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IMPACT OF MONETARY POLICY ON POVERTY LEVELS IN FIVE ASEAN COUNTRIES

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Abstract

The purpose of this study is to find leading indicators of poverty rates based on monetary policy in the five ASEAN countries with the highest poverty rates in 2019. This study uses secondary data in the type of panel data, with time-series data starting from 2005 to 2019, and the object of the research country is Indonesia, Laos. PDR, Myanmar, Philippines, and Thailand. Using the ARDL Panel model, the estimation results found interest rates and exchange rates to affect the poverty rate in the long-term in five ASEAN countries, while the exchange rate and the money supply affect in the short term. The leading indicator of poverty levels in the five ASEAN countries from the money supply variable, because the results are significant in all observed countries except in Lao PDR and Indonesia.

Keywords: Poverty Rate, Monetary Policy and ASEAN.

I. INTRODUCTION

The big problem faced and has not been resolved to date by developing countries is poverty. The difficulty of handling poverty is seen from the level of the number of poor people or the extent of an area experiencing inequality, so that the higher the number of poverty rates, the higher the number of difficulties in overcoming them. Poverty itself is the main factor that hinders the process of economic development. In essence, economic development aims for the welfare of the community by increasing the distribution of people's income and economic growth in a country. In addition, with equitable development and expanding employment opportunities can also reduce poverty.

The experience of the 1998 crisis in Indonesia and then the 2008 financial crisis that hit various countries in the world, including Indonesia due to the subprime mortgage case in the United States, had a significant impact on the economy. Poverty alleviation and development programs are hampered. This is no exception also felt by countries in ASEAN. The following is a list of countries with the highest poverty rates in ASEAN in 2019:

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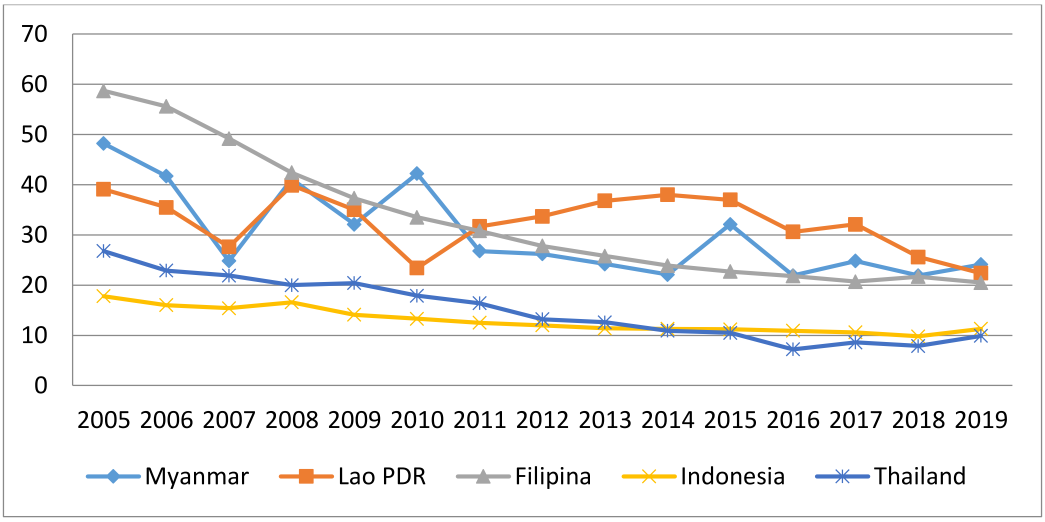
Table 1. ASEAN Poverty Rate, December 2019 (%)

ASEAN Country	Poverty Level
Myanmar	24.1
Lao PDR	22.4
Filipina	20.5
Indonesia	11.3
Thailand	9.9
Vietnam	8
Malaysia	3.8
Singapore	0.9
Kamboja	0.3
Brunei Darussalam	0.1

Sorce : (Indexmundi.com, 2020)

Based on table 1, it is known that of the ten countries in ASEAN there were five countries with the highest poverty rates at the end of 2019, namely Myanmar, Lao PDR, Philippines, Indonesia, and Thailand. The cause of poverty is the lack of policy coordination in dealing with poverty in each country, besides that it is also triggered by the increase in the price of rice and fuel oil (BBM). Myanmar is the country with the highest poverty rate in ASEAN with a percentage of 24.1%, followed by Lao PDR at 22.4%, the Philippines at 20.5%, Indonesia 11.3%, and Thailand at 9.9%.

Figure 1. Poverty Levels of Five ASEAN Countries, 2005 – 2019



Source : (WorldBank)

From 2005-2019 the percentage of poverty rates in the five ASEAN countries fluctuated every year. Only the Philippines and Thailand were able to reduce the poverty rate significantly each year from 58.7% in 2005 to 20.5% in 2019 in the Philippines, and from 26.8% in 2005 to 9.9% in 2019 in Thailand.

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In 2008 the poverty rate in Lao PDR, Indonesia and Myanmar experienced an increase. The Poverty Rate of Lao PDR is 39.9% higher than the previous year. Indonesia with a poverty rate of 16.6% higher than the previous year and Myanmar with a very high poverty rate of 41.1%. However, the Philippines and Thailand were able to reduce poverty at that time. This percentage increase is the impact of the global economic crisis. In 2008 the Global Financial Crisis occurred, namely the collapse of the financial system originating from the United States so that it affected all regions of the world.

Thus, there must be a policy taken by the government in dealing with poverty. Various efforts and policies have been and are being carried out, but monetary policy is a modern instrument that is recognized as being effective in managing the economy (Datumbanua, 2014). According to (Budiantoro & Saputra, 2013) that monetary policy can affect poverty, by maintaining monetary policy will affect economic growth and inflation which will later affect the poverty rate. However, in research (Goshit PhD & Longduut, 2016) that monetary policy is ineffective and inadequate to reduce poverty in Nigeria. In this country monetary policy is not able to move alone in overcoming poverty. The existence of this research gap, finally the author is interested in examining how the influence of monetary policy on poverty levels in five ASEAN countries, namely Myanmar, Lao PDR, Philippines, Indonesia, and Thailand.

II. LITERATURE REVIEW

1. Vicious Circle of Poverty

The vicious circle of poverty is a series of forces that influence each other, giving rise to a situation where a country, especially a developing country, has many problems to achieve higher development. This theory says that a country is poor because the country is basically poor. This theory is a concept that controls a circular relationship of resources that tend to influence each other so as to place a poor country constantly in an atmosphere of poverty. In other words, this vicious circle is like a circle that has no end, so it will continue to rotate in the same circle. This theory tries to explain the causes of poverty from an economic perspective, namely:

a. On a macro level, poverty arises because of unequal ownership of resources which causes inequality in income distribution, where the poor only have limited resources and low quality.

b. Poverty arises because of differences in the quality of human resources. The low quality of human resources results in low production, which in turn lowers wages. The low quality of human resources is caused by low education, disadvantaged fate, discrimination or due to heredity.

c. Poverty arises because of differences in access to capital.

The three causes of poverty are based on the Vicious Circle Of Povety theory proposed by (Nurkse, 1953). The following is a scheme of the vicious cycle of poverty in Nurkse's theory:

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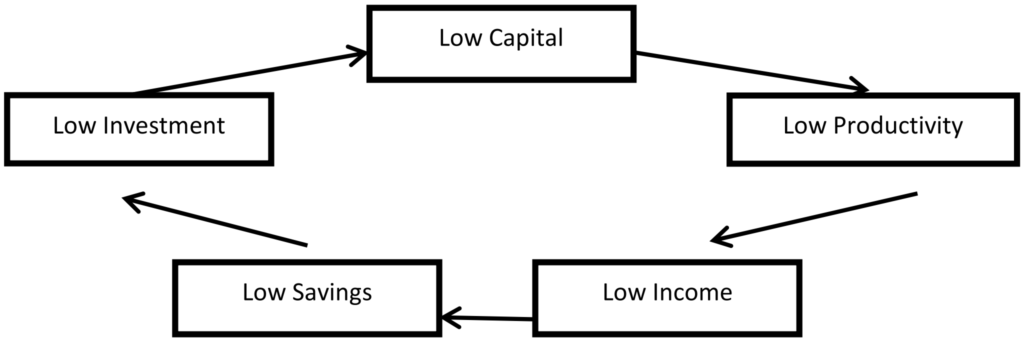

Figure 1. The Vicious Circle of Poverty

According to Ragnar Nurkes, the causes of poverty are backwardness and lack of capital which causes low productivity so that the income received is also low. Low income has an impact on low savings and investment. This low saving and investment causes underdevelopment. And so on. Ragnar Nurkse in (Kuncoro, 2006) suggests that a poor country is poor because it is poor (a poor country is poor because it is poor). Poverty in a country has no end, meaning that the country is poor because it has nothing and by having nothing causes the country to suffer from poverty.

2. Monetary Policy

Monetary policy is all actions or efforts of the central bank to influence the development of monetary variables (Amount of Money Supply, Interest Rates, and Exchange Rates) to achieve the desired target. As part of macroeconomic policy, the monetary objective is to assist in achieving macroeconomic objectives, including: economic growth, job creation, price stability, and balance of payments balance. The four targets are the ultimate goal of monetary policy (Natsir, 2011). Monetary policy is the policy of the monetary authority or central bank in the form of controlling the monetary economy to achieve the desired economic development.

Litteboy and Taylor (2006) in (Natsir M., 2014) state that monetary policy is all efforts or actions of the central bank to influence monetary developments such as money supply, credit, interest rates and exchange rates, to achieve certain economic goals including economic growth. , price stability, job creation (unemployment), balance of payments balance. So that it can reduce poverty. The main objective of monetary policy is that its achievements can only be seen from a long-term perspective, meaning that everything is prepared now to achieve the main goals in the future (Maski, 2007).

Monetary policy reflects the relationship between borrowing prices and the level of money supply in the economy in poverty alleviation (Sunday, 2016). Monetary policy can be expansionary or contractionary (Engler, 2011). Agents of economic development have used monetary policy for many main objectives, namely economic growth and reduction of low poverty levels (Choundhry, 2013). The linkage between policy instruments and the main targets through transmission channels is known as the monetary policy transmission

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mechanism.

3. The Relationship between Monetary Policy and Poverty Level

Various previous research literatures have discussed the effect of monetary policy on poverty levels. (Hapsari, 2017) examines the effect of economic growth, inflation, and unemployment on poverty in Indonesia, the result is that economic growth and inflation have no effect on poverty levels, only unemployment has a significant effect. The results of this study are also supported by Ningsih & Andini (2018). However, (Nasution, Nasution, & Faried Lubis, 2020) found that fiscal policy and monetary policy were effective in overcoming poverty in North Sumatra Province.

(Yusuf, 2013) observes the relationship of monetary policy with poverty and income inequality. The result is that monetary policy monetary policy (inflation) in the long term and macro instability has a greater impact on poverty levels. (Goshit PhD & Longduut, 2016) observed Nigeria with the results that interest rates, credit, bank liquidity ratios, and inflation rates had no significant impact on poverty rates. Only the money supply, GDP, unemployment and balance of payments have an effect.

III. METHOD

This study uses secondary data in the type of panel data with a time series starting from 2005 to 2019, and the countries observed are the five countries with the highest poverty rates in 2019 in ASEAN, namely Myanmar, Lao PDR, Philippines, Indonesia, and Thailand. The data is taken from the World Bank Data website. The model used to analyze the effect of monetary policy on poverty levels in five ASEAN countries is the Auto Regression Distributed Lag (ARDL) Panel, with the aim of finding monetary policy variables that are able to become leading indicators of poverty levels in five ASEAN countries.

The ARDL Panel equation formed is as follows:

$$KMS_{it} = \alpha + \beta_1 PE_{it} + \beta_2 INF_{it} + \beta_3 JUB_{it} + \beta_4 SB_{it} + \beta_5 KRS_{it} + e_{it} \quad (1)$$

Information:

KMS = Poverty Rate (%)

PE = Economic Growth (%)

INF = CPI Inflation (%)

JUB = Total Money Supply (%)

SB = Real interest rate (%)

KRS = Exchange rate against USD

α = Constant

β = Coefficient

e = Error term

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i = Number of observations (Five ASEAN countries)

t = 15 year time series

IV. RESULT AND DISCUSION

1. ARDL Panel Test Results

Panel analysis of Auto Regressive Distributin Lag (ARDL) examines pooled data, which is a combination of cross section (country) data and time series (annual) data. Where the ARDL panel results are better than ordinary panels because ARDL panels are able to be cointegrated in the long term and have the most suitable lag distribution in theory.

Before performing the ARDL Panel test, the unit root test was carried out with the Augmented Dickey Fuller (ADF) Fisher Test for each observed variable with the following results:

Tabel 2: Output Uji Unit Root

Variable	ADF Value	Prob.	description
KMS	-10.2453	0.0001	Stasioner pada 1st Difference
PE	-10.982	0.0001	Stasioner pada 1st Difference
INF	-4.2586	0.001	Stasioner pada Level
JUB	-5.9635	0.000	Stasioner pada Level
SB	-6.1791	0.000	Stasioner pada Level
KRS	-8.222	0.000	Stasioner pada 1st Difference

Source: Output Eviews 10.0

From the output of the unit root test, it can be seen that the inflation variable, JUB, and interest rates are stationary at the level, while the variables of poverty, economic growth, and the exchange rate are stationary at the 1st difference. Because the assumption that must be met before conducting the ARDL Panel test is that the data for each variable must be stationary at the level or 1st difference, the results of all these variables are accepted and further tests can be carried out.

The output of the ARDL Panel test is as follows:

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Table 3. ARDL Panel Test Output

Variable	Coefficients	Prob.
Long Run Equation		
PE	2.671628	0.7883
INF	0.231142	0.3495
JUB	-0.044798	0.4905
SB	0.120152	0.0506
LOGKRS	-3.843316	0.0270
Short Run Equation		
Cointeq01	-0.693069	0.0353
D(PE)	12.38384	0.4444
D(INF)	-0.631044	0.1220
D(JUB)	0.113385	0.0296
D(SB)	-0.360941	0.3046
D(LOGKRS)	-11.93071	0.0259
C	25.15747	0.0795

Source: Output Eviews 10.0

In the long-term equation, the results find that only the exchange rate affects the poverty level in Myanmar, Lao PDR, Philippines, Indonesia, and Thailand with a coefficient value of -3,843 and a prob of 0.027 < 0.05. This means that in the long term the higher the exchange rate can reduce the poverty level. Meanwhile, in the short-term equation, the money supply and the exchange rate that affect the poverty level with their respective coefficients are

Table 4: Output of the Indonesian ARDL Panel

Variable	Coefficient	t-Statistic	Prob.
COINTEQ01	-0.229812	-8.351336	0.0036
D(PE)	-11.65827	-0.113337	0.9169
D(INF)	0.045975	5.356280	0.0127
D(JUB)	0.094725	2.739224	0.0714
D(SB)	-0.034208	-7.018061	0.0059
D(LOGKRS)	-15.58519	-0.139710	0.8977
C	5.644249	0.302213	0.7822

Source: Output Eviews 10.0

The results of the ARDL Panel for Indonesia show that only inflation and interest rates have a significant effect on the poverty level with a prob value less than 0.05.

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Tabel 5: Output Panel ARDL Negara Thailand

Variable	Coefficient	t-Statistic	Prob.
COINTEQ01	-0.179912	-93.16371	0.0000
D(PE)	-0.812227	-1.012902	0.3857
D(INF)	-1.618927	-5.536698	0.0116
D(JUB)	0.224426	9.134254	0.0028
D(SB)	-1.115494	-4.583525	0.0195
D(LOGKRS)	-25.28568	-0.068330	0.9498
C	1.936681	0.882469	0.4425

Source: Output Eviews 10.0

The results of the ARDL Panel for Thailand show that inflation, money supply, and interest rates have a significant effect on the poverty level with a prob value of less than 0.05.

2. Discussion

The results of this study found that for long-term stability, exchange rates significantly affect poverty levels in Myanmar, Lao PDR, Philippines, Indonesia, and Thailand. For short-term stability the money supply and the exchange rate significantly affect the poverty level. The results of each country show that monetary policy through the money supply variable is the leading indicator of the poverty level because it is significant in all countries except Lao PDR and Indonesia. This means that monetary policy through controlling the money supply is the main focus in reducing poverty levels in Myanmar, the Philippines, and Thailand.

The leading indicator of poverty levels in Myanmar and the Philippines comes from the money supply variable. The leading indicator of the poverty rate in the Lao PDR country comes from the inflation and interest rate variables. The leading indicator of the poverty rate in Indonesia comes from the inflation and interest rate variables. Meanwhile in Thailand, inflation, money supply and interest rates were found to be leading indicators of poverty levels. This finding is in line with research conducted by (Budiantoro & Saputra, 2013) (Yusuf, 2013) that expansionary monetary policy by increasing the money supply in the community can make the economy grow and develop which has an impact on increasing people's welfare and reducing poverty.

V. CONCLUSIONS AND RECOMMENDATIONS

This study concludes that inflation and interest rates are variables that need to be controlled in reducing poverty levels in Lao PDR and also in Indonesia. In the Philippines and Myanmar, only the money supply variable needs to be controlled in reducing poverty levels. In contrast to Thailand, there are three variables that become the focus of monetary policy control in reducing poverty, namely inflation, money supply, and interest rates.

The policy implications for central banks in each country are observed to pay more attention to increasing the effectiveness of monetary policy, not only to macroeconomic stability, because through appropriate and effective monetary policy it will be able to reduce poverty in

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Myanmar, Lao PDR, Philippines, Indonesia and Thailand.

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