Sensitivity of Financial Inclusion and Poverty Rate to Economic Growth:
A Comparative Study in ASEAN-5

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ABSTRACT
Financial inclusion, poverty and economic growth are still interesting topics in research in the field of economics. In the context of policy and strategy formulation, the Government as a stakeholder has an important role in designing measurable and targeted policies and program activities in increasing financial inclusion, reducing poverty rates and at the same time being able to increase economic growth. Financial literacy is still relatively low, indicating that there is still a gap between the design of policies and programs with the expected level of financial inclusion output. This makes the role of the financial system in reducing poverty and increasing economic growth, is still not maximized. Therefore, this study aims to examine the sensitivity of financial inclusion and poverty to economic growth in Indonesia using a panel regression model. The results of this study indicate that increasing financial inclusion can encourage economic growth and alleviate poverty. If the financial needs are smooth then investment activities can run smoothly and the economic turnover runs effectively so that poverty decreases.

Keywords: *Financial Inclusion, Economic Growth, Poverty, Sensitivity.*

1. INTRODUCTION

Financial inclusion, poverty and economic growth are still interesting topics in research in the field of economics. At least there are several underlying reasons, firstly the level of financial inclusion in Indonesia, based on data from the Financial Services Authority (OJK) regarding the results of the 2019 National Financial Literacy and Inclusion Survey (SNLIK) shows that Indonesia's financial literacy index has only reached 38.03% with an inclusion level finance by 76.19%. This indicates that the Indonesian public's level of understanding of financial sector products is still relatively low. Then, based on BPS data, the poverty rate in Indonesia as of September 2021 shows that there are still 26.5 million people in the poor category, with the percentage of urban poor reaching 7.60%. Finally, Indonesia's economic growth in 2021 shows growth of 3.69%, where the economic contribution of the provinces in Java Island still dominates, amounting to 57.89%, where the health services business and social activities show the highest growth of 10.46%.

Improving people's welfare is the main goal of development. One of the indicators can be shown by the decline in the poverty rate. In fact, various research results confirm that efforts to reduce poverty are still an unresolved agenda, and even policies to increase economic growth have not been able to improve people's lives, supported by Rumbogo [1]. Therefore, the problem of poverty is one of the concerns in the development agenda as stated in the Sustainable Development Goals (SDG), supported by Demirguc-Kunt et al [2].

In the context of policy and strategy formulation, the Government as a stakeholder has an important role in designing measurable and targeted policies and program activities in increasing financial inclusion, reducing poverty rates and at the same time being able to increase economic growth. Financial literacy is still relatively low, indicating that there is still a gap between the design of policies and programs with the expected level of financial inclusion output. This makes the role of the financial system in reducing poverty and increasing economic growth, is still not maximized.

2. LITERATURE REVIEW

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In theory, financial inclusion makes it easy for people to access and use various forms of financial services. Access to finance is central to growth and job creation. Inclusive finance has an impact on economic growth because it does not only work for people who already have access to financial services, but can also reach poor groups who are engaged in productive sectors, especially the informal sector and MSMEs. In the short term, inclusive finance will ensure a more efficient allocation of resources, investment financing and a stable financial system. In the long term, inclusive finance will increase productivity and employment as well as reduce vulnerability and risk to shocks and crises.

Dermirguc-Kunt et al [3] describe financial inclusion as broader access to financial services. The implication is that price and non-price barriers to various forms of financial services must be removed, especially for the poor. This expansion of access will reduce inequality and promote growth, which will lead to a reduction in the poverty rate. Bank Indonesia [4] defines financial inclusion as all efforts aimed at eliminating all forms of price and non-price barriers to public access in utilizing financial services. Inclusive finance is a national strategy launched to encourage economic activities for groups of people who have not enjoyed financial services. This will encourage economic growth, create financial system stability, support poverty alleviation programs, and reduce inequality.

3. METHOD

This study uses a quantitative approach and secondary data types. Secondary data obtained from World Bank Data. The research period used is from 2000 to 2021 with a sample of 5 ASEAN countries, namely Indonesia, Malaysia, Thailand, the Philippines and Vietnam. In order to answer the research objectives, the models and methods of data analysis that will be carried out are as follows:

1.1. Panel Regression Model

To examine the effect of financial inclusion and poverty on economic growth in Indonesia, a panel regression model is used. The panel regression model in this study is as follows:

$$Y_{it} = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon_{it}$$

Where Y is Economic Growth, X is the independent variable including the financial inclusion index, poverty and control variables (inflation, unemployment, population growth).

4. RESULT AND DISCUSSION

2.1. Panel Data Result

This study aims to analyze the effect of financial inclusion and economic growth in ASEAN-5 using panel data regression. The initial stage in carrying out panel data regression is to choose which model fits the data, namely through the Chow test and the Hausman Test. Following are the results of the Chow Test.

Table 1. Chow Test Results

Effectts Test	Statistic	d.f.	Prob.
Cross-section F	18.391616	(4,100)	0.0000
Cross-section Chi-square	60.652946	4	0.0000

Source: Processed Data, 2022

Based on these results, it can be seen that the prob value is (0.000) or less than 0.05, so it is stated that the appropriate model is the Fixed Effect. Therefore, this study uses panel data regression with the Fixed Effects model. Following are the results of the Fixed Effect Model regression.

Inclusion and Economic Growth show significant positive results, meaning that inclusion increases, so economic growth increases. Meanwhile, the poverty rate and inflation as well as the unemployment rate are significantly negative. This means that if poverty and inflation and unemployment increase, economic growth will decrease. The population shows significant positive results, which means that if there are more people, economic growth will increase. The statistical F test also shows significant results, meaning that all independent variables affect the dependent variable (economic growth). R-square also shows a value of 83.4% meaning that the variables in the model are able to explain the dependent variable well.

Table 2. Results of Fixed Effect Models

Variable	Coefficient	Prob	Description
T-test			
Constanta	-9.00E+11	0.000	Significant
Financial Inclusion Index	3.84E+09	0.000	Significant
Poverty	-1.56E+11	0.026	Significant
Inflation	-3.82E+09	0.006	Significant
Unemployment	-7.24E+09	0.032	Significant
Population	10653.26	0.000	Significant
F-test			
F-statistic	208.2598	0.000	Significant
R-square	0.834		

Source: Processed Data, 2022

2.2. Discussion

Financial inclusion is an effort to encourage the financial system to be accessible to all levels of society, thus encouraging quality economic growth while overcoming poverty. Increasing financial inclusion means economic growth will also increase. This is because residents in a country are able to meet their financial related needs such as transactions, saving, paying insurance premiums and repaying credit. If the financial needs are smooth then investment activities can run smoothly and the economic turnover runs effectively so that poverty decreases. Sanjaya [5] argues that the main goal of financial inclusion is to reduce poverty.

The importance of financial inclusion can be seen from the fact that not all residents have equal access to economic resources, while at the same time every resident must fulfill their needs. Poverty and economic disparity between community groups can occur due to the powerlessness of the community in obtaining access to the existing financial system. Therefore, what happens is that the financial system only lives in its own environment without having a real impact on the existence of other sectors outside the financial sector.

Another reason that causes financial inclusion to increase so that economic growth increases is poverty alleviation. Dixit & Ghosh [6] argue that the impact of financial inclusion on poverty alleviation has been carried out by the result that the provision of access to financial services has the potential to get the poor out of the vicious cycle of poverty through a culture of saving, thrift, and creating an efficient and low-cost payment mechanism.

Furthermore, poverty can affect economic growth due to dependency. As an illustration, this dependence can occur because a country has debts with other countries / the International Monetary Fund. Therefore, it is necessary to equalize the results of growth in the business sector in an effort to reduce the poverty rate. Wongdesmiwati [7] who uses gross domestic product as a measure of economic growth. It can be seen from the research results that there is a significant negative relationship between poverty and economic growth. Barika [8], argues that between economic growth and poverty has a significant influence.

Then, inflation has a positive and negative impact on the economy. If a country's economy is experiencing a downturn, then Bank Indonesia can carry out an expansionary monetary policy by lowering interest rates. Inflation has a negative effect on economic growth because high and unstable inflation is a reflection of economic instability which can result in an increase in the price level of goods and services in general and continuously, and result in higher levels of poverty so that a country's economic growth decreases. Due to the higher inflation rate, people who initially can meet their daily needs with the high prices of goods and services cannot fulfill their needs, causing poverty.

Inflation has a significant effect on Indonesia's Economic Growth/Gross Domestic Product (GDP). One of the things that caused inflation to increase in Indonesia was one of the reasons for the Covid-19 pandemic that hit Indonesia which resulted in rising fuel prices, basic food prices, decreased public interest in buying, and even a drastic increase in unemployment in Indonesia. This is supported by a and Bono [9] that Covid -19 which hit Indonesia which resulted in rising fuel prices, basic food prices, decreased public interest in buying, and a drastic increase in unemployment in Indonesia. Inflation can be bad because the continuous increase in prices may not be affordable by all people. When there is inflation, people have to spend more money to get the goods they want, supported by Izzah [10].

Through the estimation process, the results show that the unemployment rate has a significant negative effect on economic growth. Muhadir stated that unemployment had a negative impact on economic activity. He classifies the impact on the economy into two main aspects, namely the impact on a country's economy and the impact on individuals who experience it (society). In general, the results of his research found that if the unemployment rate in a country is relatively high, then this can hinder the achievement of economic development goals that have been aspired to Muhadir [11].

The estimation results in this study indicate that population has a significant positive effect on economic growth in Indonesia. This is also supported by the results of other studies which specifically state that the number of people of productive age has a positive and significant effect on a country's economic growth. When referring to the results of this study, it is possible that the composition of the population in Indonesia from 2000 to 2021 is the majority of the population of productive age which can increase economic growth, supported by Rahmatullah [12].

5. CONLCUSSION

Based on the results of the tests that have been carried out, there are several conclusions that can be drawn, among others. First, increasing financial inclusion can encourage economic growth and alleviate poverty. If the financial needs are smooth then investment activities can run smoothly and the economic turnover runs effectively so that poverty decreases. Second, poverty and economic growth have a significant negative relationship. Third, inflation has both positive and negative impacts on the economy. Fourth, the unemployment rate has a significant negative effect on economic growth. Fifth, population has a significant positive effect on economic growth in Indonesia.

Reviewing the results and conclusions of this study, there are suggestions that can be given. Financial literacy needs to be increased to support financial inclusion, so that it can encourage economic growth and alleviate poverty. The impact of financial inclusion on poverty alleviation has been carried out, where the result is that the provision of access to financial services has the potential to get the poor out of the vicious cycle of poverty through a culture of saving, saving, and creating an efficient and low-cost payment mechanism.

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