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PERFORMANCE ANALYSIS OF ISLAMIC MICRO FINANCE INSTITUTIONS ON SUSTAINABLE RURAL DEVELOPMENT: EVIDENCE IN INDONESIA

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Abstract

This study aims to analyze the influence of the performance of Islamic microfinance institutions (MFIs) in strengthening the agricultural and fisheries sector to realize sustainable rural development. The study uses quantitative method and purposive sampling method. The sample of this study was 85 agricultural and fishery business actors in Central Java, Indonesia. The variable quality of service, accessibility and philanthropic characteristics of Islamic MFIs towards sustainable rural development which mediated by strengthening of the agricultural and fisheries sector. The urgency of this research is to establish a financing model for the agriculture and fisheries sector. This study uses primary data which collected through filling out the questionnaires by business actors in the agriculture and fisheries sector. The results showed that

the service quality of Islamic MFIs had no impact on strengthening the agricultural and fisheries sector (Prob: 0.245), accessibility of Islamic MFIs had a positive impact on strengthening the agricultural and fisheries sector (Prob: 0.06), philanthropic characteristics had a positive impact on strengthening the agricultural and fisheries sector (Prob: 0.01), strengthening the agriculture and fisheries sector has a positive impact on sustainable rural development. This research can be used as a model for channeling customer funds to finance Islamic MFIs.

Keywords: Islamic Micro finance Institutions, Competitiveness, accessibility, service quality, Agriculture, Fisheries

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Introduction

Indonesian constitution No. 6/2014 that Indonesian Government is committed to achieve rural development including fulfillment of basic needs, development of village facilities, village infrastructure development, development of local economic potential, and sustainable use of natural resources and environment. Rural development is expected to be able to solve problems in rural areas, and make villages more independent, strong, advanced and democratic through improving the quality of human life, improving the welfare of rural communities, and alleviating poverty. Village development through the agricultural sector is still important (Anríquez & Stamoulis, 2007) (Hermawan I. , 2012).

Even though, fisheries are no less important sectors in carrying out village development. Data from the Ministry Of Marine Affairs And Fisheries Republic Of Indonesian noted in 2018 the total area of aquaculture business reached about 19.140.000 Ha of various types of cultivation. Fisheries production in Indonesia also reached 23,186,442 (Ministry Of Marine Affairs And Fisheries Republic Of Indonesian, 2018). This shows that in addition to the agricultural sector, the fisheries sector also has enormous potential for the Indonesian economy.

Finance institutions are important to realize the development of the agriculture and fisheries sector in rural areas. The World Bank notes that there are five challenges which faced by farmers in Indonesia and one of it is the problem of financing. The same problem was also found in Indonesian

fisheries (World Bank, 2005). So far, Indonesia's fisheries sector is still classified as backward, so funding solutions are needed for fishermen (Winarsih, 2014; Yuliana, 2014). Moreover, Islamic banking financing for the agricultural sector is still limited at less than 4% (Nasution, 2016). Financing institutions are expected to play a role as capital providers and invest in order to realize rural development especially villages with agricultural potential and fisheries.

Alternative finance models that are in accordance with business characteristics in the agricultural and fisheries sector are very necessary, one of it is through the Islamic financing. As a real business sector that has the potential for profit and loss, the agriculture and fisheries sector is very relevant to obtain capital from Islamic banking financing institutions. The principle of Islamic banking is based on the *Syirkah* principle (business partnership) by implementing a profit-loss sharing system in its operations (Zaini, 2013). Islamic micro finance institutions have become an alternative as a financial intermediary for business players in the agricultural and fisheries sector in Indonesia (Nasution, 2016).

Consistency in developing Islamic micro finance institutions has become an effective way to repeat the golden period during the Caliph Umar bin Abdul Aziz. At that time, the *amil zakat* institution and other social institutions experienced difficulties in distributing assets which collected to the community. The community has been very prosperous with their various needs, such as clothing, food, shelter, education, health, freedom of expression, etc. (Effendi, 2010). Islamic micro finance institutions which developed in Indonesia are known as *Baitul Maal wat Tamwil* (BMT).

Even, it does not mean that the BMT is fully prepared to become a financial intermediary institution and play a full role in rural development. Sadrah and Engkos (2004) revealed that BMT establishment is often not balanced with professional knowledge, experience and skills regarding management, service, and human resources (HR) management. In addition, many BMTs that stand up then stop in a short time or they grew but their performance is not good, and a little BMT can run well. Furthermore, the facts on the ground showed that many BMTs were drowned and dispersed due to unprofessional management, unreliable managers that led to public distrust and triggered massive withdrawals of funds and capital difficulties (Santosa, 2010)

Based on these phenomena researchers are interested in conducting further research related to the effect of the performance of Islamic micro finance institutions in encouraging to strengthent of rural agriculture and fisheries in order to realize sustainable rural development. This is an evaluation of the SDGs program that is being launched around the world, where one of the goals is to reduce poverty. The performance of Islamic micro finance institutions by measurements in three variables. They are namely service quality, accessibility, and philanthropic characteristics.

Research Methods

This study aims to find out what is the quality of service of Islamic micro financial institutions, accessibility of Islamic micro financial institutions and the philanthropic characteristics of Islamic micro finance financial institutions affecting sustainable rural development with the competitiveness of agriculture and fisheries as mediation. The type of research used is quantitative research. This study analyzes the relationship between dependent variables and independent variables. The definition of each variable is as follows:

a. Dependent variable

Dependent variable in this study is sustainable rural development which measured by using four indicators are namely the fulfillment of basic village needs, development of village facilities, utilization of village natural resources, and development of village environments.

b. Independent variable

The independent variable in this study consisted of 3 variables are namely the quality of service of the Islamic micro financial institution, the accessibility of the Islamic micro financial institution, and the characteristics of philanthropy Islamic micro finance institution. These variables are measured by using several indicators on each variable. The service quality variable of Islamic micro financial institutions is measured by four indicators, namely the reliability of the Islamic micro finance institution product, the responsiveness of the Islamic micro financial institution, ease of transaction, and the availability of micro-credit. The accessibility variables of the Islamic micro financial institution are measured by

three indicators are namely the affordability of the location of the Islamic micro financial institution, the wide network of Islamic micro financial institutions, and the affordability of the Islamic micro financial institution services. Four indicators measure variable characteristics of philanthropic Islamic micro financial institutions, namely poverty alleviation programs, real sector financing commitments, increased social and spiritual capital, and open opportunities for entrepreneurship for customers.

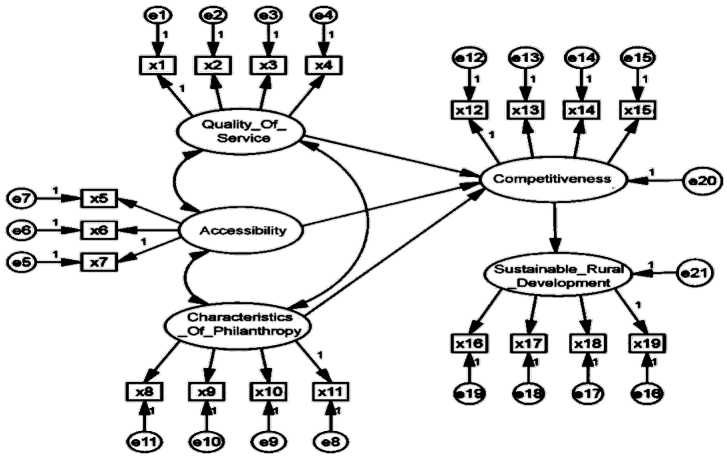
c. Intervening variable

Intervening variable in this research is the competitiveness of the agriculture and fisheries sector as measured by four indicators, namely agricultural productivity, fishery product productivity, the ability to produce superior products, and the potential to compete globally. The study was conducted in Regencies in Central Java Province in Indonesia because the region is an agrarian and coastal area, which were the main sectors of income of the community, are namely agriculture and fisheries. The data used in this study are primary data and was obtained from the distribution questionnaire with closed type of questions to several regions in Central Java. Data collection with questionnaires is intended to be more relevant to the situation of the community at the research location.

Result and Discuss

The figure below shows the structural equation model (SEM).

Figure 1. Structural Equation Model (SEM)



Data Normality

The data normality test used in this study exercised by using the critical ratio value criteria (c.r.) on AMOS output of the skewness value and kurtosis of data distribution. Data has a normal distribution if the critical ratio (c.r.) value of the skewness and kurtosis value is ± 2.58. The table below presents the results of data normality test in this study:

Table 1. Assessment of normality

Variable	min	max	skew	c.r.	kurtosis	c.r.
x16	1.000	10.000	-.520	-1.959	-.947	-1.783
x17	1.000	10.000	.169	.636	-.606	-1.140
x18	1.000	10.000	-.004	-.016	-1.043	-1.963
x19	1.000	10.000	.266	1.000	-1.148	-2.160
x15	1.000	10.000	.558	2.100	-.484	-.911
x14	1.000	10.000	-.694	-2.513	-.301	-.567
x13	1.000	10.000	-.241	-.908	-.881	-1.658
x12	1.000	9.000	-.060	-.228	-1.244	-2.342
x8	1.000	10.000	-.217	-.816	-1.009	-1.898
x9	1.000	10.000	.174	.653	-.846	-1.592
x10	1.000	10.000	.052	.194	-1.007	-1.896
x11	1.000	10.000	-1.117	-1.203	.126	.238

Variable	min	max	skew	c.r.	kurtosis	c.r.
x5	2.000	10.000	-1.015	-1.820	1.889	1.555
x6	1.000	10.000	-.436	-1.642	-.795	-1.496
x7	2.000	10.000	-1.037	-1.903	.494	.929
x4	1.000	10.000	-1.094	-2.116	1.961	2.591
x3	2.000	10.000	-1.000	-1.764	2.431	1.574
x2	2.000	10.000	-1.222	-2.499	1.836	2.100
x1	4.000	9.000	-.717	-2.498	.358	.673
Multivariate					68.307	14.410

From the Critacal value, the skewness value ratio shows all the normal distributions because the value is ± 2.58.

Outlier Evaluation

Detection of multivariate outliers is done by noticed to the mahalanobis distance value. The criteria used are based on the Chi-square value on the degree of freedom (degree of freedom) 19, namely the number of indicator variables at the level of significance p <0.000. Mahalanobis distance value x2 (19, 0.001) = 43.82. Table 2 shows the output of the mahalanobis distance from the AMOS 22.0 program. There is no mahalanobis value above 43.82, so there is no outlier in the research data.

Table 2. Mahalanobis distance

Observation number	Mahalanobis d-squared	p1	p2
84	43.812	.000	.040
22	43.803	.001	.002
67	43.778	.001	.000
79	43.695	.001	.000
77	42.786	.001	.000
26	40.516	.003	.000

Observation number	Mahalanobis d-squared	p1	p2
42	5.796	.998	1.000
15	4.557	1.000	1.000
53	4.380	1.000	1.000
57	4.160	1.000	1.000
16	3.944	1.000	1.000
25	2.377	1.000	1.000

Multicolinearity and Singularity Test

This test is done by looking at the determinants of the covariance matrix. If the value is very small, it indicates that there is multicollinearity or singularity. In this case the covariance matrix determinant value is 3.090 or very large / far from zero, it means that there is no multicollinearity and singularity.

Path Analysis (Path Analysis) For Regression Test

This path model is the basic model used to analyze paths (path analysis) to estimate the strength of the causal relationships that described in the model. Analysis of the significance of the path coefficients was researched through the significance of regression weights from the model as below:

Table 3. Regression Weights

			Estimate	S.E.	C.R.	P	Label
Sustainable_Rural_Development	<--	Quality_Of_Service	-.747	1.234	-.606	.245	par_15
Sustainable_Rural_Development	<--	Accessibility	1.060	1.593	2.665	.006	par_16
Sustainable_Rural_Development	<--	Characteristics_Of_Philanthropy	.637	1.218	2.523	.001	par_17
Sustainable_Rural_Development	<--	Competitiveness	.877	.261	3.357	***	par_18

Partial testing can be done for each variable. So, to determine whether a significant or not influence can be seen from column P which is a p-value, compared to the significance level (alpha = α) used as usual 0.05. If the p-value is smaller than 0.05 then Ho is rejected. The second way is to see the value of C.R (Critical Ratio). If C.R is greater than 2.0 then Ho is rejected. From the table above shows the value of p in H1 shows the results above 0.05, which is 0.245 and the value of C.R is smaller than 2.0, which is -0.606 so that it can be said that H1 is rejected. Whereas for H2, H3, and H4 shows the p value is less than 0.05 and the c.r value is greater than 2.0. so it can be said that the hypothesis is accepted.

The direct relationship between the quality of service of the Islamic micro financial institution on the competitiveness of the agriculture and fisheries sector shows a negative relationship with the regression coefficient value of -0.747. This caused by several factors, one of which is the lack of strong interaction between the Islamic micro finance institution and the agricultural and fisheries sector businesses. The results of the regression coefficient value of -0.747 which shows a negative relationship is also reinforced by the opinion of Dusuki (2008) which states that microfinance institutions need innovative approaches in addition to traditional models such as group-based loan programs which proved to be one effective model. Meanwhile Mehmet (2007) argues that even though the growth of the Islamic financial industry was increased, it was not always balanced with the implementation of human resources. Thus, human resources which understands sharia principles and implements it into service and innovation become a necessity for society. Then this affects the level of public trust.

The data above also shows the direct relationship of the accessibility of Islamic micro financial institutions to the competitiveness of the agriculture and fisheries sector shows a significant relationship with the regression coefficient value of 1.060. it means the Islamic micro finance institution contributes significantly to farmers and fishermen. The results of this study reinforce the opinion of Anggraeni, Puspitasari, Ayubbi, & Wiliasih (2013) in which the access of small medium enterprise corporation to Islamic finance at Islamic micro financial institutions is able to increase small medium enterprise corporation profits by 6.21 percent from the average business profit. However, in developing and designing farmers' financing schemes it should be contextual and flexible, it means that microfinance institutions must adapt to local conditions and culture and consider the characteristics of farmers as

users, such as low education, asset support, skills, productivity and ushatani income (Rahayu, 2015).

In the direct relation of the philanthropic characteristics of the Islamic micro financial institution to the competitiveness of the agriculture and fisheries sector shows a significant relationship with the regression coefficient of 0.637 and the direct relationship of competitiveness of the agricultural and fisheries sectors towards sustainable rural development shows a significant relationship with the regression coefficient of 0.877. People believe that the philanthropy or its implementation in the form of zakat, infaq and alms whether it through the Islamic micro finance institution or another *amil zakat* institutions which improves the competitiveness of farmers or fishermen through productive *zakat* programs. Because in theory the effect of *zakat* multipliers has implications for poverty alleviation programs (Arif, 2010). Besides that philanthropy carried out by farmers towards poor families has contributed to the improvement of welfare (Tamim, 2011). So the philanthropy by the community for the community is one of the factors to improve the welfare of the poor which works in the agriculture and fisheries sector so it has an impact on sustainable rural development.

Goodness Of Fit Index

The result of goodness of fit as below:

Table 4: Evaluate the Goodness of Fit Criteria

No	Criteria	The value ofthe recommendations	the results of this model	explanation
	Chi-square (X2)	expected that small X2 with df = 19 is 42.83 * 41.621*	41.621	
	X^2- significance probability	≥ 0.05	0.001	Good
	Relative X2 (CMIN/DF)	≤ 2.00	1.394	Good
	GFI (*Goodness of Fit Index)*	≥ 0.90	0.914	Good
	AGFI (Adjusted *Goodness of Fit Index)*	≥ 0.80	0.925	Good
	Tucker-Lewis *Index* (TLI)	≥ 0.90	0.913	Good
	Normed Fit Index (NFI)	≥ 0.90	0.912	Good
	Comparative Fit Index (CFI)	≥ 0.90	0.223	Good
	Root Mean Square Error of Approximation (RMSEA)	≤ 0.08	0.063	Good

The result of confirmatory factor analysis in the measurement model above shows that the above model is accepted. This shows that the model is fit because all the criteria for goodness of fit are at a good level. This indicates that statistically and theoretically the model built can explain and define the construct.

Conclusion

Based on the results of the study concludes that the service quality of Islamic micro financial institutions on the competitiveness of the agricultural and fisheries sector shows a negative relationship so the hypothesis is rejected. This caused by several factors, one of which is the lack of strong interaction between the Islamic micro financial institution with the agricultural and fisheries sector business actors. While the accessibility of the Islamic micro finance institution and the characteristics of the Islamic micro finance institution indicated a positive relationship so the hypothesis is accepted. The recommendation is the need for synergy between the government and financial institutions, especially Islamic financial institutions in disseminating financial programs to the fisheries sector. So that the hope is to be able to reduce the poverty gap and according to the goals of the SDGs.

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