BMT Management Efficiency in Bandung City Mosques

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Abstract—**The many developments of Islamic cooperatives or BMT in The City of Bandung is not supported by factors that can support an Islamic cooperative to be able to continue to develop and run well. Facts in the field show that many Islamic cooperatives sink and disband due to a lack of balanced with knowledge, experience, and professional skills regarding management of management well. The research method used is quantitative research, with data collection techniques using purposive sampling and the sample consists of 7 mosque-based Islamic cooperatives. Data processing techniques using data envelopment analysis (DEA) method, VRS assumption (output-oriented). Efficiency measurement uses variable inputs of total assets, operating expenses and cooperative capital, while the output variable consists of Income and Remaining Operating Results. The results of the DEA calculations show that in 2017 only MUI Bandung city has achieved perfect efficiency, year 2018 kopsyah cipaganti and MUI Bandung City, and Year 2020 kopsyah MUI Bandung City, Nurul Hikmah, Cipaganti and Silih Aping. The level of kopsyah that has been efficiency constantly during the period 2017-2020 is the MUI Islamic Cooperative Bandung.**

Keywords—BMT, management, efficiency, mosques

I. INTRODUCTION

BMT is a business entity that is a legal entity with a business consisting of individuals who are oriented to generate added value that can be utilized to improve the welfare of its members [1]. In addition, cooperatives are also a people's economic movement that is oriented to foster community participation in an effort to strengthen the structure of the national economy with economic democracy based on the principle of kinship [2]. Cooperatives in their activities have two distinctive characters, namely economic and social [3], meaning that even though in their main business they have economic principles, cooperatives are still concerned with cooperative education for members and the community [4].

Islamic Cooperatives are cooperatives that run businesses in the field of savings and loans and financing using Islamic principles. In the past, Islamic cooperatives were synonymous with baitul maal wattamwil (BMT) [5], but in their development Islamic cooperatives grew very diverse with variations in names that were not uniform, including the types of Islamic Microfinance Institutions, Islamic Multipurpose Cooperatives and Islamic Financial Services Cooperatives [6].

In the city of Bandung there is a mosque-based Islamic cooperative, this mosque-based Islamic cooperative was started in 2006. The MUI of Bandung City began to introduce mosque-based cooperatives to the public because they saw the large number of mosques in the city of Bandung. In developing the Islamic economy. One way to develop an Islamic economy in mosques is through mosque-based Islamic cooperatives.

The number of Islamic cooperatives registered at the Bandung City KUMKM service is 122 Islamic cooperatives, but the latest development of the number of Islamic cooperatives from the total of 122 Islamic cooperatives there are only 32 active Islamic cooperatives that still report RAT and 92 Islamic cooperatives an including inactive.

Based on an interview with the head of the Bandung City Cooperative Protection and Counselling Management Organization section, the number of inactive Islamic cooperatives is caused by unprofessional management, untrustworthy management, resulting in public distrust and capital difficulties. So this situation shows that the performance of Islamic cooperatives has not been optimal and many of the status of Islamic cooperatives have become inactive. On the other hand, in its operations, Islamic cooperatives are still faced with limited human resources who do not understand Islamic principles or management properly.

According to Heni Yuningrum's [3] research, the large number of developments in Islamic cooperatives or BMTs in the city of Bandung is in fact not supported by factors that can support a Islamic cooperative to continue to develop and run well. Facts in the field show that many Islamic cooperatives have sunk and disbanded due to a lack of balance with professional knowledge, experience, and skills regarding good management. Therefore, many BMTs or Islamic Cooperatives appear, then die and or grow but do not develop. Especially with the existence of Islamic banks and BPRS with strong facilities and capital, which further narrows the space for Islamic cooperatives. Therefore, to maintain and reduce the decline in the number of Islamic cooperatives, SMEs are required to improve the efficiency of business performance in order to be able to compete, develop and survive.

Efficiency is an important indicator in measuring the overall performance of a company's activities to produce at the lowest possible cost. The ability to produce maximum output with existing inputs is a measure of the expected performance [7]. When measuring efficiency is carried out, financial institutions are faced with the condition of how to obtain the optimal level of output with the existing level of input or by obtaining the minimum level of input with a certain level of output [3]. By analyzing the allocation of inputs and outputs, it can be further analyzed to see inefficiencies [8].

Efficiency assessment is carried out using the Data Envelopment Analysis (DEA) method [9]. The DEA method is a non-parametric approach which is basically a linear programming-based technique used to measure the relative efficiency of comparable Economic Work Units (UKE) [10]. The UKE in question can be in the form of companies, departments, divisions, banks, financial institutions, and other businesses.

There have been many studies regarding the measurement of efficiency levels, such as that of Abrista Devi regarding the Analysis of Financial Performance Efficiency of Islamic Cooperatives in the Special Region of Yogyakarta using the DEA Method [11]. Aulia Dara Octaviani on Analysis of BMT Efficiency and Effectiveness with DEA Method and Islamic Values. From the research that has been done, no one has examined the efficiency of the Performance of the Mosque-Based Islamic Cooperative in Bandung City. So that researchers try to do research on the efficiency of mosque-based Islamic cooperatives.

II. METHODS

This type of research is a quantitative research. Quantitative research is a term used to describe approaches developed in the natural sciences and are now widely used in social research. Quantitative research are methods based on numerical information or quantities, and are usually associated with statistical analyses. In this study, quantitative methods were used to calculate the level of efficiency of mosque-based Sharia cooperatives in the city of Bandung.

In this quantitative analysis, to calculate the level of efficiency, the researcher uses Data Envelopment Analysis (DEA), which is a standardized method as a tool to measure the performance of unit activities, where the process uses the MAXDEA application. In processing data in the form of inputs and outputs taken from financial reports, which are owned by the Syari'ah Cooperative. In addition, researchers also use Microsoft excel software as supporting software.

This DEA approach is a non-parametric approach. There are two models that are often used in this approach, namely Constant Return to Scale (CRS) and Variable Return to Scale (VRS).

III. RESULTS AND DISCUSSION

The sampling method used in this research is purposive sampling. 7 Syari'ah Cooperatives in Bandung City are the object of this research. Calculation of the efficiency of the seven Syari'ah Cooperatives using the Data Envelopment Analysis (DEA) method. The researcher uses the three input variables, namely total assets, cooperative capital and operating expenses and two output variables, namely residual operating results and income. In the following table 1, the development of input and output variables used in the study is presented.

TABLE I.   INPUT VARIABLES FOR THE TOTAL ASSETS OF THE BANDUNG CITY SYARI'AH COOPERATIVE FOR THE 2018-2020 PERIOD

BMT	*Period*		
	2018	*2019*	*2020*
Al-Barokah	213,687,602	189,993,187	160,482,724
Baitul Makmur	188,184,700	197,510,200	183,499,200
Cipaganti	43,403,606	33,993,956	31,264,931
Hayatun Sunnah	150,430,797	221,153,644	253,959,372
MUI Kota Bandung	51,293,193	68,799,262	84,078,756
Nurul Hikmah	330,053,547	467,263,970	642,352,300
Silih Aping	674,045,658	725,521,534	726,624,701

TABLE II.   OUTPUT VARIABLES REMAINING OPERATING RESULTS OF THE BANDUNG CITY SYARI'AH COOPERATIVE PERIOD 2018-2020 (IN UNITS OF RP)

BMT	Period		
	2018	*2019*	*2020*
Al-Barokah	11,178,710	6,624,835	5,194,037
Baitul Makmur	5,882,833	5,333,100	2,854,500
Cipaganti	8,752,790	10,677,060	6,831,000
Hayatun Sunnah	5,448,985	6,128,195	8,199,527
Mui Kota Bandung	2,372,054	3,544,480	3,180,895
Nurul Hikmah	19,299,230	28,532,481	39,194,025
Silih Aping	36,329,254	38,766,505	43,320,117

Source: Data Processed (Output MAX.DEA) 2021.

From table 2, it can be seen that the remaining amount of the results of the Islamic cooperative business each year has increased and decreased. The increase in the remaining operating results every year occurs in the Hayatun Sunnah, Nurul Hikmah and Silih Aping Islamic cooperatives. The increase in the remaining operating results that occurred was quite significant. However, the decrease in the remaining operating results was found in the Al-Barokah, Baitul Ma'mur and MUI cooperatives in Bandung. A very significant decrease was seen in the Al-Barokah and Baitul Ma'mur cooperatives.

Furthermore, the distribution score of the efficiency of Islamic cooperatives will be explained along with the table results.

TABLE III. DISTRIBUTION SCORE

PERIOD	BMT	SCORE
2018	MUI Kota Bandung	1
2019	MUI Kota Bandung	1
2019	Cipaganti	1
2018	Silih Aping	1
2018	MUI Kota Bandung	1
2018	Cipaganti	1
2018	Nurul Hikmah	1
2019	Silih Aping	0.95
2019	Nurul Hikmah	0.94
2018	Silih Aping	0.89
2018	Cipaganti	0.79
2018	Nurul Hikmah	0.79
2018	Al-Barokah	0,59
2020	Hayatun Sunnah	0.39
2019	Al-Barokah	0.37
2018	Hayatun Sunnah	0.34
2018	Baitul Makmur	0.33
2019	Hayatun Sunnha	0.31
2020	Al-Barokah	0.31
2019	Baitul Makmur	0.29
2020	Baitul Makmur	0.61

Data source processed (MAX.DEA) 2021.

Table 3 shows the number of efficient and inefficiency business units. On a certain scale. Based on the table, it can be seen that the number of Islamic cooperatives included in the perfect category (100%) is 7 DMU. The table above provides information that the business unit is in a condition of 90-99% efficiency as many as 2 DMU based on the categories that have been determined by the cooperative, which is included in the very good criteria. The number of cooperatives is in a condition of 70%-89.9% efficiency as many as 3 DMU, so the cooperative is included in the Good criteria. The number of cooperatives is in a condition of efficiency of 50% - 69.9% there is only 1 DMU then the cooperative is included in the criteria of Good Enough. However, the highest number of Islamic cooperatives is in a condition of <40%, which is 8 DMU, and is included in the bad criteria. This means that during the 2015-2017 period, the Syari'ah Cooperative's performance was included in the bad criteria.

Based on the information in the table above, the DMU (Shari'ah Cooperative) with the lowest efficiency rate is the

Baitul Ma'mur Syari'ah Cooperative in 2017 of 16.13%. This can certainly be a consideration for DMUs that are not yet efficient to improve their technical efficiency. Besides that, the efficiency level of Islamic cooperatives is generally at a low point, meaning that it is below 60%. Seeing the number of cooperatives that are not yet efficient based on the calculation table above, the inefficient DMU is divided into two parts, namely Increasing Return to Scale (IRS) and Decreasing Return to Scale (DRS). Increasing Return to Scale which means that if a cooperative is in IRS conditions, it means that adding 1% of inputs will add more than 1% of output and therefore the company will definitely continue to increase its production capacity. And Decreasing Return to Scale (DRS) which means if an input cooperative is added by 1%, the output will be less than 1%. It is in the DRS position.

Therefore, the cooperatives that are included in the IRS are the Silih Aping Cooperative (2015), the Nurul Hikmah Cooperative (2016), and the Silih Aping Cooperative (2016). To achieve an efficient level, these DMUs can still be improved by looking at their potential improvement values or the projection table. Unlike the case with Syari'ah Cooperatives which include decreasing, namely Baitul Makmur (2015), Al Barokah (2015) , Cipaganti (2015), Hayatun Sunnah (2015), Nurul Hikmah (2015), Al-Barokah (2016)), Baitul Makmur (2015). 2016), Hayatun Sunnah (2016), Al-Barokah (2017), Baitul Makmur (2017), Hayatun Sunnah (2017). To achieve efficiency, cooperatives need to reduce a lot of costs because the market has been saturated.

IV. CONCLUSION

Calculation of the level of efficiency, from seven Islamic cooperatives, there is only one Islamic cooperative that experiences constant efficiency of 100 & = 1 for the 2015-2017 period, namely the MUI syari'ah cooperative in Bandung City. Meanwhile, six other Islamic cooperatives experienced fluctuating efficiency conditions, including the Al-Barokah Cooperative, Baitul Makmur Cooperative, and Cipaganti Cooperative. Hayatun Sunnah Cooperative, Nurul Hikmah Cooperative and Silih Aping Cooperative. Based on the criteria of Islamic cooperatives, the number of Islamic cooperatives is in a condition of <40% as many as eight DMUs, this indicates that the performance of Islamic cooperatives must really be improved because they are in bad condition.

Inefficiency in the six syari'ah cooperatives occurs in the input variables of total assets, operating expenses and cooperative capital, but the input variable for total assets is almost all Islamic cooperatives experiencing efficiency, only syari'ah cooperatives and aping experience inefficiency in total assets, which is 8.32% of the variable. Total asset input should be reduced. For the variables of operational expenses and cooperative capital, inefficiency is experienced by each Islamic cooperative. This indicates that each input target is excessive and not on target. On the output variable side, almost all Islamic cooperatives experience a level that has not reached perfect efficiency, this indicates that the output produced has not been maximized and has reached the target, except for the

MUI Islamic cooperatives in Bandung City which have achieved perfect efficiency during the 2018-2020 period.

REFERENCES

[1] M.A. Adnan and S.R. Ajija, "The effectiveness of baitul maal wat tamwil in reducing poverty: The case of Indonesian Islamic microfinance institution," Humanomics, 2015.

[2] A. Mathie and G. Cunningham, "From clients to citizens: Asset-based community development as a strategy for community-driven development," Dev. Pract., vol. 13, no. 5, pp. 474–486, 2003.

[3] H. Yuningrum, "Mengukur Kinerja Operasional BMT pada Tahun 2010 Ditinjau dari Segi Efisiensi dengan Data Envelopment Analysis (DEA)(Studi Kasus BMT di Kota Semarang)," Econ. J. Ekon. Islam, vol. 2, no. 2, pp. 111–128, 2012.

[4] E. Oczkowski, B. Krivokapic-Skoko, and K. Plummer, "The meaning, importance and practice of the co-operative principles: Qualitative evidence from the Australian co-operative sector," J. Co-op. Organ. Manag., vol. 1, no. 2, pp. 54–63, 2013.

[5] A.S. Rusydiana and A. Devi, "Aplikasi Metode Analytic Network Process (ANP) Untuk Mengurai Problem Pengembangan Baitul Maal Wat-Tamwiil (BMT) Di Indonesia," J. Ekon. dan Bisnis Islam., vol. 3, 2013.

[6] H. Amri, "Membangun Kesadaran Masyarakat Pinggiran Melalui Baitul Maal Wat Tamwil (BMT)," Islam. Bank. J. Pemikir. dan Pengemb. Perbank. Syariah, vol. 4, no. 1, pp. 11–22, 2018.

[7] M. Meliana, "Analisis Efisiensi Unit Usaha Syariah Perusahaan Asuransi Di Indonesia: Dengan Metode Data Envelopment Analysis (DEA)." Fakultas Ekonomi, 2019.

[8] A. Basso and S. Funari, "A data envelopment analysis approach to measure the mutual fund performance," Eur. J. Oper. Res., vol. 135, no. 3, pp. 477–492, 2001.

[9] C.T. Kuah and K.Y. Wong, "Efficiency assessment of universities through data envelopment analysis," Procedia Comput. Sci., vol. 3, pp. 499–506, 2011.

[10] L. Kuntz and S. Scholtes, "Measuring the robustness of empirical efficiency valuations," Manage. Sci., vol. 46, no. 6, pp. 807–823, 2000.

[11] A. Devi, "The Effectiveness of The Success Of Sharia Cooperatives Development In Indonesia," Ekon. Islam Indones., vol. 2, no. 1, 2020.