies, fiqh (Islamic law) and Islamic Economic studies related to performance measurement. The result of interview from 12 experts is they are agreed to the reliability of this developed instrument. Second step of this research, is verifying performance measurement which is developed by 16 experts in banking studies through questionnaire. All experts are expected to answer some questions related to the weighted given by each ratio, in order to be easily measured, and re-identifying performance measurement component, whether it is acceptable and compliance with banking situation. Mean weighting are given by the experts will be explained in table 2, as follows:

Tabel 2. Mean Weighting for 3 goals and 10 elements given by Experts

Goal	Weighted Mean (scale 100%)	Elements	Weighted Mean (scale 100%)
O1. Education	30	E1. Donation for Educations	24
		E2. Research	27
		E3. Training	26
		E4. Publicity	23
		TOTAL	100
O2. Justice	41	E5. Affrodable Return	30
		E6. Affordable price of product	32
		E7. Non interest product	38
		TOTAL	100
O3. Welfare*	29	E8. Profit Ratio	33
		E9. Income Distribution	30
		E10. Real Sector Investment Ratio	37
		TOTAL	100

***This welfare is included bank and public interest**

According to 10 ratios as already defined earlier, only 7 ratios are going to used in determining national banking performance, there are 4 ratios refer to the first sharia objectives (education), and the last 3 ratios refer to the 3rd sharia objectives (welfare). Others 3 ratios refer to the 2nd sharia objectives (justice) couldn't be applied in this research, because of the constraint of the sample data. There are some ratios used in this research are included:

a. Donation of education/total income (R1,1)
b. Research cost/total cost (R1,2)
c. Training cost/total cost (R1,3)
d. Publicity cost/ total cost (R1,4)

e. Net income/total activa (R3,1)
f. Zakat/net income (R3,2)
g. Investment for financing/total financing (R3,3)

Research methodology used in this research is referred to the research methodology used by Mustafa Omar dan Dzuljastri (2008). The research conducted by Omar dan Dzuljastri (2008) is using *Simple Addictive Weighted Method (SAW)-(Hwang adan Yoon, 1981)*. This method is used to give the weighting, compute the variance and process the rank for the current data. This method is a decision making method for mutual attribute (MADM). Decision making must identify the main attribute and the value of intra attribute. The definition of attribute in this research is the goals to achieve *maqasid sharia* in nasional banking industry, and intra attribute is 10 elements and performance indicators as already mentioned in table 1. The respondent (decision maker) gives the weighting for every single attributes and intra attributes in this research. Weighting for every attribute and intra attribute already presented in the earlier discussion and has been verified by some experts (see table 2). Performance data could be accessed through annual report of six sample bank for the year of 2008-2012.

Decision maker will get the total score from each bank by multiplying scale rank for every attribute by evaluating existing respondent for every intra attributes and sum total score for product. Mathematically, the computation of performance indicator (PI) for the first goal (OI) is described as follows:

Where,

(OI) is describing the achievement of first goal of *maqasid sharia* "education".

W1,1 is weighting for 1st element from 1st goal (taken form table 2)

E1,1 is weighting for 1st element from 1st goal (tabel 2)
E1,2 is weighting for 2st element from 1st goal (tabel 2)
E1,3 is weighting for 3st element from 1st goal (tabel 2)
E1,4 is weighting for 4st element from 1st goal (tabel 2)
R1,1 is ratio value from performance ratio based on 1st goal (tabel 3)
R1,2 is ratio value from performance ratio based on 1st goal(tabel 3)
R1,3 is ratio value from performance ratio based on 1st goal(tabel 3)
R1,4 is ratio value from performance ratio based on 1st goal(tabel 3)
So, in the end of computation, then the formula used to measure performance indicators for each goals are, PI (O1) = PI 1,1 + PI 1,2 + PI 1,3 + PI 1,4……...(2)
Where,
PI 1,1 = W1,1 x E1,1 x R1,1 ..... (3)
PI 1,2 = W1,2 x E1,2 x R1,2 ..... (4)
PI 1,3 = W1,3 x E1,3 x R1,3 ..... (5)
PI 1,4 = W1,4 x E1,4 x R1,4 ..... (6)
Performance Indicator for the 3rd goal is described through computation PI (O3).
Where,
W3,1 is the weighting for the 3rd sharia goal, *maslahah* (welfare) (table 2)
E3,1 is the weighting for the 1rd element from the 3st goal (tabel 2)
E3,2 is the weighting for the 2rd element from the 3st goal (tabel 2)
E3,3 is the weighting for the 3rd element from the 3st goal (tabel 2)
R3,1 is ratio value from performance ratio based on 3st goal(tabel 3)
R3,2 is ratio value from performance ratio based on 3st goal(tabel 3)
R3,3 is ratio value from performance ratio based on 3st goal(tabel 3)
So, in the end of computation, then the formula used to measure performance indicators for each goals are, PI (O3) = PI 1,1 + PI 1,2 + PI 1,3 + PI 1,4……...(8)

Where,

PI 3,1 = W3,1 x E3,1 x R3,1 ..... (9)

PI 3,2 = W3,2 x E3,2 x R3,2 ..... (10)

PI 3,3 = W3,3 x E3,3 x R3,3 ..... (11)

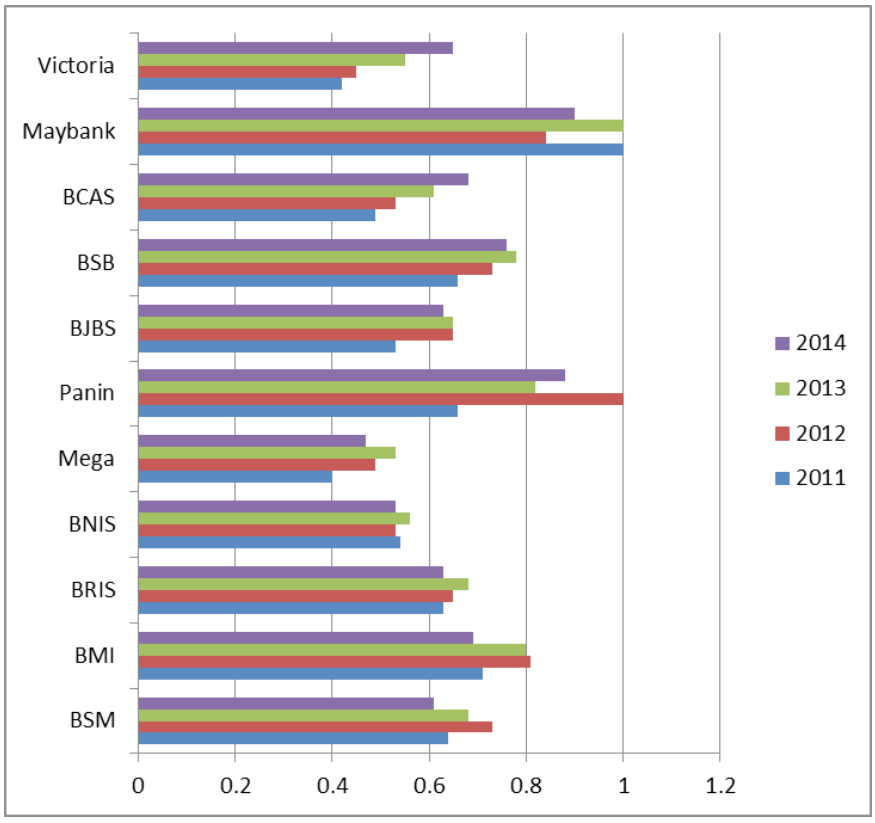
Total overall computation from all performance indicators and performance ratio for every goal and for every bank describes *maqasid sharia index*. In this study, only two goals were used to achieve *maqasid sharia index*, and then in formula of *maqasid sharia index* for this research is formulated as follows:

MI = PI (O1) + PI (O2) ..... (12)

Or in another word, *maqasid sharia index* for every bank is total from performance indicators which is computed based on first and third goal.

Identifying the Efficiency Score

In order to identify the efficiency score of Islamic Bank in Indonesia then we used *Data Envelopment Analysis* (DEA) method. Decision Making Unit (DMU) in this research is Islamic Bank Industry along the period 2012-2015. In obtaining the efficiency score from all DMU compared, we used *Banxia Frontier Analyst* 3*Software*. DMU will be stated as efficience only if that current DMU can reach score value of 1 or 100%, and otherwise, DMU will be stated as inefficience only if the score value is below 1 or 100%. Here is the efficiency score of Islamic Bank in Indonesia:



Picture 3: The Graph of Islamic Banking Efficiency in Indonesia

According to the picture above, we can conclude that efficiency score of Islamic Bank Industry in Indonesia are varying. Perfect efficiency was reached by Maybank Sharia in the year of 2011, Panin Sharia in the year of 2012, and Maybank Sharia in the year of 2013. Whereas in 2014 there is no one of Islamic Bank is in efficient condition. The lower efficiency value is achieved by Bank Mega Sharia in the year of 2011, with the efficiency value of 40%. Upcoming result is to identify the mean value of efficiency and followed by Islamic Banking Industry performance measurement by *Maqashid Shariah Index* (MSI).

Table 3: Efficiency and MSI score of Islamic Bank in Indonesia, 2011-2014

EFFICIENCY	2011	2012	2013	2014	Mean	MSI
BSM	0.64	0.73	0.68	0.61	0.67	0.202
BMI	0.71	0.81	0.80	0.69	0.75	0.224
BRIS	0.63	0.65	0.68	0.63	0.65	0.208
BNIS	0.54	0.53	0.56	0.53	0.54	0.195
Mega	0.40	0.49	0.53	0.47	0.47	0.172
Panin	0.66	1.00	0.82	0.88	0.84	0.254
BJBS	0.53	0.65	0.65	0.63	0.62	0.201
BSB	0.66	0.73	0.78	0.76	0.73	0.201
BCAS	0.49	0.53	0.61	0.68	0.58	0.212
Maybank	1.00	0.84	1.00	0.90	0.94	0.197
Victoria	0.42	0.45	0.55	0.65	0.52	0.199
Mean					0.66	0.206

According to the table above, we can conclude that the biggest mean value of efficiency is achieved by Maybank Sharia (94%), and the lowest mean value of efficiency is achieved by Bank Mega Sharia (47%). The highest performance is achieved by Panin Sharia with the MSI value 254, meanwhile the lowest performance is achieved by Bank Mega Sharia with the MSI value 172.

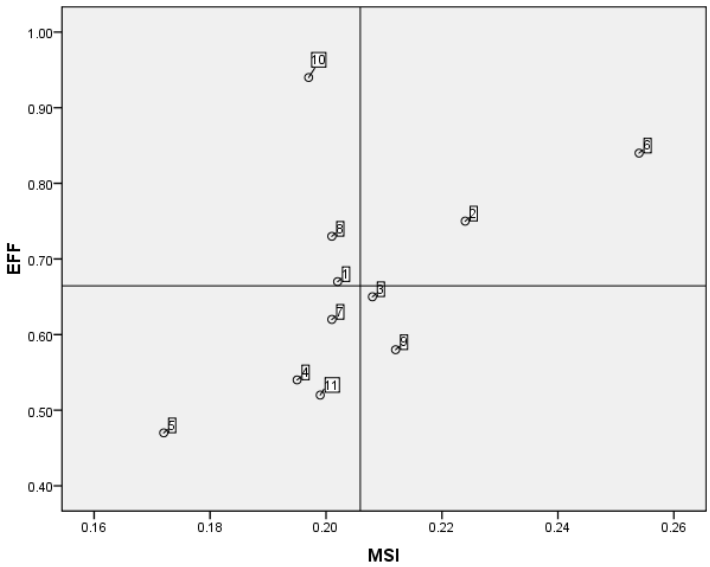
Islamic Banking Industry Quadran Analysis

According to this approach, Islamic Bank is grouped into (4) quadrans based on the score of efficiency category and banking performance category which is measured by *maqashid shariah index*, there are *high* and *low*. Efficiency score and stabilities are classified into high and low category according to the mean value.

Quadran 1 involves the group of Islamic bank with the high efficiency and high performance, and then it is considered as the best bank in the group. Quadran 2 involves the group of Islamic bank with the high efficiency, but in other side has a low performance. It is considered that

Islamic bank in this 2nd quadran capable to manage the resource and have enough efficiency rates, but have a less qualified performance. Quadran 3 involves the group of Islamic bank with the low efficiency rates, but in other side have a good performance. The group of Islamic bank in this quadran could be considered as an Islamic bank, which doesn't notice the efficiency, but focus on performance. Then we can conclude that a good performance doesn't represent its efficiency. Quadran 4 involves the group of Islamic bank with the low efficiency rates, and also has a low of performance. Islamic bank in this group would be considered as Islamic Bank which has no capability to manage their resource, so the efficiency is lower and the performance also worse.

Picture below describe the group of Islamic Bank based on the computation of CRS efficiency score and performance score from *maqasid sharia* perspectives. This picture represents two categories, there are: efficiency score in *y* axis, and value of *maqasid shariah index* (MSI) in *x* axis.



Picture 4: Four Quadran of Islamic Banking Industry Based on Efficiency Score and Maqasid Sharia Index

Explanation:

Quadran 1 (High Efficiency, High MSI): BMI, Bank Panin Sharia
Quadran 2 (High Efficiency, Low MSI): BSM, Maybank, BSB
Quadran 3 (Low Efficiency, High MSI): BRIS, BCAS
Quadran 4 (Low Efficiency, Low MSI): Mega Sharia, Victoria Sharia, BNIS, and BJBS.

Picture 4 above represent that in the research period 2011-2014, there are two Islamic Bank involve in 1st quadran, three of Islamic Bank involve in 2nd quadran, two Islamic Bank involve in 3rd quadran, and four Islamic Bank involve in 4th quadran.

The 1st quadran group is Islamic bank with high efficiency and followed by high performance. Islamic bank involve in this category are BMI and Bank Panin Sharia. BMI has mean efficiency value is 75% and MSI index is 0.224, while Bank Panin Sharia has an efficiency rate is 84% with MSI index is 0.254. So we can conclude that, BMI and Bank Panin Sharia is the most successful bank in managing the financial potential they have. In addition, both of these banks have a great integrity to implement *maqasid sharia* as Islamic Bank in Indonesia through best performance. The best performance in Islamic perspective not only referred from profit aspect, but also there are so many factors that could be considered in *maqasid shariah index*. The combination between high efficiency and high performance make BMI and Panin Sharia Bank as the best bank from efficiency and *maqasid shariah index* aspect.

The 2nd quadran group is Islamic bank with high efficiency and followed by low performance. Islamic bank involve in this category are BSM, Maybank Sharia, and Bank Sharia Bukopin. BSM has mean efficiency value is 67% and MSI index is 0.202, while Maybank Sharia has an efficiency rate is 94% with MSI index is 0.197. BSB has an efficiency rate

is 73% with MSI index is 0.201. Islamic bank from this group is defined as Islamic bank which is successful in managing of efficiency but have a low performance. If viewed from efficiency aspect, BSM, Maybank Sharia, and BSB has been successes to be an Islamic Bank which involved to the most efficient bank. It means that three of these banks have good capability to optimize financial resources to be distributed as financing. Even though, the performance achieved has not maximal yet, especially the performance related to sharia performance which measured by *maqasid shariah index*. The strategies conducted are to enhance bank performance and not only viewed from profit earning, but also from others facts of MSI index.

The 3nd quadran group is Islamic bank with the low efficiency and followed by high performance. Islamic bank involve in this category are BRI Sharia and BCA Sharia. BRI sharia has mean efficiency value is 65% and MSI index is 0.208, while BCA sharia has an efficiency rate is 58% with MSI index is 0.212. Both of these Islamic banks are involved with the low efficiency score but have a good performance. According to *maqasid sharia* perspective, BRI Sharia & BCA Sharia have been successful to achieve a good performance because of their capability to concern not only profit oriented but also concern on others factors such as justice, welfare and education. However, from the side of efficiency, both of these banks haven't been achieving a good efficiency score. It means that they need more good management related to financial resource by Islamic bank, and it is expected to encourage the successful of bank purposed.

The last quadran is the 4nd quadran group is Islamic bank with the low efficiency and followed by low performance. Islamic bank involve in this category are Mega sharia, Victoria sharia, BNI sharia, and BJB sharia. Mega sharia has mean efficiency value is 47% and MSI index is 0.172, while Victoria sharia has an efficiency rate is 52% with MSI index is 0.199. BNI sharia has an efficiency rate is 54% with MSI index is 0.19, while BJB

sharia has efficiency rate is 62% with MSI index is 0.201. A group of these Islamic banks are involved with the low efficiency score and performance. It means that Mega sharia, Victoria sharia, BNI sharia, and BJB sharia are Islamic bank that have not been able to maximize their potention, especially related to financial aspect, and also have not been able to reach a good performance, especially from the sharia perspectives. Then, we can conclude that they need sufficient and comprehensive evaluation related to Islamic banking financial management, considering the banking competitor in Indonesia was increased.

Conclusion

According to the result of this study, then we can conclude that: Islamic bank involve in quadran 1 is Islamic bank who reached the highest efficiency and the best performance, there are BMI and Bank Panin Sharia. Islamic bank involve in quadran 2 is Islamic bank who reached the highest efficiency and the lowest performance, there are BSM, Maybank Sharia, and Bank Sharia Bukopin. Islamic bank involve in quadran 3 is Islamic bank who reached the lowest efficiency and have a good performance, there are BRI sharia, and BCA sharia. Islamic bank involve in quadran 4 is Islamic bank who reached the lowest efficiency and the lowest performance, there are Bank Mega Sharia, Victoria Sharia, BNI Sharia, and BJB Sharia.

For future research, efficiency analysis can be conducted by others mehod, so the result would be compared, and the data used must be updated in order to achieve the update research result. While for Islamic Bank Industry, needed a comprehensive understanding related to a good performance concept from maqasid sharia aspects. This comprehensive understanding reached in order to maintain the objectives of Islamic Banking, that not only profit would be the success measurement, but there are some others important measurement to rate the success of bank.

References

Agung, F. (2013). "Maqashid Al-Syariah Imam Al-Syathibiy .http://www.lib.uin-malang.ac.id. Accessed in 26 December 2013

Antonio, M. S. (2000). *Bank Syariah: Dari TeoriKePraktek*. Jakarta: GemaInsani Press

Antonio, S. dan Taufiq. (2012). "An Analysis of Islamic Banking Performance: Maqasid Index Implementation in Indonesia and Jordania". Jurnal of Islamic Finance IIUM, 1(1) 012-029

Ascarya, D. Y. dan Guruh S. R.. (2008). "Analisis Efisiensi Perbankan Konvensional dan Perbankan Syariah di Indonesia dengan *Data Envelopment Analysis* (DEA)." *Paper in the book of Current Issues Lembaga Keuangan Syariah Tahun 2009,* TIM IAEI, Jakarta: Kencana Prenada Media Group

Asmuni. (2005). *"Studi pemikiran Al-Maqasid".* Al-Mawardi edisi XIV. Accessed in 26 December 2013

Charnes, A., Cooper, W.W., and Rhodes, E. (1978). "Measuring the Efficiency of Decision Making Units", *European Journal of Operation Research*, 2(6). pp. 429-44

Hadad, M., Wimboh S., Dhaniel I. dan Eugenia M. (2003). *Analisis Efisiensi Industri Perbankan Indonesia: Penggunaan Metode Nonparametrik Data Envelopment Analysis (DEA)*. Jakarta: Direktorat Penelitian dan Pengaturan Perbankan. Bank Indonesia

Ibn'Asyur, Muhammad Thahir. *Maqashid asy-Syariah al Islamiah.*

Komaryatin, N. (2006). Analisis Efisiensi Teknis Industri BPR di Eks Karesidenan Pati. Semarang: Pasca Sarjana Universitas Diponegoro

Nopirin. (1997). *Pengantar Ilmu Ekonomi Makro dan Mikro.* Yogyakarta: BPFE

Otoritas Jasa Keuangan. (2015). *Statistik Perbankan Syariah Indonesia* Tahun 2015

Omar dan Dzuljastri. (2008) "The Performance Measures of Islamic Banking Based on the Maqasid Framework". IIUM INTAC IV best paper

Sutawijaya, A. dan Etty P. L. (2009). Efisiensi teknik Perbankan Indonesia pascakrisis ekonomi : Sebuah studi empiris penerapan model DEA. Jurnal Ekonomi Pembangunan. 10(1). Juni. pp. 49-67.

Syakir, A. K. (2004). "Mengukur Efisiensi Intermediasi Sebelas Bank Terbesar Indonesia Dengan Pendekatan Data Envelopment Analysi (DEA)." *Jurnal Bisnis Strategi*. Vol.13. Hal. 126-139, Semarang**.**

Shirkah Author Guidelines

Shirkah currently offers two routes to submit manuscripts. We highly recommend to submit the articles which are made using OJS (Open Journal System). Feel free register as author soon through visiting http://shirkah.or.id/index.php/home/user/register. The authors may directly send their manuscripts, along with their resume, to shirkahiainsurakarta@gmail.com. Please prepare your manuscripts, using following guidelines:

1. Manuscript must be written in English. Submitted articles should not have been published or be under review for publication with another journal.
2. Manuscript's length is about 15 – 20 pages, typed in one-half spaced on A4-paper size.
3. Manuscript must include an 150 – 200 word abstract and keywords.
4. Manuscript must be arranged as follows: Title, Name of Author, E-mail address, Abstract, Keywords, Introduction (including method if any), Discussion, Conclusion, References.
5. Manuscript's titles not more than ten words.
6. Manuscript must be submitted in Microsoft Word or RTF.
7. Arabic words should be transliterated according to the style of *International Journal of Middle Eastern Studies.*
8. Manuscript references are preferably derived from the up-to-date references.
9. The author's resume should be submitted separately, consisting of at least full name, institutional address, phone number, areas of studies, and recent publications (if any).
10. ***Shirkah*** use APA Style 6th edition (2010) as reference format writing. We suggest the use of a reference manager software such as Mendeley, Zotero, and Endnote at templating the citation style. APA Style to be used is as follows:

Book with single author

Swann, G. M. Peter. (2014). *The Economics of Innovation an Introduction*. Cheltenhum & Northampton: Edward Elgar.

in-text citation: (Swann, 2014)

Articles in reference books

Alatas, S. F. (2006). Islam and the Science of Economics in Abu Rabi', I.M. *The Blackwell Companion to Contemporary Islamic Thought*. USA: Willey-Blackwell (pp. 587-606).

in text citation: (Alatas, 2006)

E-Book

Hackett, Rosalind (2007). "Religous Dimentions of War and Peace: Introduction." Dalam Gerrie ter Haar dan Yoshio Tsuruoka (Ed.), *Religion and Society: An Agenda for the 21st Century* (h. 3-6). Retrieved from http://brill.nl.

in text citation: (Hackett, 2006)

Master's thesis, from a commercial database

McNieI, D. S. (2006). Meaning through narrative: A personal narrative discussing growing up with an alcoholic mother (Master's thesis). Available from ProQuest Dissertations and Theses database. (UMI No. 1434728)

in text citation: (Mc Niel, 2006)

Doctoral dissertation, from an institutional database

Adams, R. J. (1973). Building a foundation for evaluation of instruction in higher education and continuing education (Doctoral dissertation). Retrieved from http://www.ohiolink.edu/etd/

in text citation: (Adams, 1973)

Doctoral dissertation, from the web

Bruckman, A. (1997). MOOSE Crossing: Construction, community, and learning in a networked virtual world for kids (Doctoral dissertation, Massachusetts Institute of Technology). Retrieved from http://www-static.cc.gatech.edu/--asb/thesis/

in text citation: (Bruckman, 1997)

Journal article with No DOI

Bourkhis, K., and Nabi, M. S. (2013). Islamic and conventional banks' soundness during the 2007-2008 financial crisis. *Journal Metrics*, 22(2), 68-77.

in-text citation: (Bourkhis & Nabi, 2013).

Journal article with DOI

Ichwan, M. (2012). The Local Politics Of Orthodoxy: The Majelis Ulama Indonesia in the Post-New Order Banten. *Journal Of Indonesian Islam*, 6(1), 166-194. doi:http://dx.doi.org/10.15642/JIIS.2012.6.1.166-194

In text citation : (Ichwan, 2012)

Abstract as citation

Hasan, N. (2012). Islamist Party, Electoral Politics And Da'wah Mobilization Among Youth : The Prosperous Justice Party (PKS) in Indonesia. *Journal of Indonesian Islam*, *6*(1), 17-47. Abstract from http://jiis.uinsby.ac.id/index.php/jiis/article/view/97

in text citation : (Hasan, 2012)

Mass media article

Sahal, Akhmad (2014, March 2). Kiai Sahal dan Realisme Fikih. *Tempo Magazine*, p. 120.

in text citation : (Sahal, 2014)

Research report

Fisher, B. S., Cullen, F. T., & Turner, M. G. (2000). The Sexual Victimization of College Women. Research Report.

in text citation : (Fisher, Cullen, Turner, 2000)

Monograph

Routray, Bibhu Prasad (2013), *National Security Decision-Making in India* (RSIS Monograph No. 27). Singapura: Rajaratnam School of International Studies.

in text citation : (Routray, 2013)

Proceeding article

Sudibyakto, Hizbaron, D.R., & Jati, R (Ed.) (2009), *Proceeding International Seminar Disaster Theory, Research and Policy.* International seminar held by Sekolah Pascasarjana, Universitas Gajahmada, Yogyakarta, 8-9 Desember 2009.

in text citation : (sudibyakto and Jati, 2009)

Paper conference/seminar/symposium

Janutama, Herman Sinung (2011). "Kraton dan Hubungan Antar Agama." Paper presented in *Seminar Kraton dan Panatagama* held by Center for the Study of Islam and Social Transformation (CISForm), Yogyakarta, 17 November.

in text citation :(Janutama, 2011)

Online article in web

Shiva, (2006, February). Bioethics: A Third World Issue. *Native-web*. Diperoleh dari http://www.nativeweb.org/ pages/legal/shiva.html

in text citation : (Shiva, 2006)

Online research report

Kessy, S. S. A., & Urio, F M. (2006). The contribution of microfinance institutions to poverty reduction in Tanzania (Research Report No. 06.3). Retrieved from Research on Poverty Alleviation website: http://www.repoa.or.tz /documents_storage/Publications/Reports/06.3_Kessy_and_Urio.pcif

in text citation : (kessy and urion, 2006)

Holy book

Qur an, 2 (25)

In text citation : (Q. al-Baqarah 2:25).

Encyclopaedia

Graycar, Adam (1992). Social Welfare Policy. Dalam Mary Hawkesworth dan Maurice Kogan (Ed.), *Encyclopedia of Government and Politics* (Vol. 1). London: Routledge.

in text citation : (Graycar, 1992)

Interview

Sultan Hamengkubuwono X (interview, 2011, April 19)

in text citation : (Hamengkubuwono, 2011)

Documentary film

Steijlen, Fridus (2008). *A Day in the Life of* Indonesia [documentary film, 58 minutes]. Leiden: KITLV Press.

in text citation : (Steijlen, 2008)

Vol. 2 No. 2, May - August 2017