

Research article

Sustainability of Microfinance Institutions: An Analysis of Influencing Factors in South Sumatra Province

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Abstract: Microfinance has become an important tool for poverty alleviation in many countries and the Indonesian government through various intervention programs to overcome poverty has also implemented microfinance programs in Indonesia, one of which is through the *Kota Tanpa Kumuh* (Kotaku) Program. This study aims to analyze the factors that affect the sustainability of the Financial Management Unit (UPK) Microfinance Institutions (MFI) operating in South Sumatra Province. The purpose of this study is to gain a better understanding of these factors and their sustainability so that they can provide recommendations to stakeholders at both the central and regional levels. The data collection method was used by surveying 50 samples of the UPK Community Self-Reliance Agency (BKM) spread across three cities, namely Palembang City, Prabumulih City and Lubuklinggau City which is the largest city there are UPK BKM microfinance institutions from 7 cities and districts intervened in the Province South Sumatra. The analytical method in this study uses logistic regression to analyze data using descriptive qualitative analysis to explain the factors that influence the sustainability of UPK BKM Microfinance Institutions (MFI) in South Sumatra Province. The results showed that the factors that had a significant effect on the level of sustainability of MFI were BKM support and portfolios at risk.

Keywords: Microfinance Institutions, Sustainability, Kotaku Program, Welfare Program Impact**JEL Classification:** G21, I38, P36

Abstrak: Keuangan mikro telah menjadi alat penting untuk pengentasan kemiskinan di banyak negara dan pemerintah Indonesia melalui berbagai program intervensi penanggulangan kemiskinan juga telah melaksanakan program keuangan mikro di Indonesia, salah satunya melalui Program *Kota Tanpa Kumuh* (Kotaku). Penelitian ini bertujuan untuk menganalisis faktor-faktor yang mempengaruhi keberlangsungan Unit Pengelola Keuangan (UPK) Lembaga Keuangan Mikro (MFIS) yang beroperasi di Provinsi Sumatera Selatan. Tujuan dari penelitian ini adalah untuk mendapatkan pemahaman yang lebih baik tentang faktor-faktor ini dan keberlanjutannya sehingga dapat memberikan rekomendasi kepada pemangku kepentingan baik di tingkat pusat maupun daerah. Metode pengumpulan data digunakan dengan survei terhadap 50 sampel Badan Kemandirian Masyarakat (BKM) UPK yang tersebar di tiga kota yaitu Kota Palembang, Kota Prabumulih dan Kota Lubuklinggau yang merupakan kota terbesar terdapat lembaga keuangan mikro UPK BKM dari 7 kota dan kabupaten yang diintervensi di Provinsi Sumatera Selatan. Metode analisis dalam penelitian ini menggunakan regresi logistik untuk menganalisis data dengan menggunakan analisis kualitatif deskriptif untuk menjelaskan faktor-faktor yang mempengaruhi keberlangsungan UPK BKM MFIS Provinsi Sumatera Selatan. Hasil penelitian menunjukkan bahwa faktor-faktor yang berpengaruh signifikan terhadap tingkat keberlanjutan MFIS UPK adalah Dukungan BKM dan Portofolio berisiko.

Kata Kunci: Lembaga Keuangan Mikro, Keberlanjutan, Program Kotaku, Dampak Program Kesejahteraan

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1. INTRODUCTION

Microfinance institutions have been developing since the late 1990s as an economic development tool designed to benefit low-income communities (Xu et al., 2019). The aim of microfinance institutions as development organizations is to serve the financial needs of underserved or underserved markets to meet development goals such as to create jobs, reduce poverty, help existing businesses grow or diversify their activities, empower women or disadvantaged population groups. others, and encourage new business development. Microfinance institutions globally help the poor to gain access to capital and get out of prolonged poverty (Ayayi, 2012; Valadez & Buskirk, 2011). For many years microfinance presented itself as a useful tool for development by extending financial services to the bottom layer of the pyramid—the poor (Hudak, 2012). Microfinance has attracted a lot of public attention (Beisland et al., 2015). Microfinance institutions target the poor through innovative approaches that include group loans, progressive loans, regular repayment schedules, and collateral substitutes for the poor who have been having difficulty accessing loans from banking institutions due to low levels of income and ownership (Busch et al., 2016). Emerging evidence over the decades has supported the belief that the provision of microfinance is an essential component of any effort to improve the livelihoods of the poor in poor and developing countries (Kakembo et al., 2021; Robert et al., 2021).

Based on the evidence of this success, the Indonesian government through various programs of poverty reduction interventions both in urban and rural areas has also implemented the implementation of the Microfinance program in Indonesia. Government spending in community funding programs has been shown to affect regional poverty inequality and income inequality (Anugra et al., 2016). One of the Microfinance Programs implemented in Indonesia is a revolving loan program which is part of tridaya activities side by side with infrastructure and social development programs under the control of the Ministry of Public Works. This program began to be implemented in 1999 for the Java and Sulawesi regions through the Urban Poverty Reduction Program (P2KP), continued in 2008 and 2009 for all regions of Indonesia through the National Program for the Establishment of Urban Independent Communities (PNPM-MP) and continued with the *Kota Tanpa Kumuh* (Kotaku) Program in 2015 with a total revolving loan capital fund disbursed up to currently reaches Rp. 1.1 trillion (Ministry of PUPR 2019). Research by Das (2015) investigating the microfinance component of a community-run slum improvement program The shanty project in Surabaya, Indonesia, found it benefits institutions, program design, and contextual factors that make microfinance management a challenge for communities regardless of their autonomy and rich experience with physical improvement.

In its implementation, the person in charge of this revolving loan grant is handed over to an institution formed from a village community called the Community Empowerment Agency (BKM) and is managed by a unit under BKM called the Financial Management Unit (UPK) (Suwarno et al., 2019). Until 2008, 10,391 UPKs have been formed throughout Indonesia, which are expected to be access to capital for MSMEs owned by poor families. This is supported by the findings of Nengsih et al., (2015) through the Community Empowerment Program (PNPM) has gradually improved the lower economy of the community without looking at several factors that determine the progress of the program. However, after running for 19 years for P2KP and 11 years for PNPM-MP based on data conditions as of December 2018, there are 72 percent of BKM UPK in Indonesia that are suspended in the sense that they are not running and only 22.4 percent of BKM UPK are still surviving and continue to grow in providing microfinance services to MSMEs owned by the urban poor with a total arrears of Rp. 495 billion (44 percent) of the total funds that have been collected amounting to Rp. 1.4 trillion from all UPK BKM (Ministry of PUPR 2019). During the period until December 2018, the number of groups financed by the revolving loan program reached 14,732 groups or as many as 75,588 MSMEs in South Sumatra Province with the value of capital fertilization from the government's initial capital reaching 25.05 percent or Rp 12.9 billion whose funds have not been rolled out to date.

Although it did not occur in all locations, it is undeniable that the Microfinance program has succeeded in increasing the income levels of the poor in Indonesia, this can be seen from the

appreciation given by international financial institutions such as the World Bank, Islamic Development Bank and other international institutions so that these institutions -the institution increases the amount of assistance related to the development and expansion of microfinance programs for use in poverty alleviation. This is supported by the findings of Hermes (2014) which states that microfinance is the right tool to reduce the income gap between the rich and the poor in developing countries. As such, it appears to have the potential to help the poor directly, as it allows them to be self-employed and play an active role in the economy. In addition, supported by Al-Mamun & Mazumder (2015) the evaluation of the effectiveness of microcredit programs provides an in-depth understanding of the power and direction of government initiatives and strategies as well as institutional mechanisms and welfare programs used to address existing poverty problems. Over the past few decades, microfinance has played an important role in alleviating poverty and empowering economically and socially low-income communities, one study by Kumari et al., (2019) in Sri Lanka.

Millions of people in developing countries have been given access to formal financial services through microfinance programs (Hasan et al., 2021). Nevertheless, potential clients still remain underserved and the demand for financial services far outweighs the supply available today. Given the significant capital constraints, expanding the microfinance program remains a formidable challenge facing the microfinance industry. Research related to the effect of capital on the sustainability of MFIs has been studied by Rai (2012). In addition, the determinants affecting the sustainability of MFIs in different countries have been studied by (Kayembe et al., 2021; Hossain & Khan, 2016; Gashayie & Singh, 2015; Quayes, 2012). Given the large benefits of UPK BKM in the context of business capital for MSMEs owned by low-income people and the problem that microfinance institutions always face is how to determine financial sustainability, it is necessary to study things that affect the sustainability of Microfinance Institutions such as UPK BKM so that the benefits can continue to be enjoyed by the poor and other stakeholders.

2. RESEARCH METHODS

2.1. Data

This study analyzes the factors that affect the sustainability of MFIs in South Sumatra Province with a case study of UPK MSMEs in the Kotaku program using seven variables, namely seven free variables and one bound variable. The dependent variable is UPK BKM MFI, while the independent variable is the amount of capital, the variable amount of UPK Capital, the Number of UPK Personnel, UPK Personnel Incentives, BKM Support, Remote Locations, Number of KSM and Portfolios at risk. The data collection method was used by surveying 50 samples of UPK BKM MFIS spread across three cities, namely Palembang City, Prabumulih City and Lubuklinggau City which is the largest city there is an UPK BKM MFIs from 7 cities and regencies in South Sumatra Province. The data collection technique used in this study was an interview by the researcher with the manager or officer of UPK BKM or BKM Administrator or Assistant Facilitator to obtain concrete and relevant data and information. Furthermore, according to Snyder (2019) literature study is data collection by reading and understanding articles and documents Management Information System Reports, Monthly Reports and Financial Statements on each UPK BKM Kotaku Program. Previous research articles addressed the problem under study as a basis for limitation and troubleshooting.

The sampling technique used is purposive random sampling. Purposive sampling is a sampling technique based on the research objectives and the researcher's policy to select the most relevant or representative samples for a specific research purpose. Purposive sampling can be considered as part of convenience sampling, where respondents are subjectively selected (Klar & Leeper, 2019). The data analysis used in this study is divided into quantitative analysis and qualitative analysis. Methods used to measure qualitative information and statistical methods, which are used to analyze measured or searched data (Fakis et al., 2014), the benefits and advantages of measuring qualitative information from interviews and conducting statistical analysis are explored (Almeida et al., 2017). Qualitative data is presented through a descriptive

method using tabulations to support quantitative data while this quantitative data is processed using Microsoft excel 2007 and IBM SPSS version 20 using logistic regression analysis techniques.

2.2. Model

This study used logistic regression model to predict the dependent variable on a dichotomous scale (Ghozali, 2016). The logit model is considered the most efficient for estimating the model because the logit model has the ability to estimate normal distributions very well and due to the fact that it shows analytical convenience (Kasali et al., 2016). Logit regression is chosen to predict the likelihood of an event or result in a binary situation, that is, a situation where there are two possible outcomes, such as yes or no, success or failure (Menezes et al., 2017). The form of the logistic regression model in this study is as follows:

$$\log \left[\frac{P}{1-P} \right] = \beta_0 + \beta_1 TC + \beta_2 IUPK + \beta_3 NUPK + \beta_4 BKMS + \beta_5 RAL + \beta_6 NKSM + \beta_7 PAR + \varepsilon \quad (1)$$

where, β_0 is intercept is a regression line model (constant), response variable denoted at P is MFIS UPK BKM which has an OSS ratio value of $> 100\%$; and $1 - P$ is MFIS UPK BKM which has an OSS ratio value of $< 100\%$. Meanwhile, the predictor variables is denoted by TC is total capital UPK; IUPK is incentive UPK personnel; NUPK is number of UPK personnel; BKMS is BKM support; RAL is remote area location; NKSM is number of savings group (KSM) served; PAR is portfolio at risk.

3. RESULTS AND DISCUSSION

3.1. Descriptive statistics

All UPK Microfinance Institution respondents from each category of smooth credit return were identified based on the variables UPK capital, number of UPK personnel, UPK personnel Incentives, BKM support, remote locations, number of KSM and portfolios at risk. Table 1 most UPK MFIs have a capital size between Rp.100 to Rp.200 million rupiah, where as many as 89% of MFIs that have problems in sustainability have a capital amount below Rp.200 million, so this shows that the larger the capital, the better the ability to continue the MFI even though it is not expressly visible. With the increase in the amount of capital, the ability to cover expenses and get profits is also getting bigger, but this also demands an increase in the number of SMEs served and the number of UPK officers both in terms of quantity and quality.

Based on the information on the number of personnel in Table 1, as much as 57 percent of UPK MFIs have only one personnel in carrying out the administrative process and serving revolving loan users. Likewise, when viewed in terms of the number of unsustainable UPK, 81 percent only have one UPK officer which is certainly not ideal in terms of numbers considering that UPK's work is very much starting from socializing revolving loans, coaching prospective users related to proposals, selecting proposals, implementing books and financial statements totaling 13 types, collecting, withdrawing and depositing into bank accounts, to doing non-performing loans. In addition to the inadequate number of personnel, the low quality of human resources, frequent personnel changes, and the difficulty of finding personnel who meet the criteria are problems that often occur in all UPK MFIs.

The number of incentives can affect the performance of a worker. As many as 50 percent of UPK SMEs with sustainability problems pay incentives of less than one million rupiah in one year or an average of Rp. 83,000 per month for UPK officers which is of course very inadequate so this will be a problem in terms of work loyalty so there is a potential for SOP not to be implemented which will cause a high level of congestion, at least SMEs that are underserved and do not carry out bookkeeping are at risk of fraud in fund management UPK. The support of BKM institutions in the implementation of UPK MFI activities greatly affects the availability of MFIs. Based on Table 1, as much as 73 percent of sustainable MFIs are supported by BKM and 91 percent of unsustainable MFIs have shown that BKM support is very low. Support from BKM related to the implementation of UPK MFI activities includes verification of proposals, auditing of financial statements for each period, socialization of MFI programs, to handling non-performing loans.

Table 1. Respondents' sustainability patterns based on various variables

Sustainability Categories	Continues		Not Continuing		Freq.	Percent
	Freq.	Percent	Freq.	Percent		
UPK Capital (in millions)						
<Rp.100	8	16%	13	41%	21	26%
100-200	31	63%	15	47%	46	57%
>200-300	8	16%	3	9%	11	14%
>300	2	4%	1	3%	3	4%
Sum	47	100%	32	100%	81	100%
Number of UPK Personnel						
1	20	41%	26	81%	46	57%
2	23	47%	6	19%	29	36%
≥3	6	12%	0	0%	6	7%
Sum	49	100%	32	100%	81	100%
Number of Incentives UPK/ Year						
<1	8	16%	16	50%	24	30%
1-2	6	12%	5	16%	11	14%
>2-3	4	8%	3	9%	7	9%
>3-4	7	14%	2	6%	9	11%
>4	24	49%	6	19%	30	37%
Sum	49	100%	32	100%	81	100%
BKM support						
Already	36	73%	3	9%	39	48%
Do not	13	27%	29	91%	42	52%
Sum	49	100%	32	100%	81	100%
Remote Areas						
Already	0	0%	11	34%	11	14%
Do not	49	100%	21	66%	70	86%
Sum	49	100%	32	100%	81	100%
Number of Underserved KSM						
<30	6	12%	15	47%	21	26%
30-60	11	22%	10	31%	21	26%
>60-80	12	24%	2	6%	14	17%
>80-120	10	20%	3	9%	13	16%
>120	10	20%	2	6%	12	15%
Sum	49	100%	32	100%	81	100%
Portfolio at Risk Value						
≤10%	43	88%	3	9%	46	57%
>10-20%	2	4%	3	9%	5	6%
>20%	4	8%	26	81%	30	37%
Sum	49	100%	32	100%	81	100%

Source: Field data processed, 2019

From the information in Table 1, all UPK MFIs located in remote locations in the category of not millions, the distance to the location makes weak assistance and supervision in strengthening the UPK MFI institutions by the consultant team, on the other hand in remote locations the number of SMEs that are financed is very limited, it is also difficult to find UPK personnel both in terms of quality and quantity when compared to non-remote locations. The amount of KSM served will affect the income of UPK SMEs, based on data, as many as 78 percent of unsustainable UPK SMIs are underserved by KSM figures below 60 KSM, this certainly makes the MFI's ability to cover expenses and fertilize capital due to low income. The problem of high congestion at the

beginning of the implementation of the program which became a trauma for UPK and BKM officers in solving it, the small number of KSM in accordance with the provisions of the program and competition from other program MFIs and banks offering lower services in some areas became the main problems related to the small number of KSM facilitated.

Portfolio at Risk (PAR) describes the amount of funds that have the potential to experience bottlenecks in repayment of loans from KSM that will certainly affect income from UPK. In Kotaku's revolving loan program, the PAR category is divided into 3 groups, namely PAR ≤ 10 percent is included in the satisfactory category, PAR > 10 -20 percent is in the minimum category and PAR > 20 percent is included in the category and is suspended. Based on data from Table 1, as many as 81% of unsustainable UPK MFIs have a PAR of > 20 percent and vice versa those with a million 88 percent have a PAR of ≤ 10 percent. Previously disclosed problems such as the quality and quantity of UPK officers, BKM support, and congestion are the main things related to the high PAR in several MFIs.

3.2. Results

The factors that ensure the sustainability of Microfinance Institutions in South Sumatra Province that will be estimated are UPK Capital, Number of UPK Personnel, UPK Personnel Incentives, BKM Support, Remote Locations, Number of KSM and Risky Portfolios. The response variable in terms consists of two alternative options, namely Continuous MFI (1) and unsustainable MFI (0).

Table 2. Logistic regression analysis results

Variables	Coeff.	S.E.	Forest	df	Prob.	Odds-ratio
TC	0.000	0.000	0.022	1	0.882	1.000
IUPK	0.000	0.000	0.006	1	0.936	1.000
NUPK	2.576	2.340	1.212	1	0.271	13.143
BKMS	3.730***	1.353	7.604	1	0.006	41.674
RAL	-21.587	9843.313	0.000	1	0.998	0.000
NKSM	0.002	0.016	0.010	1	0.920	1.002
PAR	-0.005***	0.002	7.836	1	0.005	0.995
Constant	-2.298	2.515	0.835	1	0.361	0.101
Cox & Snell R Square	0.645					
Nagelkerke R Square	0.873					
H-L Test	4.813 (0.777)					

Note: *, ** and *** represent significance at the levels of 1%, 5% and 10% respectively

Source: SPSS output, 2019

Logit Model

$$\ln\left(\frac{P_i}{1-P_i}\right) = -2.298 + 0.000 TC + 0.000 IUPK + 2.476 NUPK + 3.730 BKMS - 21.587 RAL + 0.002 NKSM - 0.005 PAR \quad (2)$$

Based on the results of processing binary logistic regression analysis data using IBM SPSS Software, the results were obtained as follows, at a confidence level of 95 percent ($\alpha = 0.05$), then the overall test with the omnibus test on this logistic regression model has a value of $P = 0.000$. This suggests that a P value ($0.000 < \alpha$ of 5 percent then rejects H_0 , meaning that there are at least one of the free modifiers that have a noticeable effect or a statistically significant regression model. Or in other words this model is FIT. Based on the chi-square value of $0.000 < (\alpha = 0.05)$ it can be concluded that simultaneously UPK Capital, Number of UPK Personnel, UPK Personnel Incentives, BKM Support, Remote Locations, Number of KSM and Portfolio are at risk, significantly affecting the level of sustainability of Microfinance Institutions in South Sumatra Province.

The Goodness of fit test, which consists of the Hosmer and Lemeshow (H-L) Test, is a test to find out whether the model is in the right form or not (Chomen, 2021). It says it is appropriate if there is no significant difference between the model and its observation value. Where the results of this test show that the p-value (0.777) > 5 percent ($\alpha = 0.05$) then receives H_0 . This suggests that the model is acceptable, and a hypothesis can be made because there is no significant difference between the model and its observation value. The output results on the Cox-Snell R^2 and Nagelkerke R^2 describing the ability of independent variables to describe dependent variables show that as much as 87.3 percent of diversity can be explained by the model, while the rest (12.7 percent) are explained by other factors (variables) outside the models.

3.3. Discussion

The total capital of UPK (TC) has a positive but not significant effect on the sustainability of MFIs. There are several factors that affect the insignificance of UPK's capital in supporting the sustainability of MFIs. The effect of UPK's total capital on MFI sustainability can be limited if the operational scale of the MFI is relatively small. If the MFI has a limited scale, the increase in UPK capital may not have a significant impact on operational activities, customer growth, or service expansion. MFIs often aim to provide financial access to communities underserved by formal financial institutions (Abraham, 2018). Therefore, the sustainability of MFIs is more influenced by their ability to provide affordable and relevant financial services to their customers (Jalil, 2021). Factors such as competitive interest rates, flexibility in loan terms, and good customer service can be more important than UPK's total capital. Although the total capital of UPK may be quite large, it is important to consider how the capital is allocated. If capital is not allocated effectively to improve relevant financial services, innovate products, or increase the overall capacity of MFIs, then the impact on sustainability may be limited. The results of the study are in line with the findings Nengsih et al., (2015).

UPK Personnel Incentives (IUPK) have a positive but not significant effect on the sustainability of MFIs. In MFIs, limited resources must be allocated wisely. When these resources are used to provide incentives to UPK personnel, it means that there are other aspects of MFI operations that may be overlooked. For example, resources that can be used to improve financial access, product development, or customer training can further contribute to the long-term sustainability of MFIs compared to providing incentives to personnel. MFIs often operate in culturally diverse communities. A strong work culture and an intrinsic passion to help communities can be more influential factors on MFI performance and sustainability than financial incentives (Abdul Zalim, 2022). Motivating UPK personnel through a more culture-oriented approach and organizational values can be more effective in the long run. The findings are in line with the results Utami (2017); Beisland et al., (2019); and Godfroid, (2019).

The number of UPK Personnel (NUPK) has a positive but not significant effect on the sustainability of MFIs. MFIs may have limited human resources, both in terms of budget for recruitment of additional personnel and in administrative and managerial capacity to manage larger teams. In this situation, the addition of UPK personnel may not have a significant impact on the sustainability of the MFI if it is not supported by adequate human resources to effectively train, supervise, and coordinate the team. The addition of UPK personnel can increase the capacity of MFIs in providing financial services to customers. However, if operational efficiency is not proportionally improved, an increase in the number of personnel may not contribute significantly to sustainability (Apriono et al., 2021). Efficiency in transaction processing, risk management, and coordination between personnel also needs attention. A larger number of UPK personnel does not guarantee better quality. The sustainability of MFIs is more influenced by the ability and competence of personnel in providing quality financial services. In some cases, an increase in the number of personnel without proper attention to selection, training, and skill development can result in less effective teams and potentially detrimental to MFI sustainability. These results are in line with research Khan & Hossain (2016).

Based on Table 2, BKM support (BKMS) has a positive and significant effect on the sustainability of MFIs. SMEs can provide better access to resources that are important to MFIs,

such as financing, training, and mentoring. Financial support from SMIs can assist MFIs in increasing their capital and liquidity, which is a key factor in operational sustainability (Rahman et al., 2020). In addition, support in the form of training and mentoring from SMEs can help improve the management capacity and expertise of MFIs, contributing to long-term sustainability. BKM can help MFIs expand their networks by involving local communities and related parties (Zubaidah et al., 2023). This can include involvement in community activities, meetings with local businesses, or cooperation with financial and other development institutions. Through BKM support, MFIs can gain access to a wider market, gain new business opportunities, and increase customer confidence (Atmadja et al., 2018). BKM support can help strengthen MFI institutions in terms of policy, governance, and internal supervision. BKM can provide guidelines and guidance in developing good policies and procedures, as well as assist in the development of reporting systems and internal controls. This kind of support can increase MFI transparency, accountability, and professionalism, which is important for building trust and ensuring long-term sustainability.

The location of remote areas (RAL) has a negative but not significant effect on the sustainability of MFIs. Remote area locations often have small populations and limited economies. This can affect the potential of the MFI market in reaching a sufficient number of customers to maintain operational sustainability (Lopez & Winkler, 2018). If the number of potential customers is limited, MFIs may find it difficult to achieve sufficient scale to earn sufficient revenue to operate sustainably. Remote area locations often have infrastructure limitations that affect accessibility and connectivity (Cowie et al., 2020). For example, lack of telecommunication networks, limited transportation, or minimal financial facilities can be obstacles in providing effective and efficient financial services. This limitation can affect the ability of MFIs to run daily operations smoothly and provide adequate services to customers. Remote area locations often have higher risks and higher costs in running operations. For example, higher credit risk due to lack of accessible credit information, higher logistics costs to supply funds and services to remote areas, or higher communication costs to interact with customers in remote locations. This can increase the operational burden of MFIs and reduce their sustainability. This condition is in line with the findings Brown et al., (2018); Fianto et al., (2019); García-Pérez et al., (2020).

The number of KSM served (NKSM) has a positive but not significant effect on the sustainability of MFIs. Increasing the number of KSM served can provide the potential to achieve better economies of scale. With more KSM, MFIs can earn higher income from interest and service fees, which can help in financing their operations. However, the effect of increasing the number of KSMs may not be statistically significant if the additional costs associated with expanding the network and meeting customer needs are not proportional to the revenue generated. With the increasing number of KSMs served, MFIs can experience risk diversification. This diversification can help in reducing credit risk as the loss of one customer or group will not have a major impact on the overall sustainability of the MFI (Rehman et al., 2019). However, the effect of the amount of KSM on sustainability may not be significant if diversified credit risk remains high or if other factors such as poor risk management or low portfolio quality persist. In some cases, the increase in the number of KSMs served may reflect the support and trust given by local communities to MFIs. This support can contribute to long-term sustainability by helping to maintain the operational sustainability of MFIs through active participation from KSM members and encouragement from surrounding communities. However, the effect of the number of KSMs may not be statistically significant if the support of the community is not strong enough or if other factors such as poor management or other internal problems still affect the sustainability of the MFI. This is in line with the findings of research by Pandji et al., (2019); Bengono, (2022); and Siwale & Godfroid, (2022).

Portfolio at Risk (PAR) has a positive and significant impact on the sustainability of Microfinance Institutions. Portfolio at Risk is an important indicator for evaluating the quality of an MFI's credit portfolio. The lower the PAR rate, the better the quality of the portfolio and the smaller the credit risk faced by MFIs (Blanco-Oliver et al., 2021). In the long run, MFIs with low PAR levels tend to have a better ability to collect credit payments, avoid losses, and maintain the liquidity needed to run operations. Thus, a low PAR level can have a positive and significant impact on the sustainability of MFIs. A low PAR level reflects the financial health of MFIs. When PAR levels

remain low, MFIs have a stable income from current credit payments and can use that income to finance their operations, raise capital, and develop services. With sound finances, MFIs can protect themselves from the risk of bankruptcy or significant decline in performance, and thus, maintain long-term sustainability. A low PAR level may indicate the operational efficiency of the MFI. With good credit risk management, MFIs can reduce uncontrolled credit risk, avoid losses, and optimize the use of available resources. These operational efficiencies can contribute to long-term sustainability by increasing profitability, expanding service coverage, or delivering services at a lower cost. In this case, a low PAR level can have a positive and significant influence on the sustainability of MFIs. This is in accordance with research conducted by (Long & Marwa, 2015; Rai, 2012; Le et al., 2020; Bhanot & Bapat, 2015; Mahapatra & Dutta, 2016).

4. CONCLUSIONS

Based on this study, the findings indicate that the total capital of the Financial Management Unit (UPK) has no significant effect on the sustainability of Microfinance Institutions (LKM). This can be caused by several factors. First, although sufficient capital is important for MFI operations, other factors such as risk management, operational efficiency, and access to resources and markets may have a more dominant role in influencing MFI sustainability. On the other hand, the findings show that support from the Community Self-Reliance Agency (BKM) has a positive and significant effect on the sustainability of the MFI. This shows the important role of BKM in supporting MFIs financially, technically and socially. Support from the BKM can increase the MFI's access to resources, training, and networks that can improve the quality of the MFI's services and operations. So, it is necessary to increase cooperation between MFIs and BKM through funding and training programs, providing technical assistance, and cooperation in expanding the range of MFI services. In the case of remote locations, the findings show that even though it has a negative impact on MFI sustainability, the impact is not statistically significant. This may be due to the complexity of the challenges faced by MFIs in remote areas, such as limited market access, poor infrastructure, and limited resources. It is important to consider the special needs of MFIs in remote locations and provide appropriate support, such as infrastructure investments, expanding access to financial services, and incentive programs to encourage MFI sustainability in the area.

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