

## Dinamika Ekonomi: Jurnal Kajian Ekonomi dan Pembangunan

Vol. XIV, No. II, 2023, pp. 81-90

Journal homepage: <a href="https://bit.ly/dinamika\_ekonomi">https://bit.ly/dinamika\_ekonomi</a>

# Effectiveness Of MSMEs Financing To Poverty Allevation In Developing Countries And Opportunities To Reduce Poverty Due To Covid-19: Experience From Indonesia

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https://doi.org/10.29313/de.v14i2.11714

Received: 22/03/2023 Accepted: 31/03/2023

**Keywords:** UMKM Lending, Poverty Aleviation, Developing Countries, Effectiveness, Covid-19

## **ABSTRACT**

This article attempts to describe the effectiveness of the MSME loan program for reducing poverty in developing countries and the opportunities for MSME credit to reduce poverty due to Covid-19 based on experience in Indonesia. The existence of Covid 19 at the end of 2019 made the economy in developing countries including Indonesia even worse. One of the assistance programs to reduce poverty in Indonesia is a special loan fund for micro, small and medium enterprises. The research methodology used is quantitative-descriptive with the Panel Vector Error Correction Model (P-VECM) approach. The data used are MSME loan data and poverty rates in 34 provinces in Indonesia obtained from Bank Indonesia and the Indonesian Central Bureau of Statistics. The results of this study found that MSME loans have a long-term and short-term relationship with poverty reduction. In addition, MSME loans also have a great opportunity to help minimize poverty due to Covid-19.

#### 1. INTRODUCTION

According to (Todaro, Michael P; Smith, 2015), the financial sector plays an important role for the development of developing countries, one of which is to overcome the problem of poverty by providing microfinance. Microfinance is one way to overcome poverty because microfinance provides credit loan services, savings services and other basic financial services that are easily accessible to the poor. Poverty is a major development problem in developing countries, so even in the SDGs, poverty is the first goal so that sustainable development can be implemented. A large population is one of the problems of most developing countries because it turns out that the large population in developing countries is not matched by the available jobs. This condition is exacerbated by the presence of Covid-19 where economic activity is not running as it should, so companies in developing countries need to minimize production costs by laying off employees and/or terminating employment. As a result, many new poor people because of Covid-19. This also makes poverty in developing countries increase, including Indonesia. If you look at historical poverty data according to data from the Indonesian Central Bureau of Statistics for the 2013-2019 period, the average poverty rate in Indonesia has fallen by 11%. However, due to Covid-19, poverty in Indonesia in 2020 will increase by 11.15%. The reduction in poverty prior to Covid-19 was inseparable from various kinds of poverty alleviation programs carried out by various parties, both by the government and by NGOs. Poverty alleviation programs in Indonesia, one of which is the existence of a microfinance program through credit loans. Microcredit loans in Indonesia that are well-known and provided by Indonesian banks are People's Business Credit (KUR) and Micro, Small and Medium Enterprises (MSMEs) loans. Even though the goals and objectives of these programs are the same, namely to help micro-finance the vulnerable poor, these two programs have differences starting from the implementers and the terms and conditions for granting credit. For more details regarding this difference can be seen in Table. and Medium Enterprises (MSMEs). Even though the goals and objectives of these programs are the same, namely to help micro-finance the vulnerable poor, these two programs have differences starting from the implementers and the terms and conditions for granting credit. For more details regarding this difference can be seen in Table. and Medium Enterprises (MSMEs). Even though the goals and objectives of these programs are the same, namely to help micro-finance

the vulnerable poor, these two programs have differences starting from the implementers and the terms and conditions for granting credit. For more details regarding this difference can be seen in Table.

Table 1. Differences in Business Credit and Business Credit, Micro, Small and Medium Enterprises in Indonesia

No.	Component	People's Business Credit (KUR)	Micro, Small and Medium Enterprises (MSMEs) Loans	
1.	Executing Bank	Government Owned Bank	Private Banks or Government Banks	
2.	The initial year of loan implementation	2007	2008	
3.	Guarantee Agency	PT. Jamkrindo and PT. Askrindo	Private Banks or Government Banks lending	
4.	Credit limit	20 million rupiah – 2 billion rupiah	5 million rupiah – 100 million rupiah	
5.	Credit Recipient Terms	a. Collateral: Collateral is very dependent on the loan being applied for (business being run, vehicle, land or building).	<ul><li>a. Collateral: Collateral for physical assets (vehicles, land or buildings).</li><li>b. Business Age: at least 2 years of</li></ul>	
		<ul><li>b. Business Age: at least 6 months of business experience.</li><li>c. In applying for credit, it does not require a Tax Principal Number (NPWP)</li></ul>	business experience. c. In applying for credit, you must have a Taxpayer Identification Number (NPWP).	

Source: Processed by Researchers

In the table it can be seen that MSME credit has a wider reach, namely including state-owned banks and private-owned banks, so in this article the focus of the credit loan program studied is the MSME credit program. The question is, is microfinance effective in overcoming poverty in developing countries, especially in the case of Indonesia, which has a large population? If so, how big is the effectiveness in terms of the amount of influence and shock? Can the amount of influence and shock given provide opportunities under any circumstances, including reducing poverty due to Covid-19? This article attempts to answer these questions based on the Indonesian experience. This study is important because it turns out that previous research has shown that there have been no specific studies related to microfinance and poverty associated with Covid-19. In fact, what has been widely studied is the role of micro, small and medium enterprises which are able to help reduce poverty by creating jobs. Research like this has been carried out by bisuga-Oyekunle et al., 2020; Duarte, 2004; Fishha & Oyelana, 2015; Geremewe, 2018; Hossain et al., 2018; Kowo et al., 2019; Maksimov et al., 2017; Ndubisi et al., 2020; Nursini, 2020; Oyelana & Adu; Asikhia, 2010; Osemene, OF, Salman, RT, & Kolawole, 2017. Even though microfinance and MSMEs are actually directly related, in-depth studies are needed regarding microfinance, poverty reduction with Covid-19 to provide a comprehensive picture of how effective microfinance programs are in reducing poverty and how far these programs can overcome poverty. Or in other words, this study is proof of Todaro's statement (20...) which states that microfinance programs can help reduce poverty in developing countries. This study will strengthen whether microfinance can reduce poverty in various conditions or there are exceptions (such as with Covid-19). This study is proof of Todaro's statement (20...) which states that microfinance programs can help reduce poverty in developing countries. This study will strengthen whether microfinance can reduce poverty in various conditions or there are exceptions (such as with Covid-19). This study is proof of Todaro's statement (20...) which states that microfinance programs can help reduce poverty in developing countries. This study will strengthen whether microfinance can reduce poverty in various conditions or there are exceptions (such as with Covid-19).

## 2. LITERATURE REVIEW

This section explains in detail the linkages between economic development, micro, small and medium enterprises (MSMEs), microfinance, poverty reduction, and Covid-19 based on the existing literature. It is important to provide an overview of the research position in this article. Micro, small and medium enterprises (MSMEs) have an important role in the economic development of a country (Aladin et al., 2018; Duarte, 2004; Lopes de Sousa Jabbour et al., 2020; Ndubisi et al., 2020). The results of the study (Woźniak et al., 2019) show that there is a positive relationship between MSMEs and economic conditions (reflected by the condition of gross domestic income). Likewise with research (Aladin et al., 2018). (Aladdin et al., 2018) states that when the number of MSMEs changes by 1 percent in the past 1year, economic changes will be followed in a positive direction. This condition is of course on condition that all challenges in MSMEs can be handled properly. In reality, MSMEs are still facing challenges such as lack of capital resources, difficult market access, business skills, and others (Fiseha & Oyelana, 2015). To deal with these challenges, the government can provide incentive policies or special programs to support MSMEs that are more advanced and sustainable (Lopes de Sousa Jabbour et al., 2020). Sustainable MSMEs can be strengthened by strengthening the entrepreneurial spirit of MSME owners so that

MSME productivity also increases and in the end the income and welfare of the community also increases (Duarte, 2004; Ndubisi et al., 2020). There is a positive relationship between MSMEs and the economy which ultimately helps in overcoming existing poverty problems. MSMEs create jobs (Abisuga-Oyekunle, Patra, & Muchie, 2020; Duarte, 2004; Fiseha & Ovelana, 2015; Geremewe, 2018; Hossain, Siddique, & Jamil, 2018; Kowo, Adenuga, & Sabitu, 2019; Maksimov, Wang, & Luo, 2017; Ndubisi, Zhai, & Lai, 2020; Nursini, 2020; Oyelana & Adu, 2015) and provide opportunities for the poor to earn income to meet their needs. MSMEs are considered capable of solving the problem of poverty through increasing production capacity produced by MSMEs themselves, so that the higher the production, the higher the income earned (Asikhia, 2010). The income generated from MSMEs is very significant in overcoming poverty (Osemene, OF, Salman, RT, & Kolawole, 2017). That way, greater income guarantees the poor rise from poverty (Maksimov et al., 2017; Oyelana & Adu, 2015). MSMEs have helped young people get out of unemployment status, by creating job opportunities (Osemene, OF, Salman, RT, & Kolawole, 2017; Oyelana & Adu, 2015). The more jobs that are absorbed, the fewer people who are below the poverty line (Nursini, 2020). Even, research conducted in Tanzania found evidence that MSMEs help alleviate poverty problems, namely through income that serves to meet needs and can increase living standards. There is an increase in living standards, proving that poverty is reduced (Anderson & Mdemu Komba, 2017). Factors that can overcome poverty from the MSME side, namely: entrepreneurial performance, entrepreneurship education, and access to credit loans. When the level of entrepreneurship education is high, entrepreneurial performance is also high, and this has a major effect on the level of poverty alleviation (Maziriri & Chivandi, 2020). In addition to strengthening entrepreneurship, MSMEs can also be more effective in reducing poverty with microfinance assistance. This is because microfinance can help in creating new and sustainable entrepreneurs (Ayyagari, Beck, & Hoseini, 2020). (Development, 2004) states that microfinance can effectively create MSME financial sustainability. According to (Erlando, Riyanto, & Masakazu, 2020), financial sustainability will be created when financial services and products can be accessed and used easily and effectively (financial inclusion). (Claessens & Feijen, 2007) states that this financial inclusion can create jobs, increase investment in human resources, increase consumption. (Erlando et al., 2020) stated that financial inclusion has a strong relationship with poverty reduction. These studies are in accordance with the views of development economists (Todaro, Michael P;Smith, 2015) which states that microfinance can reduce poverty. Meanwhile, regarding the relationship between microfinance and poverty reduction, there are scholars who find the opposite, namely that microfinance actually has less impact on reducing poverty. The results of the study (Han, Wang, & Ma, 2019) show that microcredit does not have a positive impact on reducing poverty. This is because borrowers are less effective in using loans to create added value. Meanwhile, according to research (Ndlovu & Toerien, 2020), increased access to formal financial services has a limited effect on improving the wealth condition of poorer members of society, and may even result in widening inequality. related to the relationship between microfinance and poverty reduction, there are scholars who find the opposite, namely that microfinance actually has less impact on reducing poverty. The results of the study (Han, Wang, & Ma, 2019) show that microcredit does not have a positive impact on reducing poverty. 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Even though MSMEs can help in the economic development of a country. However, in 2019, the world was faced with the Covid-19 pandemic. This certainly has an impact on the economies of countries in the world, including developing countries. Several developing countries such as in Ibero-America or Africa experienced an

economic depression when the Covid-19 pandemic took place. MSMEs in Latin America and Carbia are at risk of bankruptcy (Kashyap & Raghuvanshi, 2020). Likewise, the impact that has hit African countries, such as disruption of global supply chains, reduced demand, and the decline in commodity prices is the beginning of increasing poverty and economic inequality (Dzigbede & Pathak, 2020). The government implemented a lockdown policy which had an impact on shrinking economic activity. However, without this policy, the spike in cases of the Covid-19 virus may continue to increase (Ashfaq & Bashir, 2020). Almost all countries find it difficult to provide policies that are able to overcome both. MSMEs face the risk of bankruptcy due to constant expenses without additional income, or even not receiving income during a pandemic, which causes a rupture in the capital chain (Lu, Wu, Peng, & Lu, 2020). The existence of the Covid-19 pandemic forced business transactions to focus on online transactions. This certainly has an impact on MSMEs or companies that require adaptation to technology, as well as the use of the required capital. The case of MSMEs in Zimbabwe, recycling durable machines for low-income customers and as a form of business innovation in surviving the pandemic (Manyati & Mutsau, 2021). Besides that, This condition with the existence of Covid-19 has resulted in the condition of poverty getting worse. In addition to the disrupted economy creating new poverty, it turns out that existing conditions of poverty can encourage a higher rate of spread of the Covid-19 virus (Bargain & Aminjonov, 2021; Bhayani et al., 2020). The poor tend not to comply with social distancing policies (Bhayani et al., 2020; Wright, Sonin, Driscoll, & Wilson, 2020). This is motivated because the poor have demands to fulfill their basic needs, in order to survive. Judging from the increase in work mobility, the poor prefer to continue work activities in this pandemic situation (Bargain & Aminjonov, 2021). The Covid-19 pandemic can cause poor households to become even poorer or fall into extreme poverty (Luo et al., 2020). That way, the poor face two choices: Dare to be exposed to the virus to meet their needs or be exposed to increasingly extreme poverty by remaining silent. Not everyone is aware of the increasing economic inequality that occurred during the Covid-19 pandemic. This has an impact on government policy, where more and more people are aware of the increasing inequality and poverty during the Covid-19 era, the greater the support for government intervention to overcome this downturn (Wiwad, Mercier, Piff, Shariff, & Aknin, 2021). The solution to addressing the problem of poverty in the midst of Covid-19 is with socio-economic assistance (Bargain & Aminjonov, 2021) or stimulus benefits for the unemployed (Wright et al., 2020). If you look at the studies that have been conducted, there is no research related to the effectiveness of MSME financing assistance and its opportunities for reducing poverty during the Covid-19 period. Therefore, this research is important to be conducted to provide a detailed description for MSME financing assistance providers, to what extent they need to provide MSME financing assistance in the context of reducing poverty due to Covid-19. To examine this, the research hypothesis used is the view (Todaro, Michael P; Smith, 2015) which states that microfinance can reduce poverty. This means that microfinance has a positive relationship with poverty reduction.

#### 3. METHODOLOGY

In the theory of development economics, microfinance and poverty reduction have a unidirectional relationship, so the study hypothesis is the development of MSME credit (Net Expansion/NE and Outstanding Credit/OC variables) can affect poverty reduction (POV) in Indonesia. To see how far the long-term and short-term effects of these two variables are, Panel - Vector Error Correction Models were used in this study. The data used is MSME credit development data for 34 provinces in Indonesia for the period September 2012 - September 2018 sourced from Bank Indonesia and poverty data for 34 provinces in Indonesia for the same period sourced from the Central Bureau of Statistics. The VECM procedure used is the unit root test, cointegration test, estimation and model feasibility test.

#### 4. RESULT AND DISCUSSION

In this section, the results of testing between variables are discussed. As for the tests carried out using unit roots tests or data stationarity (requirement test), the estimation results used are the P-VECM estimation results. For a detailed explanation, it is explained as follows:

## 4.1 Unit roots test, Optimum Lag Test, Model Stability Test

The unit root test is carried out to see what level the stationary panel data is at. The unit roots test can be carried out using the Augmented Dickey-Fuller method, namely by comparing the Augmented Dickey-Fuller probability value with the value of  $\alpha$  (0.05). If the p-Value < 0.05 then the data is said to be stationary. This test is needed so that the model produces unbiased or skewed regression. Based on the results of the unit roots test,

the three variables namely Poverty (pvr), Outstanding Credit (oc), and Net Expansion (ne) are stationary at the 1st level of differentiation.

Table 2. The results of the Augmented Dickey-Fuller Test at the 1st level of differentiation

Variable	p-Value ADF - Fisher Chi-square	95% confidence level ( $\alpha = 5$ %)	Information
PVR	0.0000	0.05	Stationary on Difference I
OC	0.0000	0.05	Stationary on Difference I
NE	0.0000	0.05	Stationary on Difference I

Determination of the number of lags in the model is determined by the information criteria recommended by the smallest value of Final Prediction Error (FPE), Akaike Information Criterion (AIC), Schwarz Criterion (SC), and Hannan-Quinn (HQ). The Eviews program has indicated an asterisk for the lag that is determined as the optimum lag. The results of the optimum lag test show that almost all the asterisks are at lag 8. Therefore, lag 8 is defined as the optimum lag and is used at all stages in the subsequent analysis.

Table 3. Optimum Lag Test Results

lag	LogL	LR	FPE	AIC	SC	HQ
1	-3741413	NA	1.11e+16	45.45955	45.62897	45.52832
2	-3704,979	70.21763	7.96e+15	45.12702	45.46585	45.26456
3	-3587569	222.0119	2.14e+15	43.81296	44.32121	44.01927
4	-3518.294	128.4744	1.03e+15	43.08235	43.76001	43.35743
5	-3499046	34.99502	9.11e+14	42.95814	43.80521	43.30200
6	-3454,745	78.93627	5.95e+14	42.53025	43.54674*	42.94288
7	-3439,131	27.25412	5.50e+14	42.45007	43.63598	42.93148
8	-3412,834	44.94390*	4.47e+14*	42.24041*	43.59574	42.79059*

After carrying out the optimum lag test, it is continued with the VAR stability test to analyze further, because if the VAR estimation results which will be combined with the error correction model are unstable, the Impulse Response Function and Variance Decomposition will be invalid. To test whether the VAR estimation is stable or not, a check on the VAR stability condition is carried out in the form of a roots of characteristic polynomial. According to Gujarati (2003), a VAR system is said to be stable if all of its roots have a modulus smaller than one.

Table 4. Model Stability Test Results

roots	Modulus
0.903130	0.903130
-0.878168	0.878168
-0.053039 - 0.390808i	0.394391
-0.053039 + 0.390808i	0.394391
-0.322451	0.322451
0.178345	0.178345

In addition to looking at the root and modulus numbers, to see the stability of the model, you can also look at the root distribution shown in figure 1. The stability of the model is shown by the distribution of dots in a circle.

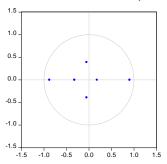


Figure 1. model stability

## 4.2 Ganger Causality Test

The Ganger Causality Test was used to see the direction of the relationship between the NE, OC, and POV variables. Whether there is a relationship can be seen from the probability value of each causality test which is then compared with an alpha of 0.05 or an alpha of 0.1. From the Ganger quality test, it can be seen that some of the variables have a causal relationship (p-value  $<\alpha$ ). This means that the variable has the possibility of being the dependent variable (influenced variable).

Table 5. of Ganger Causality Test Results

Null Hypothesis (Ho)	P-values	Test result	Causality Relations
OC does not Granger Cause POV	4.E-05	Reject Ho	There is a relationship
POV does not Granger Cause OC	6.E-07	Reject Ho	There is a relationship
NE does not Granger Cause POV	0.1040	Reject Ho	There is a relationship
POV does not Granger Cause NE	0.0003	Reject Ho	There is a relationship
NE does not Granger Cause OC	0.0107	Reject Ho	There is a relationship
OC does not Granger Cause NE	3.E-07	Reject Ho	There is a relationship

#### **4.3 Cointegration Test**

The cointegration test can be carried out using the Johansen method. Based on the results of the Johansen test, the value of the Trace Statistics from the Trace test and the maximum eigenvalue is greater than the critical value at alpha 0.05, which means that in the system there is one cointegrated equation.

Table 6. Johansen Test Cointegration Test between POV, OC, NE

Unrestricted Cointegration Rank Test (Trace)						
Hypothesized No. Eigenvalue		Trace Statistics	0.05 Critical Value	Prob.**	Cointegration Test	
of CE(s)					Results	
None *	0.237693	60.94975	24.27596	0.0000	There is Cointegration	
At most 1 *	0.091471	16.16770	12.32090	0.0108	There is Cointegration	
Un	restricted Coint	EGration Rank Test (Ma	aximum Eigenvalue)			
Hypothesized No.					Cointegration Test	
of CE(s)	Eigenvalue	Max-Eigen Statistics	0.05 Critical Value	Prob.**	Results	
None *	0.237693	44.78205	17.79730	0.0000	There is Cointegration	
At most 1 *	0.091471	15.82818	11.22480	0.0073	There is Cointegration	

Cointegration testing through the Johansen Cointegration Test shows that the four variables, namely POV, OC, and NE, have a long-term or cointegrated relationship. Thus in this study applied VECM panel analysis.

## 4.4 Panel Estimation Results of Vector Error Correction Model between POV, OC, NE

The VECM panel estimation results to see long-term effects can be seen in the following table.

Table 7. Panel VECM Estimation Results

System: UNTITLED

Estimation Method: Least Squares Date: 02/23/23 Time: 11:25 Samples: 2013S2 2018S2 Included observations: 374

Total system (balanced) observations 1122

	coefficient	std. Error	t-Statistics	Prob.
C(1)	-0.017294	0.001731	-9.993372	0.0000
C(2)	0.033778	0.044981	0.750928	0.4529
C(3)	-0.413402	0.041763	-9.898773	0.0000
C(4)	-0.017830	0.001843	-9.676053	0.0000
C(5)	-0.018828	0.001822	-10.33361	0.0000
C(6)	0.010805	0.001472	7.338499	0.0000
C(7)	0.004245	0.001497	2.836606	0.0046
C(8)	-55.42492	6.900439	-8.032086	0.0000
C(9)	0.024332	0.053760	0.452609	0.6509
C(10)	-4.115755	1.397389	-2.945319	0.0033
C(11)	-11.01577	1.297405	-8.490621	0.0000
C(12)	-0.826162	0.057245	-14.43213	0.0000
C(13)	0.182369	0.056601	3.221999	0.0013
C(14)	0.144001	0.045741	3.148170	0.0017
C(15)	-0.259185	0.046492	-5.574844	0.0000
C(16)	97.84174	214.3688	0.456418	0.6482
C(17)	1.099959	0.055495	19.82087	0.0000
C(18)	0.211315	1.442486	0.146494	0.8836
C(19)	12.32258	1.339276	9.200925	0.0000
C(20)	0.343581	0.059092	5.814338	0.0000
C(21)	0.310326	0.058428	5.311252	0.0000
C(22)	-0.014099	0.047217	-0.298598	0.7653
C(23)	-0.354398	0.047992	-7.384465	0.0000
C(24)	3682,858	221.2871	16.64290	0.0000
Determinant residual covariance		1.47E+17		

Equation: D(NE) = C(9)\*(POV(-1) - 0.334260838779\*NE(-1) +0.0475660753483\*OC(-1) - 3292.35289802) + C(10)\*D(POV(-1)) +C(11)\*D(POV(-2)) + C(12)\*D(NE(-1)) + C(13)\*D(NE(-2)) +C(14)\*D(OC (

-1)) + C(15)\*D(OC(-2)) + C(16)

Observations: 374

R-squared	0.927469Mean dependent var	227.9909
Adjusted R-squared	0.926081SD dependent var	8857978
SE of regression	2408,304Sum squared residue	2.12E+09
Durbin-Watson stat	1 449190	

Durbin-Watson stat 1.449190

Equation: D(OC) = C(17)\*(POV(-1) - 0.334260838779\*NE(-1) +0.0475660753483\*OC(-1) - 3292.35289802) + C(18)\*D(POV(-1)) +C(19)\*D(POV(-2)) + C(20)\*D(NE(-1)) + C(21)\*D(NE(-2)) +C(22)\*D(OC (

-1)) + C(23)\*D(OC(-2)) + C(24)

Observations: 374

R-squared	0.903646Mean dependent var	2592138
Adjusted R-squared	0.901804SD dependent var	7933375
SE of regression	2486028Sum squared residue	2.26E+09
Durbin-Watson stat	2.074108	

In the table of estimation results it can be seen the sign and significance of c1. The results of data processing show that c1 is significant and has a negative sign. This shows that in the long run the development of MSME credit can affect poverty. Meanwhile, to see the effect in the short term, the estimation results can be seen in the following Wald test results.

Tabel 8. Wald Test Result

Wald test:

System: %system

Test Statistics	Value	df	probability
Chi-square	145.1881	4	0.0000

The estimation results show that the probability is smaller than the value  $\alpha = 0.05$ , namely 0.000 < 0.05. This means that the development of MSME credit has a short-term effect on poverty.

## 4.4 Feasibility Test of the Vector Error Correction Model Panel Model between POV, OC, NE

The validity of this VECM model can be seen from the results of the Portmanteau test where the test results that have a p-value > 0.05 are more dominant. For more details regarding the results of the feasibility test of the VECM panel model, see the following table.

Table 9. portmanteau test results

lags	Q-Stat	Prob.	Adj Q-Stat	Prob.	df
1	7.211537		7.255510		
2	28.67928		28.98666		
3	33.40837		33.80333		
4	35.07776		35.51419		
5	35.07776		35.51419		
6	35.07776		35.51419		
7	35.07776		35.51419		
8	35.07776	0.0024	35.51419	0.0021	15
9	35.07776	0.0673	35.51419	0.0611	24
10	35.74906	0.3405	36.22881	0.3204	33
11	39.35262	0.5878	40.08976	0.5551	42
12	47.36119	0.6190	48.72646	0.5644	51
13	61.36546	0.4268	63.92846	0.3403	60
14	82.96680	0.1204	87.53257	0.0654	69
15	100.5229	0.0440	106.8443	0.0168	78
16	116.2829	0.0197	124.2966	0.0054	87
17	123.1330	0.0324	131.9335	0.0088	96
18	124.5416	0.0937	133.5146	0.0316	105
19	124.5416	0.2353	133.5146	0.1023	114
20	124.5416	0.4442	133.5146	0.2437	123
21	124.5416	0.6652	133.5146	0.4468	132
22	124.5416	0.8367	133.5146	0.6606	141
23	124.5416	0.9362	133.5146	0.8290	150
24	125.4422	0.9770	134.5686	0.9206	159
25	129.7327	0.9873	139.6252	0.9461	168
26	145.9822	0.9573	158.9142	0.8316	177
27	154.9539	0.9529	169.6412	0.7994	186
28	160.9628	0.9642	176.8782	0.8196	195
29	171.0295	0.9551	189.0915	0.7654	204
30	175.6563	0.9709	194.7465	0.8101	213

#### Discussion

The estimation results show that there are short-term and long-term effects of MSME credit development on poverty reduction. These results are in line with the thinking(Todaro, Michael P;Smith, 2015)which states that microfinance can help reduce poverty in developing countries. But of course, the influence of MSME financing can affect poverty if the

existing MSMEs are productive and can be competitive. Based on MSME loan data for the 2014-2019 period, to see the effectiveness of MSME loans in reducing poverty in Indonesia, the measure used is a comparison of poverty targets and realization. Based on the 2010-2014 National Medium Term Plan Document (RPJMN) and the 2015-2019 National Medium Term Plan Document (RPJMN), the average annual target for reducing poverty in Indonesia is 7.5 percent. Meanwhile, the realization of poverty reduction in Indonesia during the MSME lending period, namely 2013-2019, Indonesia's poverty decreased by an average of 11 percent. Based on this data, the value of the effectiveness ratio is 147 percent. This figure shows that the MSME loan program that has been implemented is classified as very effective in reducing Indonesia's poverty for the 2013-2019 period.

#### 5. CONCLUSIONS

MSME financing in Indonesia has been effective and proven to have a long-term and short-term effect on reducing poverty in Indonesia. This is certainly a big opportunity for Indonesia where MSME financing can help recover the Indonesian economy from Covid-19.

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