

Efficiency and Performance of Islamic Bank: Quadrant Analysis Approach

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Article Info

Article history:

Received : 15 Feb 2018
Accepted : 12 May 2018
Published : 1 June 2018

Abstract

The purpose of this study is to analysis the level of efficiency of Islamic banks through the ratio used as a measure of operational efficiency that is the operational expense tooperational revenue, knowing the level of bank performance of the assessment in accordance with the principles of islamic bank is maqashidsharia index, and know the cluster quadrant of each syariah bank through a combination of efficiency assessment and performance of maqashidsharia. All research data is taken from the financial statements of Islamic banks in Indonesia through their respective websites. The research period is the year 2012 until 2016. The results showed that banks that are in the highest efficiency quadrant and high performance of sharia maqashidis Panin Bank of sharia. The results of this study indicate that PaninSyariah bank has successfully used operational costs to obtain high operating income, and has also succeeded in achieving good performance of sharia maqashidcompared with other Islamic banks in Indonesia.

Keywords:

*islamic bank; maqashid sharia
index;efficiency*

JEL: G21 G41



1. Introduction

The development of Islamic banks in Indonesia shows a very positive potential (Firmansyah & Rusydiana, 2013). Increasing assets, financing and revenues indicate that Islamic banks perform well. To achieve these performance that Islamic banks must continue to optimize the efficiency level for the cost incurred.

To measure the performance of Islamic banks can be done through the mechanism of financial statement analysis. Financial statement analysis is a way of analyzing the condition of a company based on data taken from the financial statements. In measuring financial performance, the researchers measured the bank's performance of the profitability ratios, a ratio that measures the company's ability to generate profits. The greater the profitability ratio the better the company's financial performance. Some research on financial performance (ROA) such as research conducted by Choong, et al (2012), Kusmayadi, et al (2017), and Hidayat & Firmansyah (2017).

Measuring the performance of Islamic banks is certainly different from conventional banks that only see the performance of the business side or the ability to generate profits. In Islamic banks profit should not be the only measure of performance. But other aspects need to be taken into account, especially the social and human resources aspects.

To restore the purpose of the existence of Islamic banks, the performance of Islamic banks should be measured by *maqashid sharia* rather than just the rate of return on profit. As in Omar Muhammed's research that formulates a useful measurement to measure the performance of Islamic banking developed based on the principles of *maqashid sharia* with the aim that there is a measurement for Islamic banks in accordance with its purpose. Performance measurement for Islamic banking does not focus only on profit and other financial measures, but incorporated other values of banking that reflect the size of non-profit benefits that are in line with the objectives of Islamic banks. His research resulted in a measurement of financial performance of Islamic banking called *maqashid syariah index (MSI)*. Until now this MSI model has been widely applied in subsequent scientific studies to measure the performance of Islamic banking in various countries including in Indonesia. Some studies that use *maqashid syariah index* on Islamic banking is Omar & Dzuljastri (2008) and Rusydiana & Firmansyah (2017)

Maqashid sharia index (MSI) is developed based on three main factors, namely individual education, justice creation, and welfare achievement, in which three factors are in accordance with the general purpose of *maqashid syariah* that is "to achieve prosperity and avoid evil". These three objectives are universal which should be the objective and operational basis of every entity with public accountability, not only *sharia* banks but also conventional banks, as they relate to the welfare of all stakeholders, not just shareholders or company owners

In addition to measuring the performance of *maqashid sharia*, another important thing related to the operational management of the bank is the level of efficiency. Efficiency will show the bank's strength over existing resources to obtain maximum output. Therefore, if the bank has optimized efficiency then the bank will be easier to achieve its performance.

Through this research will be analyzed about the Islamic bank cluster on the level of efficiency and performance so that it will be known bank groups that are at a high level of efficiency and has achieved good performance as well, will also be known to other groups.

2. Literature Review

2.1. Islamic Bank

Islamic Bank is a banking system in Islamic Economy that runs its business operations based on the concept of division of either profit or loss, meaning that the results obtained by customers will fluctuate in accordance with the profit earned by the bank where the greater the bank profits, the greater the results obtained by customers. Islamic banks are developed based on principles that do not allow the separation between the temporal and the religious

2.2 Operational Efficiency

Efficiency is an action that management does not achieve waste. Efficiency can also mean the limited management of resources so as to produce maximum output or projected output can be achieved by minimizing existing resources. Assessment of efficiency in banking varies according to desired sizes. One of the easiest measures of efficiency can be seen in the comparison between operational expense and operating revenue (OEOR). Firmansyah (2014) uses this ratio to measure the efficiency of islamic banking in Indonesia. This ratio is used to see the cost incurred by the bank to achieve maximum revenue. This ratio can be described as follows:

$$OEOR = \frac{\text{Operational Expense}}{\text{Operational Revenue}}$$

2.3. *Maqashid sharia index*

According to the language of Maqasid al-Shariah consists of two words namely maqasid and syari'. Maqasid is the plural form of maqshud which means intent/purpose, sharia means the path to the source, and simply maqashd al-syariah means the purpose of the law is prescribed in Islam. From the many opinions about maqasid sharia, as previous research by Muhammed & Dzuljastri (2008), the researchers considered that Ibn Ashur's view of the purpose of sharia is to create prosperity and avoid the evils identical to Abu Zahrah's opinion on maqasid sharia, more clearly to be reduced to several measurements. As Abu Zahrah classifies Sharia objectives, which include: 1) Tahdhib al-Fard (educating the individual), 2) Iqamah al-Adl (creating justice), 3) Jalb al-Maslahah (prosperity).

Maqasid syariah index (MSI) is a model of measuring the performance of islamic banking in accordance with the objectives and characteristics of islamic banking. MSI is developed with three main factors, namely: education, the creation of justice and the achievement of welfare, where the three factors are universal. The three performance measures based on maqashid sharia, namely education, justice, and welfare require national banks to be able to design educational and training programs with moral values so that they will be able to improve the skills and skills of the employees. Justice means that islamic banks must ensure honesty and fairness in all transactions and business activities covered by the product, all activities of free interest. The last syariah banking should develop investment projects and social services to improve the welfare of society (Muhammed & Dzuljastri, 2008).

The Muhammed & Dzuljastri (2008) and Antonio, et al (2012) studies show that the maqashid sharia approach can be a strategic alternative approach that can illustrate how well the national banking performance can be implemented in the form of a comprehensive policy strategy.

Operationally, the method of Sekaran (2000) is able to explain the elements to be measured through the research. This is done by observing the behavior of the dimensions illustrated by the concept described. These dimensions will be translated into observable and more measurable derivative elements, which can form the measurement indexes.

Based on the Sakaran method, the behavioral characteristics to be measured are derived into a concept, denoted as (C). The concept will be downgraded again into several dimensions that will be more easily observable and measurable, denoted by (D). Dimensions will be lowered back into some of the clearer elements of measurement, denoted by (E)(Muhammed and Dzuljastri, 2008).

By using Sakaran method, the banking objectives according to the shariamaqasid framework described before in the second part covering: education for individuals, administering justice and realizing welfare, can be explained operationally. Each goal is translated as concept (C). Then with certain characteristics it is lowered into some measurable dimension (D). This dimension will obviously be derived again into specific elements which can be easily measured (E) described in the table below:

Table 1. Operational Objectivity of Islamic Bank

Concept (Purpose)	Dimension	Element	Performance Ratio	data Source
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
2. Creating the Justice	D4. Justice Agreement	E5. A Fair Return	R5. Profit/total Income	Annual Report
	D5. Product & Affordable 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
	D7. Profitabilities	E8. Profit Ratio	R8. Net Profit/ total aktiva	Annual Report
3. Achieving the Welfare	D8. Wealth and Profit Distributions	E9. Personal Incomel	R9. Zakat/net Profit	Annual Report
	D9. Investment in Real Sector	E10. Real Sector Investment Ratio	R10. Financing for investment/ total financing	Annual Report

Source: Muhammed &Dzuljastri (2008)

Rasio-rasio tersebut dipilih karena memenuhi beberapa kriteria dalam penelitian ini, diantaranya adalah: The ratios were chosen because they met several criteria in this study, including: (a) Discussion of banking objectives that are closer to Islamic values (sharia) can be

represented through these ratios. Dimensions and elements can be easily identified through these objectives. (b) Previous studies that examine identical problems also use the same ratios in measurement, both for Islamic banking and conventional banking. So it can be implemented in both agencies (Al-Osaimy and Bamakhramah, 2004; Hameed et al., 2006). (c) Data to be collected by researchers is much easier, because the data source is the annual financial statements of banks. (d) The possibility of measuring the implementation of the concept of *maqasid sharia* is more accurate by using these ratios.

The ratios presented in table 1 are those that meet the criteria of *maqasidsyaria*. The description of these ratios as well as their relation to the *maqasidsyaria* framework (Rusydiaana&Firmansyah, 2017) 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, then the banking are valued highly implemented the goal of justice. As well as R6 is getting lower, then the goal 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, then the goal of justice is getting better according to *maqasid sharia*. (c) The third goal is achieving the welfare (*maslahah*), described through 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

3. Research Method

This study uses the population of all Islamic banks in Indonesia from 2012 until 2016. From the total population is used purposive sampling method to select the sample to be used in this study. Banks used as sampling is a bank that did not suffer losses so obtained 8 Islamic banks.

In this research, there are two variables that will be analyzed are bank performance measured by *maqasidsharia* index and operational efficiency of bank as measured by operational expense to operational revenue.

The ratios used as described in table 1 are derived from previous studies conducted by Muhammed&Dzuljastri (2008). Based on the results of his research, the average weight is as follows:

Table2 Average Weight for 3 Purposes and 10 Elements Given by Experts

Purpose	Average Weighting (scale 100%)	Elements	Average Weighting (scale 100%)
O1. Education	30	E1. Donation for Education/ donation	24
		E2. Research	27
		E3. Training	26
		E4. Publicity	23
		TOTAL	100
O2. Justice	41	E5. Affordable 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

Source: Muhammed&Dzuljastri (2008)

The method used by researchers in the research maqashidsyariah index refers to the method used by Muhammed&Dzuljastri (2008). This method is used to weight, calculate distribution and process the rank (rank) in certain data. In this research eliminated 2 ratio that is E6 and E7 because not in accordance with syariah bank so that data not presented in financial report. While the measurement of operational efficiency is measured by the ratio between operational costs to operating income. Both analyzes are based on financial statement data known as financial statement analysis.

Furthermore, to know the groups of banks based on the high level of efficiency and high the low performance of Islamic banks, then conducted a quadrant analysis by taking the average data as the middle limit. To assist the analysis then used SPSS software.

4. Result and Discussion

Based on the results of research that has been implemented, the data collected are as many as 8 islamic banks the period 2012 to 2016: (a) Bank Syariah Mandiri; (b) Bank Muamalat; (c) Bank Mega Syariah; (d) Bank BNI Syariah; (e) Bank BRI Syariah; (f) Bank BCA Syariah; (g) Bank Panin Syariah; (f) Bank Bukopin Syariah.

4.1. MaqashidSyariah Index

Assessment of maqashidsharia performance divided into 3 major sections of education, justice and welfare. The following is explained about all three:

a. Educational Objectives

In banking, the total aspects of educational objectives that can be researched are aspects

of research, training and publicity. The following table describes the research results of the three elements:

Table 3. Maqashid Sharia Index at Educational Objectives

Bank Names	Average Educational Objectives
BSM	0,0098
BMI	0,0187
BRIS	0,0125
BNIS	0,0305
MEGAS	0,0325
PANINS	0,0101
BSB	0,0181
BCAS	0,0085

The table above shows that the aspect of the educational objectives in the period 2012 to 2016. The results showed that the average aspect of educational, the largest index conducted by banks Mega Syariah that is equal to 3.25% followed by BNI Syariah of 3.05% and third place of Bank Muamalat Indonesia at 1.87%.

b. Justice Objectives

As in previous goals, the objectives of justice from the total aspects of justice objectives that can be researched are just aspects of fair returns and non-interest income. The following table describes the research results:

Table 4 Maqashid Sharia Index on Justice Objectives

Bank Names	Average Objectives of Justice
BSM	0,5391
BMI	0,5066
BRIS	0,5350
BNIS	0,5422
MEGAS	0,5427
PANINS	0,5536
BSB	0,5219
BCAS	0,5463

Table 4 above explains that the performance of maqashid sharia from the justice objective. The results showed that banks of all banks studied in the period of research 2012 to 2016 which has the highest index of this aspect is PaninSyariah bank which is 55.36%, followed by BCA Syariah that is equal to 54.63% and the third highest value obtained Bank Mega Syariah is equal to 54.27%.

c. Welfare Objectives

In contrast to the previous objectives, in this welfare goal the total aspects of the objectives can be examined as a whole consisting of the bank's profit ratio, the transfer of income and the ratio of investment to the real sector. The following table describes the research results of both elements:

Table 5. Maqashid Sharia Index on Welfare Objectives

Bank Names	Average on Welfare Objectives
BSM	0,0939
BMI	0,2434
BRIS	0,2040
BNIS	0,0736
MEGAS	0,0225
PANINS	0,2516
BSB	0,1340
BCAS	0,1610

The third element of maqashidsharia related to welfare objectives consists of the percentage of profit earned on total assets, the amount of zakat incurred from the total net profit earned, and the amount of investment financing to the real sector of total financing disbursed.

On average, banks that have the greatest value of the welfare aspect are PaninSyariah Bank which is on average 25.16% followed by Bank Muamalat which is 24.34% and the third largest is BRI syariah which is 20.40%.

Overall, the following table describes the performance of islamic banks from the aspect of maqashidsharia after performing the weighting in accordance with the provisions.

Table 6. Analysis Result of Maqashid Sharia Index

Bank Names	Maqashid Sharia
	Index
BSM	0,197
BMI	0,235
BRIS	0,228
BNIS	0,196
MEGAS	0,180
PANINS	0,252
BSB	0,208
BCAS	0,221

The Analysis result of maqashidsharia index (MSI) conducted at 8 islamic banks in Indonesia research range 2012 to 2016 obtained that the best MSI performance obtained by Bank PaninSyariah

is the average value of MSI equal to 25,2%. This shows that sharia panin bank is the best bank among other syariah banks during 2012 to 2016.

4.2. Operational Efficiency

In this study, efficiency is measured by the ratio commonly used in banking in Indonesia is the ratio of the ratio between operational expense on operationalRevenue. The smaller the value of this ratio shows the islamic banks are more efficient in running its operations. Therefore, the bank should be able to optimize the costs incurred in order to obtain maximum revenue.

To see the ratio of efficiency (OEOR) to islamic banks in Indonesia can be seen in the following table:

Table 7. Efficiency of Islamic Bank

Number	Bank Names	Efficiency (OEOR)
1	BSM	87,536
2	BMI	94,156
3	BRIS	92,388
4	BNIS	90,600
5	MEGAS	89,730
6	PANINS	80,022
7	BSB	92,880
8	BCAS	91,840
Average		89,894

From the table above can be seen that the ratio of efficiency (OEOR) of islamic banks in Indonesia on average more than 89.894%. The smallest ratio was obtained by PaninSyariah Bank, which was 80.022%. Of all syariah banks that become the object of this study, the bank PaninShariah is the most efficient banks, sharia panin banks are able to optimize operating costs to be maximized into operating income. While the largest OEOR value obtained by Bank Muamalat Indonesia that is equal to 94.156%. This indicates that Bank Muamalatis the most inefficient bank.

4.3. Quadrant Analysis: Efficiency and Islamic Bank Performance

This analysis is intended to know the group of islamic banks from the point of view of efficiency and performance of maqashidsharia. Some groups that will be obtained are: 1) a group of islamic banks with low efficiency and low performance, 2) a group of islamic banks with low efficiency and high performance; 3) a group of islamic banks with high efficiency but low performance; and 4) groups islamic banks that have high efficiency and high performance.

Here is the output quadrant analysis results between the efficiency with the performance of maqashidshariah:

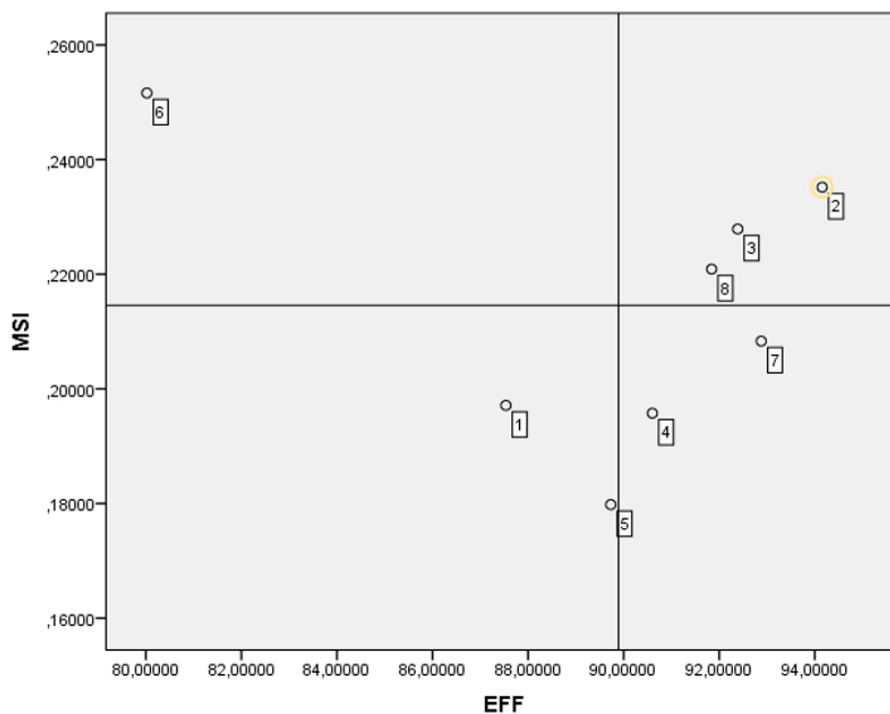


Figure 1. Quadrant Analysis

From the quadrant above can be obtained cluster group as follows: Sharia bank groups that have low efficiency and low performance are BNI Syariah and Bukopin Syariah. Bank BNI Syariah and Bank Bukopin sharia is a group of syariah banks have not optimized the cost to produce maximum income. Besides these two banks are also associated with low performance so that the analysis shows that the bank BNI sharia and Bank Bukopin sharia is in the lowest group.

Sharia bank group which has low efficiency and high performance is Bank Muamalat, BRI Syariah and BCA Syariah. The group of banks in this quadrant shows that the efficiency level is still very low compared to other islamic banks. Nevertheless, the Muamalat bank, the sharia BRI and the sharia BCA have been able to demonstrate good performance as islamic banks that adhere to Islamic principles. Therefore, low efficiency value is not an excuse for not having a good performance, because the performance of sharia cannot be associated with the level of income earned. Because as a bank that runs the principle of Islam that performance measures are not only measured by profit melalinkan by social aspects as well.

Islamic bank group which has high efficiency and low performance is BSM and Mega Syariah. The group of banks in this quadrant has managed to optimize the cost to maximize its operating income so that the efficiency ratio becomes low which indicates good condition. However, although it has successfully achieved a high level of efficiency, the Bank Syariah Mandiri and Bank Mega Syariah have not been able to show good performance of Shari'a Maqashid.

Islamic bank group that has high efficiency and high performance is Panin Syariah. The existing islamic banks in this group have demonstrated the optimal level of efficiency because the costs incurred have been able to maximize revenue. In addition, the success of islamic banks is also shown with high performance. The combination of efficiency and high performance leads to Panin Syariah banks being in the best quadrant compared to other syariah banks in Indonesia.

5. Conclusion and Suggestion

Based on the results of previous research and discussion, this research can be summarized as follows: (a) Islamic banks that perform well from the viewpoint of the performance of maqashid Sharia

during the period of research 2012 to 2016 is Bank PaninSyariah while the bank has the lowest performance is Bank Mega Syariah. (b) The best islamic bank efficiency measured by OEOR is Bank PaninSyariah, while the lowest efficiency is obtained by Bank Muamalat Indonesia. (c) Quadrant analysis shows that banks that are in the best quadrant of islamic banks that have a high level of efficiency with high performance also is Bank PaninSyariah.

Some of the important suggestions for this study are related to the deficiencies that can be improved, including: (a) Not all banks can be examined in this study because there are 2 banks whose data is difficult to obtain so further research is attempted to obtain data as optimal as possible. (b) The range of study period can be extended and can be added period 2017. In this study was not included because the availability of data on the website cannot be found. (c) Can be added with regression analysis to know the effect of efficiency on maqashid performance syariah index.

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