MEASURING THE PERFORMANCE OF ISLAMIC BANKING IN INDONESIA: AN APPLICATION OF *MASLAHAH-*EFFICIENCY QUADRANT (MEQ)

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ABSTRACT

Despite of market condition under perfect or unperfect competition, Islamic banking has to reach their level of efficiency in order to succeed and make a profit; those who do not will fail and be forced to exit the market. However apart of having a sound performance, Islamic banking also has to comply with the *sharia* principles. This paper aims to have efficiency and *maslahah* measurement in one assessment framework that is *maslahah*-efficiency quadrant (MEQ). The study from 2011-2014 revealed that Bank Muamalat Indonesia (BMI) and Sharia Panin Bank are excellent since both are within the first quadrant. Whereas Bank Sharia Mandiri (BSM), Sharia Maybank, and Sharia Bukopin Bank are considered good at the second quadrant; Bank Rakyak Indonesia Sharia (BRI) and BCA Sharia are fair at the third; and Bank Mega Sharia, Victoria Sharia, Bank Negara Indonesia Sharia (BNI), and Bank Jabar Banten Sharia (BJB) are poor at the fourth sequentially. It is urge for Islamic bank that are in low level of MSI to have a critical policy to keep in line with the five factor of *maqashid sharia* apart of having efficiency in order to reach *maslahah*.

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I. INTRODUCTION

The Development of Islamic Banking Industry in Indonesia relatively shows a steady growth. Islamic Banking Statistic Data on December 2015 shows that the number of Islamic Banks in Indonesia has reached 12 of Islamic Commercial Banks, 22 of Islamic Business Units, and 163 of Islamic Financing Banks (BPRS) with 2,301 of total office channeling in Indonesia (Financial Service Authority [OJK], 2015). As reported in the Global Islamic Finance Report (2015), Islamic Financial Industry in Indonesia ranked 7th in the world. 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, Indonesia was unable to achieve its target to own 5% of the market share in2 2016. The growth occurs in Islamic Bank was not much better than the growth of market shares it self. The failure to reach the targeted market share has raised question regarding the efficiency of Islamic banks in Indonesia. Some obstacles that prevent the Indonesian Islamic Banks from achieving its target are competitions and conversion process from Islamic Business Unit into Islamic Banking.

Berger *et al.* (1993) explained that if the change of financial structures occurred rapidly, then it is important to identify the cost efficiency and income. In the end of 2015, Islamic Banking has increased in asset and financing (*see:* Picture 1), hence a research concerning the efficiency of Islamic Bank in Indonesia is needed. This is all cause, great value of asset or financing have not been showing great efficiency yet, so to achive maximum efficiency score, the financial proportion in the bank must be sufficient with their need. The increased number of assets and financing in Islamic Banks can be showed in the Figure 1 below:

Islamic Banking Asset in Indonesia
(in Billion IDR)

Year	Value
2015	6.640.000
2014	6.500.000
2013	5.833.488
2012	4.698.952
2011	3.520.417
2010	2.738.745
2009	2.123.581
2008	1.693.332
2007	1.215.916

Figure 1.
The Graph of Islamic Banking Asset and Financing in Indonesia

The need to maintain efficiency level is of a great concern of Islamic banks. However, a sound financial ratio should must also be reflected in the process of achieving it. The target to optimize the efficiency level does not justify any means to achieve it. In fact, high profit with sound financial ratios are not proportionally

followed by the quality of employees. The interest of the shareholders is achieved by the high return rate, but the main input is from the financial instrument that contains *riba*. Thus, measuring the financial ratio alone is not enough. Another fundamental issue apart from having adequate efficiency level is the achievement of *shari'ah* objectives (*maqashid shari'ah*) in the bank's business practices.

Having different nature of values and variety of products, any efforts to conduct assessment and supervision between *shari'ah* banks and conventional banks should be different. Janachi (1995) in Suleiman (1999) views that Islamic banks have a major responsibility to shoulder all the staff of such banks and customers dealing with them must be reformed Islamically and act within the framework of an Islamic formula, so that any person approaching an Islamic bank should be given the impression that he is entering a sacred place to perform a religious ritual, that is the use and employment of capital for what is acceptable and satisfactory to God. Therefore, some papers that try to compare Islamic Bank with conventional bank only by seeing its financial ratio just become less precise.

Several efforts to present the performance assessment of Islamic banks have been done based on *maqashid shari'ah* (Muhammed *et al.*, 2008; Muhammed and Taib, 2009; Kuppusamy *et al.*, 2010; Antonio *et al.*, 2012; Bedoui and Mansour, 2013; Jazil and Syahruddin, 2013; Muayyad and Esya, 2016, and Saoqi, 2017). However, these studies were not explicitly addressing the issue of cost-saving strategies within the framework of efficiency measurement. Efficiency is a process of how firm utilizes their resources (inputs) to produce the desired products or services (outputs). It will indicate the success of the firm. If the firm gains a high level of efficiency, it indicates that the firm performs well in the operating condition and is able to manage all the resources. Eventually, this will lead to further developments such as improvement in the products and services, higher shareholder's value and higher economic growth if the funds are invested into more profitable ventures.

Hence, comparing Islamic and conventional bank solely on the efficiency measurement would lead to misleading conclusion since there are having different set of values and products. Every single effort or process taken by *shari'ah* bank to maximize output should also uphold Islamic values, so that *maqashid shari'ah* (*maslahah/shari'ah* objectives) would be automatically achieved. Therefore, this paper aims to measure the efficiency and *maslahah* in one assessment framework that is *maslahah-eficiency* quadrant (MEQ).

The remainder of the paper is organized as follows. Section 2 reviews the literatures regarding Islamic bank evaluation within the framework of efficiency and *maqashid shari'ah*. Section 3 describes methodology, particularly *maslahah-eficiency* quadrant (MEQ) which is employed in the study. Result and discussion are presented in section 4. Finally, section 5 contains conclution and recommendation.

II. LITERATURE REVIEW
2.1. The Efficiency Concept
Despite of market condition under perfect or unperfect competition, bank has to reach its level of efficiency in order to succeed and make a profit; those who do not will fail and be forced to exit the market. Efficiency is important for business entity. Efficiency is defined as doing something correctly (doing the thing right).

It is usually associated with the way of corporate in achieve its goals. Therefore, it is 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) (Ali, 2010).

Nopirin (1997) explained that efficiency is the absence of waste cost. Rinald (1981) in 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 rasio of ouput 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).

There have been plenty of research that studies the performance of Islamic banks based on the efficiency level. These studies could be classified into two main groups; (1) the efficiency of Islamic bank (*see:* Bader *et al.*, 2007; Brown & Skully, 2004; Hassan, 2006; Yudistira, 2003; Sufian, 2006; Ascarya & Yumanita, 2006), and (2) the comparison of efficiency between Islamic banks and conventional banks (*see:* Al-Jarrah & Molyneuxa, 2003; Bader *et al.*, 2007; Hussein, 2004; Mohamad *et al.*, 2008; Akhter *et al.*, 2011; Abduh *et al.*, 2013; Wahid, 2016). The majority of these studies were using frontier approach since it is superior compare to traditional analysis.

Ascarya *et al.* (2008) explained that frontier approach is more superior because the use of this technical programme 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 Approach (TFA) and Distribution Free Approach (DFA) are kinds of parametric approaches, while Data Envelopment Approach (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 the 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 (Hadad *et al.*, 2003).

Hadad *et al.* (2003) explained that there are three approaches that are widely used in parametric and non-parametric approaches to define the correlation of input and output in financial activities of financial institutions, namely asset approach, production approach, and intermediation approach. This research employs intermediation approach to consider the main function of bank as a financial intermediation which is collecting fund from surplus unit and distribute

it to deficit one. Hence, taking into account another basic feature of bank which is mainly doing the quality of asset transformation even though there is no common agreement to determin input and output variables.

However, the performance measurement by Islamic bank is still applying standard performance measurement which is heavily focused on financial aspects of financial intermediary institution, such as return on assets (ROA) and return on equity (ROE), as well as its technical aspects, such as operating costs over operating income (OCOI), non-performing financing (NPF) and financing to deposits ratio (FDR), including efficiency measures, such as technical efficiency and cost efficiency. Having different nature of values and variety of products, any efforts to conduct assessment and supervision between Islamic banks and conventional banks should be different.

Janachi (1995) in Suleiman (1999) views that Islamic banks have a major responsibility to shoulder all the staff of such banks and customers dealing with them must be reformed Islamically and act within the framework of an Islamic formula, so that any person approaching an Islamic bank should be given the impression that he is entering a sacred place to perform a religious ritual, that is the use and employment of capital for what is acceptable and satisfactory to God. Hence, Islamic banks need a shifting paradigm in term of their performance measurement which not only limited to the financial ratios (stakeholders oriented) (Yuwono *et al.*, 2004). Every single effort or process taken by Islamic bank to maximize output should also uphold Islamic values, so that *maqashid shari'ah* (*maslahah-shari'ah* objectives) would be achieved. Therefore, previous studies which only make a comparison of Islamic banks and conventional banks based on their financial ratios have become insignificant.

Several efforts to present the performance evalution of Islamic banks have been done based on *maqashid shari'ah* (*see:* Mohammed *et al.*, 2008; Muhammed and Taib, 2009; Kuppusamy, Saleha and Samudhram, 2010; Antonio *et al.*, 2012; Bedoui and Mansour, 2013; Jazil and Syahruddin, 2013; Muayyad and Esya, 2016, and Saoqi, 2017). However, these studies were not explicitly addressing the issue of cost-saving strategies within the framework of efficiency measurement. Efficiency is a process of how firm utilizes their resources (inputs) to produce the desired products or services (outputs). It will indicate the success of the firm. If the firm gains a high level of efficiency, it indicates that the firm performs well in the operating condition and is able to manage all the resources. Eventually, this will lead to further developments such as improvement in the products and services, higher shareholder's value and higher economic growth if the funds are invested into more profitable ventures.

From the above literatures, it can be concluded that there are at least two current models of Islamic banking performance evaluation that have been done: the performance evaluation of Islamic banks within the framework of i) efficiency and ii) *maqashid shari'ah*.

2.2. Maqasid *Shari'ah* Index Approach

Ghazali (1991) said "anything that guarantees or safeguarding the preservation of the *shari'ah* objectives (*maqashid shari'ah*) is called *maslahah* and every matter that

escape from it called mafsadah (damage)". There are five *maqashid shari'ah* that should be applied in every single transaction or activities (muamalah), namely faith, human self or life, intellect, posterity or lineage and wealth (*al-kulliyyah al-khamsah*), including Islamic bank practices. In a broader meaning, *maqashid shari'ah* is the ultimate goal of *shari'ah* which promoting welfare and benefit values (*Jalb al-Mashalih*) also eliminate misery (*Dar al-Mafasid*) (Al-Jauziyah, 1973, Yubi, 1998, Ibn Asyur, 2000, Al-Fasy, 1993). Therefore, performance evaluation of Islamic bank should cover the *al-kulliyyah al-khamsah* (*maqashid shari'ah*) to be considered as achieving *mashalih* or *mashlahah*.

The rationale behind the different measurement of performance between Islamic bank and conventional bank is the different set of values and products between them. The most fundamental difference is related to the reference value (Islamic Worldview) for each financial institution. This fundamental difference will lead to the differences on formulation or creation of the product for both banking model including each performance evaluation model. Umar Chapra concluded that the differences in economic systems and other economic system rests on three main things: (1) Islamic Worldview (2) Purposes (3) Strategy or Policy (Chapra, 1993). Different worldview from the conventional bank will have an impact on objective formulation of Islamic bank.

Different objective formulation will have an impact to different strategical formulation process or evaluation model. Those value not only expressed in the form of fiqh legality of particular product, but it should also have broad impact on economic and social aspect as some consequences of efforts to achieve *Maqashid* syariah (Sanrego, 2010, Rosly, 2010). Every single effort or process taken by Islamic bank to maximize output should also uphold Islamic values, so that *maqashid shari'ah* (*mashlahah*) would be automatically achieved.

Hence, apart from having different set of values compare to the conventional one, 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 continuable goals, only if the main focus from banking activity consists of benefit value, not only for shareholders but also to another interested user (Mohammed *et al.*, 2008).

In order to make sure the performance of Islamic bank is in line with the *maqashid shari'ah*, there were some studies put forwarded *maqashid shari'ah* as their framework of analysis. One of the studies is written by Mohammed et al (2008) with their *maqashid shari'ah* index (MSI). Maqasid *Shari'ah* Index is evaluation or performance measurement model of Islamic bank, which is complied with the goal and Islamic bank characteristics. MSI is developed from three main factors, there are: education, creating justice, and welfare achievement, which is stem from another view of *maqashid shari'ah* that are divided into three categories *tahdzib al-fard* (education for individuals), *iqamah al-adl* (justice), and *maslahah* (benefit/welfare) (Abu Zahrah, 1958).

Three of these main factors are designed to formulte education program and training in order to increase moral value, so human resource of Islamic Banking is able to develop their skill and knowledge. Justice means that Islamic Bank 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.

Using Sakaran method, Mohammed *et al.* (2008) have extended to develop Islamic Banking performance measurement idea according to Maqasid *Shari'ah* framework. The 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 easly 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 be 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 glasses 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 Figure 2 below, where D for dimension and E for element.
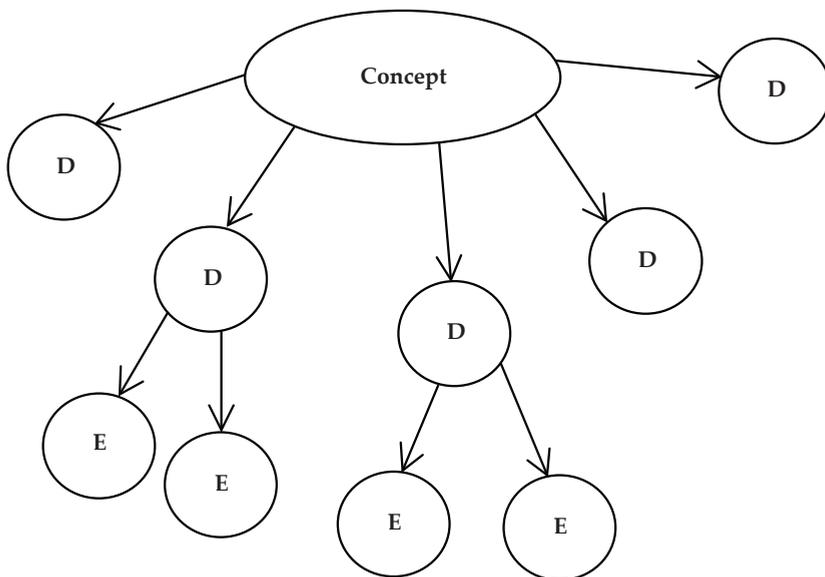

Figure 2.
The Graph of Sakaran Method Concept

From the Sakaran Method, the objectives of Islamic bank in relation to *Maqashid Shari'ah* framework include: individual education, creating justice, and achieving the welfare, are then 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 easly measured (E).

Table 1.
Performance Ratio Measurement

Concept (Goal)	Dimensions	Elements	Financial Ratio
1. Educating Individual	D1. Increasing the knowledge	E1. Donation for Education	R1. Donation for Education/ total income
		E2. Reseach	R2. Research Cost/total cost
	D2. Adding and Increasing the new capability and skill	E3. Training	R3. Training Cost/ total cost
	D3. Creating Human awareness of the existence of Islamic Bank	E4. Publicity	R4. Publicity Cost/ total cost
2. Creating the Justice	D4. Justice Agreement	E5. A Fair Return	R5. Profit/total Income
	D5. Product & Affrodable Services	E6. Affordable Cost	R6. Uncollectible Account/total investment
	D6. Eliminating Unjustice	E7. Free interest Banking Product	R7. Non-interest income/total income
3. Achieving the Welfare	D7. Profitabilities	E8. Profit Ratio	R8. Net Profit/total aktiva
	D8. Wealth and Profit Distributions	E9. Personal Income	R9. Zakat/net profit
	D9. Investment in Real Sector	E10. Real Sector Investment Ratio	R10. Financing for investment/ total financing

*Data sources: Annual Report

The ratios at Table 1 were selected because they fulfilled the criterias used in this research:
1. The discussions about the objectives of Islamic bank are considered closer to the Islamic values and also could be reflected by these ratios. Both dimension and element are easily identified through these goals.
2. Some of literatures review which inspected the same problems is also using the same ratio in measurement, not only for Islamic bank but also for conventional bank. Hence, it can be implemented in both institutions.
3. The data can be acquired easily, since the sources are the banks' annual reports.
4. The probability to measure the implementation *maqashid shari'ah* concept is more accurable by using these ratios.

The ratios which are presented in Table 1 have been fulfilled by *maqashid shari'ah* criteria. Those ratios descriptions and their correlations with maqasid *shari'ah* 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 *maqashid shari'ah* in Islamic Bank are also increasing.

b. The second goal is creating the justice, described by R5; Profit/total Incom. R6; Uncollectible Account/total investmen. 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, then the banking is valued highly implemented the goal of justice. As well as R6 is getting lower, then the goal of of justice in nasional banking is highly valued. Means if uncollactable financing in nasional 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 nasional banking is considered getting better if R7 are highly valued. Means that if non-interest investment distributed by nasional banking are increasing compared to total investment, then the goal of justice is getting better according to *maqashid shari'ah*.

c. The third goal is achieving the welfare (*maslahah*), described trough R8; Net Profit/total aktiva. R9; Zakat/net profit. R10; Financing for investment/total financing. The goal of welfare would be achieved by nasional banking only if the value of R8, R9, & R10 is increasing. Means that if net income, zakah and sector real investment are increasing, then support of nasional banking to create the *maslahah* are increasing.

III. METHODOLOGY
3.1. 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 (Miller and Noulas, 1996) in 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 (Insukindro *et al*. in 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.

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

Where:
hs   = bank efficiency s
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 by bank *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):

$$\text{Max } h_s = \frac{\sum_{i=1}^{m} u_i \, y_{is}}{\sum_{j=1}^{n} v_j \, x_{js}} \qquad \leq 1; r = 1, \dots\dots, N \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (2)$$

Where u_i and vj ≥ 0

From the formulation above, where N respresent 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 weigted 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 choosen 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 formual as follows:

$$s = \sqrt{\frac{n \sum_{i=1}^{n} x_i^2 - (\sum_{i=1}^{n} x_1)^2}{n(n-1)}} \dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots\dots \quad (3)$$

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

3.2. Maqasid *Shari'ah*h Index (MSI) Analysis

This study used *maqashid shari'ah* framework to measure the performance of Islamic banks. In this study, ratios used as already mentioned earlier in table 1 are conducted from literature review of Mohammed *et al*. (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 indepth 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. The second step is verifying the 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 reidentifying performance measurement component, wheter it is acceptable and compliance with banking situation. Mean weighting are given by the experts will be explained in Table 2, as follows:

Table 2.
Mean Weighting for 3 Goals and 10 Elements

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

*The welfare is including both bank and public interest

According to 10 ratios as already defined earlier, only 7 ratios are going to used in determining nasional banking performance, there are 4 ratios refer to the first *shari'ah* objectives (education), and the last 3 ratios refer to the 3rd *shari'ah* objectives (welfare). Other ratios refer to the 2nd *shari'ah* 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 aktiva (R3,1)
f.   Zakat/net income (R3,2)
g.   Investment for financing/total financing (R3,3)

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 *maqashid shari'ah* in national 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 attribute and intra attributes in this research. Weigthing for every attribute and intra attribute already presented in the earlier discussion and has been verified by some experts (*see:* Table 2).

Decision maker will get the total score from each bank by multiplying scale rank for every attribute by evaluating exisiting 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 *maqashid shari'ah* "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 (Table 2)

$E1,2$ is weighting for 2st element from 1st goal (Table 2)

$E1,3$ is weighting for 3st element from 1st goal (Table 2)

$E1,4$ is weighting for 4st element from 1st goal (Table 2)

$R1,1$ is ratio value from performance ratio based on 1st goal (Table 3)

$R1,2$ is ratio value from performance ratio based on 1st goal (Table 3)

$R1,3$ is ratio value from performance ratio based on 1st goal (Table 3)

$R1,4$ is ratio value from performance ratio based on 1st goal (Table 3)

So, in the end of computation, then the formula used to measure performance indicators for each goal is,

PI (O1) = PI 1,1 + PI 1,2 + PI 1,3 + PI 1,4…………………………………   (4)

Where,

PI 1,1 = W1,1 x E1,1 x R1,1…………………………………………………..   (5)

PI 1,2 = W1,2 x E1,2 x R1,2 …………………………………………………   (6)

PI 1,3 = W1,3 x E1,3 x R1,3…………………………………………………..   (7)

PI 1,4 = W1,4 x E1,4 x R1,4…………………………………………………..   (8)

Performance Indicator for the 3rd goal is described through computation PI (O3).

Where,

$W3,1$ is the weighting for the 3rd shari'ah goal, *maslahah* (welfare) (table 2)

$E3,1$ is the weighting for the 1rd element from the 3st goal (Table 2)

$E3,2$ is the weighting for the 2rd element from the 3st goal (Table 2)

$E3,3$ is the weighting for the 3rd element from the 3st goal (Table 2)

$R3,1$ is ratio value from performance ratio based on 3st goal (Table 3)

R3,2 is ratio value from performance ratio based on 3st goal (Table 3)
R3,3 is ratio value from performance ratio based on 3st goal (Table 3)
So, in the end of computation, then the formula used to measure performance indicators for each goal is,

PI (O3) = PI 1,1 + PI 1,2 + PI 1,3 + PI 1,4…………………………………   (9)
Where,
PI 3,1 = W3,1 x E3,1 x R3,1…………………………………………......   (10)
PI 3,2 = W3,2 x E3,2 x R3,2 ……………………………………………......   (11)
PI 3,3 = W3,3 x E3,3 x R3,3…………………………………………………..   (12)

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

MI = PI (O1) + PI (O2) ………………………………………………......   (13)

In another word, *maqashid shari'ah* index for every bank is total from performance indicators which is computed based on the first and the third goal. Having eficiency and *maslahah* analysis in one basket, therefore, the analysis framework of this study will refer to the following Figure 3 of quadrant where:
Quadrant 1 (High Efficiency, High MSI) = Excellent
Quadrant 2 (High Efficiency, Low MSI) = Good
Quadrant 3 (Low Efficiency, High MSI) = Fair
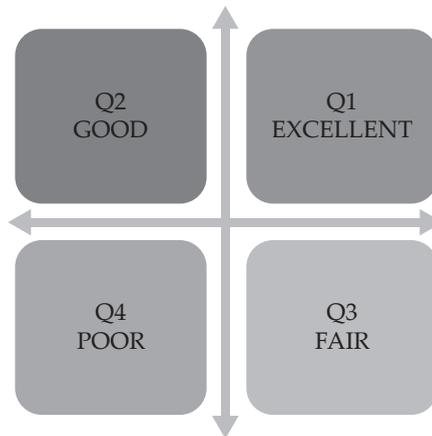Quadrant 4 (Low Efficiency, Low MSI) = Poor

Figure 3.
Maslahah-Efficiency Quadrant (MEQ)

IV. RESULT AND FINDING

To identify the efficiency score of Islamic Bank in Indonesia, 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%. The efficiency level of Islamic Banks in Indonesia is shown in the Figure 4.
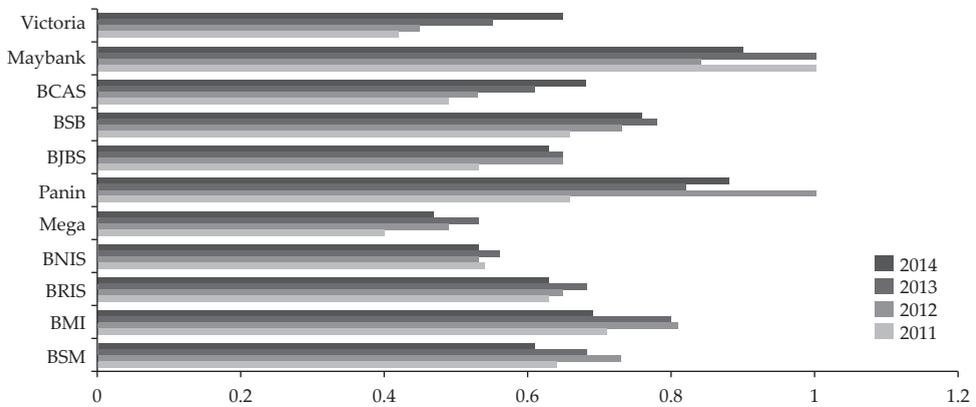

Figure 4.
The Graph of Islamic Banking Efficiency in Indonesia

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 *Shari'ah* in the year of 2011, Panin *Shari'ah* in the year of 2012, and Maybank *Shari'ah*h 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 *Shari'ah* 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 Shari'ahh 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	0.8	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	0.4	0.49	0.53	0.47	0.47	0.172
Panin	0.66	1	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	0.84	1	0.9	0.94	0.197
Victoria	0.42	0.45	0.55	0.65	0.52	0.199
Mean					0.66	0.206

Table 3 shows that the biggest mean value of efficiency is achieved by Maybank *shari'ah* (94%), and the lowest mean value of efficiency is achieved by Bank Mega *Shari'ah* (47%). The highest performance is achieved by Panin *Shari'ah* with the MSI value 254, meanwhile the lowest performance is achieved by Bank Mega *Shari'ah* with the MSI value 172.

4.1. Islamic Banking Industry Performance within MEQ Framework

According to MEQ approach, Islamic Bank is grouped into (4) quadrants based on both efficiency score and *maqashid shari'ah* index (MSI), whether they are considered as high and low performance[3].

Quadrant 1 involves Islamic bank with both high efficiency and MSI performance, which will be considered as excellent. Quadrant 2 involves Islamic bank with high efficiency, but low MSI performance. Islamic bank within this quadrant is considered as a bank that capable to manage their resources and have enough efficiency rates but have a less qualified MSI performance. Quadran 3 involves Islamic bank with low efficiency rates, but high MSI performance. The group of Islamic banks in this quadran could be considered as an Islamic bank, which does not notice the efficiency, but focus on the achievement of MSI performance. Quadran 4 involves Islamic bank with both low efficiency rates and MSI performance. Islamic bank in this category is considered as poor bank since they have both efficiency rate and MSI performace in the low level.

The Figure 5 below describes Islamic Bank based on the computation of CRS efficiency score and performance score base on *maqashid shari'ah* index (MSI). This figure represents two categories, there are: efficiency score in *y* axis, and the value of *maqashid shari'ah index* (MSI) in *x* axis.

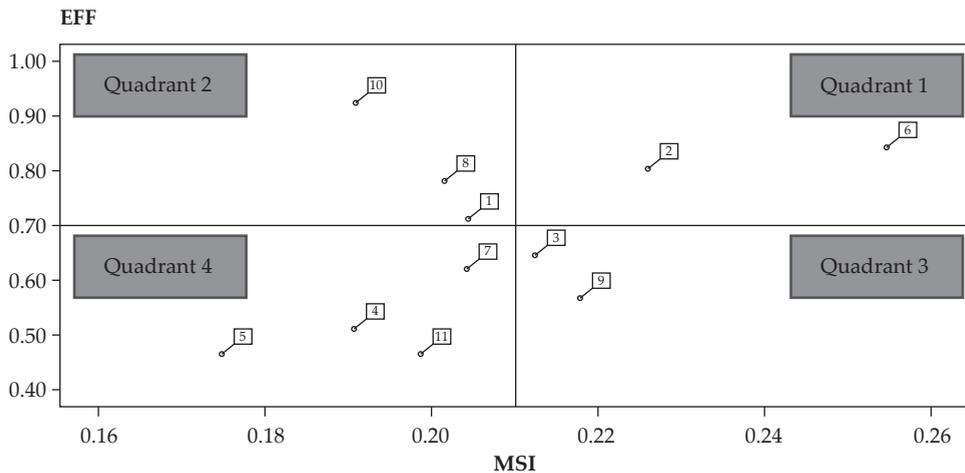3. Efficiency score and stabilities are classified into high and low category according to the mean value.

Figure 5.
Maslahah-Efficiency Quadrant (MEQ) of Islamic Banking Industry

Explanation:
Quadrant 1 (High Efficiency, High MSI): BMI, Bank Panin *Shari'ah* (Excellent)
Quadrant 2 (High Efficiency, Low MSI): BSM, Maybank, BSB (Good)
Quadrant 3 (Low Efficiency, High MSI): BRIS, BCAS (Fair)
Quadrant 4 (Low Efficiency, Low MSI): Mega *Shari'ah*, Victoria *Shari'ah*, BNIS, and BJBS (Poor)

Figure 5 indicates that within 2011-2014, there are two Islamic banks in the 1st quadrant, three of Islamic banks in the 2nd quadrant, two Islamic banks in the 3rd quadrant, and four Islamic banks in the 4th quadrant.

In the first quadrant is Islamic bank with both high efficiency and high MSI performance. Islamic bank within the first quadrant and considered as an excellent bank are BMI and Bank Panin *shari'ah*. BMI has its mean efficiency value 75% and MSI 0.224, while Bank Panin *Shari'ah* 84% and 0.254 respectively. Having this value, it can be concluded that both BMI and Bank Panin *Shari'ah* are the most successful bank in managing their business and hence both of these banks have a great integrity to implement *maqashid shari'ah* as Islamic Bank in Indonesia. In other words, having high score both of efficiency rate and MSI performance lead to BMI and Panin *Shari'ah* Bank become the best bank in Indonesia.

The second quadrant is Islamic bank with high efficiency, but low MSI performance. Islamic bank within the second quadrant and considered as a good bank are BSM, Maybank *shari'ah*, and Bank *Shari'ah* Bukopin. BSM has its mean efficiency value 67% and MSI 0.202, while Maybank *shari'ah* 94% with MSI 0.197. While BSB has its efficiency rate 73% with MSI 0.201. Islamic bank within this quadrant are considered as a good Islamic bank with high level of efficiency but low performance of MSI. From the efficiency framework, it coulb be concluded that these three banks have a sound capability to optimize financial resources to be well distributed. Nevertheless, the banks have not achieved their best performances,

specifically the *shari'ah* compliance performance which was measured by *maqashid shari'ah* index. The strategies conducted are to enhance bank performance, not only viewed from the efficiency level, but also from the MSI index.

The third quadrant is Islamic bank with low level of efficiency and high MSI performance. Islamic bank within this quadrant and considered as a fair bank are BRI *shari'ah* and BCA *shari'ah*. BRI *shari'ah* has its mean efficiency value 65% and MSI 0.208, while BCA *shari'ah* 58% and MSI 0.212. Both of these Islamic banks are considered as fair Islamic bank with low level of efficiency but high MSI performance.

Within *maqashid shari'ah* framework, both BRI *shari'ah* and BCA *shari'ah* have been successful to achieve a high MSI performance because of their effort to comply some certain parameter of *maqashid shari'ah*, such as justice, welfare and education. However, since they haven't been achieving a high level of efficiency yet, therefore they urged to have more good management related to financial resources.

The last quadrant (the fourth) is for Islamic bank with both low efficiency and MSI performance. Islamic bank within this quadrant and considered as a poor are Mega *Shari'ah*, Victoria *Shari'ah*, BNI *Shari'ah*, and BJB *Shari'ah*. Mega *Shari'ah* has its mean efficiency 47% with MSI 0.172, Victoria *shari'ah* 52% with MSI 0.199, BNI *shari'ah* 54% with MSI 0.19, while BJB *shari'ah* 62% with MSI 0.201. Having both low level of efficiency and MSI indicates that these banks are failing to manage and maximize their potention, particulalry within the issue financial aspect. Hence, these banks also unable to ascertain their *shari'ah* compliance performance. Therefore, it urged for these banks to have sufficient and comprehensive evaluation related to Islamic banking management as well as their commitment to *shari'ah* compliance issue.

V. CONCLUSION

There were major concerns related to the practice of Islamic financial institution (IFI), particularly Islamic bank, to have a "better" evaluation measurement the way they are doing business. The performance evaluation of Islamic bank which is different from conventional bank carried out because of different set of values and products between the parties. The most fundamental difference is related to the reference value (Islamic Worldview) for each financial institution. This fundamental difference will lead to the differences on formulation or creation of the product for both banking model including each performance evaluation model. It is therefore, this paper has initiated the *maslahah*-efficiency quadrant (MEQ) approach which trying to have efficiency and *maqashid shari'ah* as a framework of analysis.

The MEQ approach indicates that Islamic bank within the 1st quadrant and considered as an excellent bank are BMI and Bank Panin *shari'ah*. BMI has its mean efficiency value 75% and MSI 0.224, while Bank Panin *Shari'ah* 84% and 0.254 respectively. Islamic bank within the 2nd quadrant and considered as a good bank are BSM, Maybank *Shari'ah*, and Bank *Shari'ah* Bukopin (BSB). BSM has its mean efficiency value 67% and MSI 0.202, while Maybank *shari'ah* 94% with MSI 0.197, while BSB has its efficiency rate 73% with MSI 0.201. Islamic bank within the 3rd quadrant and considered as a fair bank are BRI *shari'ah* and BCA *shari'ah*. BRI *shari'ah* has its mean efficiency value 65% and MSI 0.208, while BCA *shari'ah*

58% and MSI 0.212. Last but not least, Islamic bank within the 4th quadrant and considered as a poor are Mega *Shari'ah*, Victoria *Shari'ah*, BNI *Shari'ah*, and BJB *Shari'ah*. Mega *Shari'ah* has its mean efficiency 47% with MSI 0.172, Victoria *Shari'ah* 52% with MSI 0.199, BNI *Shari'ah* 54% with MSI 0.19, while BJB *Shari'ah* 62% with MSI 0.201.

We recommend future research to employ other method to have a comparison result within the efficiency framework with an updated data. Hence, the result in this current study might be changed accordingly subject to the future development of *maqashid shari'ah* concept.

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