



The Effect of Financial Literacy and Financial Inclusion on Economic Growth in Indonesia

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Increasing financial literacy and inclusion become a global issue that are believed affect economic growth. However, in Indonesia, increasing financial literacy and inclusion in several provinces is not followed by the economic growth. The purpose of this research is to analyze the effect of financial literacy and financial inclusion on economic growth in Indonesia. This study analyzed 34 provinces in Indonesia with 2 survey periods, 2016 and 2019. The method of the data analysis used panel data regression with e-views 10 software. Moreover, Chow test and Hausman test are carried out to determine the best model. The results of the hypothesis test showed that financial literacy and financial inclusion have no significant effect on economic growth in Indonesia, neither partially or simultaneously. It showed that the financial literacy and inclusion improvement in Indonesia need to be enhanced in order to achieve inclusive growth as the main goal.

Keywords: *Financial Literacy, Financial Inclusion, Economic Growth*

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INTRODUCTION

In the last few decades, increasing financial literacy and inclusion has become a global issue to play an important role in promoting economic growth. According to Otoritas Jasa Keuangan (OJK) (2007), empowering consumers through financial literacy will encourage the achievement of financial system stability, improve people's welfare, reduce poverty and income inequality, as well as achieve more inclusive development. The 7th President of the Republic of Indonesia, Joko Widodo, launched the National Strategy for Indonesian Financial Literacy (SNLKI) on November 19, 2013. The SNKLI is part of the Trilogy of Policy Instruments to increase market confidence and consumer equality as well as financial services industry (level playing field).

Otoritas Jasa Keuangan (2017a), defines financial literacy as knowledge, beliefs and skills possessed by the community that can influence attitudes and behavior of the community in improving the quality of decision making and financial management to achieve public welfare.

Thus, according to the definition, it can be seen that financial service business actors, financial products consumers, and society are expected not only to know and understand financial services, but also to improve their ability to make financial decisions. Moreover, it changes their attitudes in managing finance to enhance the public welfare.

For Indonesian people, financial literacy has become a necessity for living. Therefore, the knowledge of financial literacy becomes life skill which is owned by individual in living his life for a long term. People who have high financial literacy (well literate) will more easily understand things related to financial services industry, including its products, services, and procedural. Also, they will have comprehensive information, so that they can access the products and services of the financial services industry as needed in daily life activities.

People who have high financial literacy (well literate) tend to find it easier to choose and determine financial products or services according to their respective needs and abilities, so that in the end they can improve their welfare. In addition, people who have high financial literacy (well literate) tend to have better financial management skills in supporting their financial well-being. Thus, the creation of a society that is well literate and financially inclusive will ultimately support economic growth.

The Center for Financial Inclusion defines financial inclusion (financially inclusive) as access to financial products or services as needed, including products or services in the form of credits, savings, insurance and payments. Financial inclusion also contains quality access, which includes convenience, affordability and suitability of financial products or services with regard to consumer protection. In addition, the access to these financial products or services is available to everyone.

According to the Indonesian Financial Literacy National

Strategy (SNLKI), a good public financial literacy (well literate) will be followed by public financial inclusion. People who have knowledge and understanding regarding financial service institutions, skills in utilizing financial products and services, also have confidence in financial service institutions must be supported by access availability to financial institutions, financial products and financial services. Indonesian government gives special attention to increase financial inclusion in Indonesia, because national financial inclusion plays an important role in encouraging sustainable national economic growth. In addition, financial inclusion can reduce poverty and income inequality, which in turn can improve people's welfare.

According to Levine (2005), there are four roles of the financial sector that beneficial to the economy i.e., reducing risk, mobilizing savings, reducing transaction and information costs, and encouraging specialization. Through this role, the financial sector able to create capital accumulation and technological innovation to increase economic growth. Financial inclusion can increase savings mobilization, reduce transaction and information costs, increase capital allocation and asset liquidity and encourage specialization, so that can create capital accumulation which further enhances the economic growth. In addition, financial inclusion through increasing the number of credits will encourage investment in activities that have high added value and ultimately accelerate economic growth (Fabya, 2011). By making finance available and reached to all economic agents, it will affect the growth of economic activity which will increase the country's output.

The 2019 National Financial Literacy and Inclusion Survey (SNLIK) conducted by Otoritas Jasa Keuangan illustrates that Indonesia's financial literacy condition still low despite an increase from the 2 previous surveys, namely in 2013 and 2016. Indonesia's financial literacy level has increased from 21, 84% in 2013, to 29.66% in 2016, and increased to 38.03% in 2019. The survey results also showed that the financial inclusion index of the Indonesian people has increased from 59.74% in 2013 to 67.82% in in 2016 and increased again to 76.19% in 2019. However, the increase in financial literacy and inclusion in Indonesia was not accompanied by economic growth. Based on BPS data, economic growth in 2013 reached 5.56%, decreased to 5.03% in 2016, and declined again to 5.02% in 2019.

[Figure 1 about here.]

Based on Figure 1, it can be seen that the increase in Indonesia's financial literacy and inclusion in 2016 and 2019 was not accompanied by an increase in Indonesia's economic growth. This phenomenon contrast to the objectives of the National Strategy for Financial Literacy in Indonesia (SNLKI) and the National Strategy for Financial Inclusion (SNKI) which target the increasing financial literacy and inclusion to achieve inclusive economic growth.

Therefore, this study will examine the effect of financial literacy and financial inclusion on economic growth in

Indonesia. The results of this study are expected to be able to add a comprehensive source of reference and insight on financial literacy and financial inclusion and their impact on economic growth. The results of this study are also expected to be one of the government's considerations in making and designing policies and strategies to increase economic growth through financial literacy and inclusion. This study is also an evaluation of whether the efforts that have been made by the government to increase financial literacy and inclusion in Indonesia are in line with the targets to be achieved or still need to add steps to increase financial literacy and inclusion in order to achieve inclusive growth.

LITERATURE REVIEW

Financial Literacy

Otoritas Jasa Keuangan (2017a) provides a definition of financial literacy as outlined in Otoritas Jasa Keuangan Regulation Number 76/POJK.07/2016. The regulation explains that financial literacy is the knowledge, belief, and skills possessed by the community that can influence the attitudes and behavior of the community in improving the quality of decision making and the quality of financial management so that can achieve public welfare. Otoritas Jasa Keuangan (2017b) also provides a more detailed definition in the SNLKI (Revisit 2017). The document explains that financial literacy is public knowledge and understanding of the concepts and risks of products or services in the financial services industry, including the skills, motivations and beliefs possessed by the community to apply their knowledge and understanding in effective decision making to improve financial welfare of individuals and communities and can increase community participation in national economic activities.

When Indonesian people do not have adequate financial literacy, every individual in Indonesia cannot choose savings or investment product that is suitable for him/her. Thus, there is high potential for fraud risk. Financial literacy will occur if someone has expertise or ability that makes that person achieve his goals by utilizing existing resources (Widayati, 2010). According to Manurung (2009), financial literacy is a person's ability or knowledge in managing all of his financial resources effectively.

The purpose of financial literacy is to improve the quality of individual financial decision-making and change individual attitudes and behavior in financial management, so that to be able to determine and utilize financial institutions, products and services that are in accordance with needs and abilities of consumers and community to achieve prosperity (Financial Services Authority, 2017).

Based on National Survey of Financial Literacy and Inclusion (SNLIK) in 2013 (Financial Services Authority, 2014), the level of financial literacy of the Indonesian population is divided into four parts, i.e:

1. Well literate: it means that the public has knowledge and confidence about financial service institutions and financial service products. Knowing the features, benefits and risks, as well as rights and obligations related to financial products and services, as well as having skills

in using these financial products and services.

2. Sufficient literate: the public has knowledge and confidence about financial service institutions and financial products and services. Knowing features, benefits and risks, as well as rights and obligations related to financial products and services without having skills in using these financial products and services.
3. Less literate: is when people only have knowledge about financial service institutions, financial products and services. They do not know in detail about the features, benefits and risks, as well as rights and obligations related to financial products and services.
4. Not literate, people do not have knowledge and confidence in financial institutions and services as well as financial products and services, as well as do not have skills in using financial products and services.

Financial Inclusion

The literature on financial inclusion has various concept definitions. Amidžić, Massara, and Mialou (2014) states that financial inclusion is an economic state in which individuals and companies are not denied access to financial services. The Global Financial Development Report (2014) defines financial inclusion as a condition where the majority of individuals can take advantage of available financial services and minimize the presence of groups of individuals who are not aware of the benefits of access to finance through access that is available at affordable costs. According to Bank Indonesia (2014), financial inclusion is all efforts to increase public access to banking services by eliminating all forms of obstacles. Hannig and Jansen (2010) reveals that financial inclusion is an effort to incorporate the unbanked into the formal financial system so that they have the opportunity to enjoy banking services. In addition, according to Sarma (2012) financial inclusion is a process that ensures easy access, availability, and benefits from the formal financial system for all economic actors.

According to Julie (2016) financial inclusion is an intervention strategy that seeks to overcome market frictions to prevent financial markets from operating for the poor or underprivileged. This intervention aims to attract the unbanked population into the formal financial system, so that they have the opportunity to access formal financial services ranging from savings, payments, transfers, credit and insurance. Chakrobarty (2011) says that financial inclusion promotes savings and develops a culture of saving, increases access to credit, both entrepreneurship and consumption and also enables efficient payment mechanisms, thereby strengthening the resource base of financial institutions that are able to provide economic benefits as a resource and the availability of efficient and allocative payment mechanisms. Policymakers are required to create effective opportunities for financial inclusion. Key to such interventions are policies that accelerate the introduction of innovative technologies, regulatory reforms, and infrastructure acquisitions that reduce transaction costs and enable faster, efficient and convenient delivery of financial services to a broad section of the population (Neaime and Gaysse, 2018).

Otoritas Jasa Keuangan (2017a) provides a definition of financial inclusion as outlined in Otoritas Jasa Keuangan

Regulation Number 76/POJK.07/2016. According to the regulation, financial inclusion defined as the availability of access to various financial institutions, products and services in accordance with the needs and abilities of the community in order to improve the welfare of the community.

The Center for Financial Inclusion also provides a definition of financial inclusion, namely public access to financial products or services that meet community needs. These products or services include credit, savings, insurance and payments. The availability of quality access includes convenience, affordability, suitability with due regard to consumer protection, and its availability is also given to everyone.

According to Bank Indonesia (2014) financial inclusion is the right of everyone to have full access and services from financial institutions on time, convenient, informative, and affordable manner, with full respect for their dignity and worth. Financial services are available to all segments of society, with special attention to the poor, the productive poor, and residents in remote areas (Bank Indonesia, 2014).

Relationship between Financial Literacy, Financial Inclusion and Economic Growth

Economic growth is an achievement through a process that is supported by various sectors in the economy. One sector that plays an important role in supporting economic growth is the financial sector. According to Levine (2005), there are four roles of the financial sector that are beneficial to the economy, namely reducing risk, mobilizing savings, reducing transaction and information costs, and encouraging specialization. Through this role, the financial sector is able to create capital accumulation and technological innovation so as to increase economic growth. Financial inclusion can increase savings mobilization, reduce transaction and information costs, increase capital allocation and asset liquidity and encourage specialization, so as to create capital accumulation which in turn increases economic growth. In addition, financial inclusion through increasing the number of credits will encourage investment in activities that have high added value and ultimately accelerate economic growth (Fabya, 2011). By making finance available and affordable to all economic agents, it will affect the growth of economic activity which will increase the output of a country.

Several studies examine the relationship between financial inclusion and economic growth. There is substantial evidence in the literature that countries with high financial inclusion indexes tend to achieve high rates of economic growth. Kendall et al. (2010) and Ghosh (2011) evaluate the role of access to finance on economic growth with data at the Indian sub-national level which proves the positive impact of access to financial services and utilization of financial services on economic growth in India. Mihasonirina and Kangni (2011) also found the significance of financial inclusion and communication technology on economic growth. Martinez et al. (2011) argue that access to finance is an important policy tool used by governments and policy makers to stimulate economic growth. By making finance available and affordable to economic agents, it will affect the growth of economic activity which will increase

output. Sarma and Pais (2011) found empirical evidence of a relationship between financial inclusion and economic growth using data from 49 countries. Masoud and Hardaker (2012); Demirgüç-Kunt and Klapper, (2012); Falahaty and Hook (2013) show that financial development is a significant determinant of economic growth. These findings indicate that improving the functioning of the banking sector is very important to spur economic growth. Law, Azman-Saini, and Hui (2014) emphasize that a well-developed financial system is essential for economic growth. Then Sarma (2016) continued his research by analyzing the causal relationship between various dimensions of financial inclusion and economic growth, which proves the existence of a two-way causal relationship between access to banking services and economic growth. Recently, Pradhan et al. (2016), Kim et al (2018), Gul et al., (2018), and Raza et al (2019) also prove that there is a significant positive relationship between financial inclusion and economic growth.

The above findings contradict the findings of Naceur and Ghazounai (2007) who examined the relationship between financial development and economic growth for 11 countries in the MENA region (Middle East and North Africa). The empirical results of this study indicate that bank development has a negative effect on economic growth. Khan's (2011) findings also show that financial inclusion has a negative impact on economic growth. Financial inclusion can lower credit standards because financial institutions try to reach the bottom of the poor by lowering loan terms, besides that it can increase bank reputation risk because in order to improve banking service facilities, some countries lower the standard for establishing a financial institution for rural areas, and can cause instability due to inadequate and immature regulations from Microfinance institutions.

METHOD (FOR RESEARCH ARTICLE)

Object

The object of this research is 34 provinces in Indonesia, namely Naggroe Aceh Darussalam, North Sumatra, West Sumatra, Riau Islands, Jambi, South Sumatra, Bangka Belitung, Bengkulu, Lampung, DKI Jakarta, West Java, Banten, Central Java, DI Yogyakarta, Java East, Bali, NTB, NTT, North Sulawesi, West Sulawesi, Central Sulawesi, Southeast Sulawesi, South Sulawesi, Gorontalo, North Kalimantan, West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, Maluku, Maluku, West Papua and Papua.

Variables and Operational Definitions

The independent variables in this study are financial literacy (X1) and financial inclusion (X2). The dependent variable used is economic growth (Y). Operational definitions and indicators or proxies for each variable are described in table 1.

[Table 1 about here.]

Research Model

The research model is presented in Figure 2. There are 3 hypotheses in this study, namely:

H 1: Financial literacy has a positive and significant effect on economic growth

H 2: Financial inclusion has a positive and significant effect on economic growth

H 3: Financial literacy and financial inclusion simultaneously have a positive and significant effect on economic growth

[Figure 2 about here.]

Data and Data Sources

The type of data used is panel data, which is a combination of cross section data (34 provinces) and time series (2 survey periods). The data used in this study is secondary data collected from several sources, namely SNLIK 2016, SNLIK 2019, and BPS.

Data analysis method

This research is in the form of hypothesis testing which aims to examine the contribution of cost control effectiveness and working capital turnover on economic profitability. The form of data used in the study is in the form of panel data. Panel data is a combination of time series and cross section data. Substantially, panel data is able to overcome the problems caused by neglecting the relevant independent variables (omitted variables). Therefore, to overcome the problem of inter-correlation which ultimately results in inaccurate interpretation of the regression, the panel data regression method is used (Bond, 2002). The data is taken from 14 sample companies which are cross section units and time series data from the period 2012 -2016. The analytical method used in this research is descriptive statistical analysis and panel data regression analysis with the help of the EViews Program (Winarno, 2011). To determine the significance level of each independent variable regression coefficient on the dependent variable, multiple linear regression analysis (multiple regression linear analysis) or also known as Ordinary Least Square is used. Multiple linear regression is a statistical technique used to test the effect of several independent variables on the dependent variable (Sekaran, 2006). The panel regression equation used in this study is:

$$PE_{it} = \alpha + \beta_1 LK_{it} + \beta_2 IK_{it} + e_{it}$$

Here, PE_{it} is the Provincial Economic Growth at time t; α is a constant (intercept); β_1 , β_2 is the Regression Coefficient; LK_{it} is Provincial Financial Literacy at time t, IK_{it} is Provincial Financial Inclusion at time t; and e is a disturbing factor (disturbance error)

Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) approaches were used in panel data regression analysis (Bond, 2002; Drukker, 2003). Determining which model is the most appropriate to

use among the three models consists of several stages, namely: 1) Chow test, conducted to determine whether the Common Effect model is better to use than the Fixed Effect. 2) Hausman test, conducted to determine whether the Fixed Effect model is better to use than the Random Effect.

A good regression model must produce an unbiased linear estimation (Best Linear Unbiased Estimator). The panel data model has the potential for heteroscedasticity and autocorrelation problems. This problem generally occurs because of a combination of two forms of data, namely cross section and time series. Therefore, the classical assumption test consists of heteroscedasticity and autocorrelation tests first. However, if it is known that the random effects model is a suitable model for panel data regression, then the classical assumption test is not relevant to be carried out. Because, random effects are believed to be able to overcome the problem of time series autocorrelation and the correlation between observations (cross section). The method used to estimate the random effect model is known as the Generalized Least Square (GLS) method.

RESULTS AND DISCUSSION

Descriptive Statistical Analysis

Descriptive statistical test aims to provide an overview of the object of research. The calculation of descriptive statistics in this study includes the minimum, maximum, average, and standard deviation values of each variable. The dependent variable in this study is economic growth (Y) while the independent variables in this study are financial literacy (X1) and financial inclusion (X2). The statistical distribution for each variable in this study is presented in Table 2.

[Table 2 about here.]

The final data used in the study were 68 observation results derived from a combination of cross-sectional data of 34 provinces and time series of 2 survey periods, namely 2016 and 2019. Table 3 shows that the highest economic growth rate reached 9.9%, while the minimum reached -15.7%. The high and low levels of economic growth reflect that the ability of a province to produce Gross Domestic Product (GDP) per capita in different observation periods.

Description of Research Variables

Data on the financial literacy index, financial inclusion index and Indonesia's economic growth in 2016 and 2019 are presented in the Table 3.

[Table 3 about here.]

Panel Data Regression Selection

The analysis steps used to determine the best estimation model in the panel data are by estimating the Common Effect (CEM), Fixed Effect (FEM) and Random Effect (REM)

models. The regression equation used to estimate the model is as follows:

$$PE_{it} = \alpha + \beta_1 LK_{it} + \beta_2 IK_{it} + e_{it}$$

The equation is obtained after carrying out a number of testing stages which identified deviations from the classical assumptions. The statistical results obtained in estimating the CEM, FEM, and REM models are presented in the Table 4.

[Table 4 about here.]

The table above shows that the t-statistical and probability values for each model are the basis for selecting the best model in panel data regression. The estimation results explain that each model has a different significance value. Therefore, to find which model is the best, further analysis is carried out using the Chow Test and Hausman Test.

[Table 5 about here.]

The chow test aims to determine which model is better to use between the Common Effect and Fixed Effect models. Based on the table above, the prob value in the Chi-square cross-section is smaller than alpha (α) ($0.0000 < 0.05$), so H_0 is rejected. This means that the Fixed Effect model is better used than the Common Effect model.

[Table 6 about here.]

Hausman test aims to determine which model is better between the Fixed Effect model and the Random Effect model. Table 6 shows that the probability value in the random cross-section is greater than alpha (α) ($0.5481 > 0.05$), so H_0 is accepted. Thus, it is concluded that the suitable model used in panel data regression is the Random Effect Model (REM). With the selection of the Random Effect Model (REM), the classical assumption test is irrelevant.

Panel Data Regression Analysis and Hypothesis Testing

This research was conducted to see the effect of the independent variable on the dependent variable. Panel data regression analysis is used to see whether the hypothesis that has been made will be accepted or rejected. The significance level used is 5%. The estimated statistical model is the best model and is free from deviations from classical assumptions. To find out the results of hypothesis testing from panel data regression analysis, it can be seen in Table 7.

[Table 7 about here.]

Based on the table above, the panel data regression equation is obtained as follows:

$$PE_{it} = 0.057584 - 0.000893 LK_{it} - 0.005242 IK_{it}$$

The t-statistic test shows how far the influence of one independent variable individually in explaining the dependent variable. The test criteria use a significance rate of 0.05. If the significance value is $< 5\%$ then H_0 is rejected or H_a is accepted and if the significance value is 5% then H_0 is accepted or H_a is rejected. Table 7 shows the results of the significance test between financial literacy and financial inclusion on economic growth. The table shows that neither financial literacy nor financial inclusion has a significant effect on economic growth. This is indicated by the significance value of financial literacy and financial inclusion greater than alpha ($0.9647 > 0.05$; $0.7509 > 0.05$). Based on these results, it can be concluded that the first hypothesis and the second hypothesis in this study were rejected.

Table 7 also shows the results of the F-Statistics test. The F-statistical test shows how far the influence of the independent variables simultaneously in explaining the dependent variable. The test criteria use a significance rate of 0.05. If the significance value is $< 5\%$ then H_0 is rejected or H_a is accepted and if the significance value is 5% then H_0 is accepted or H_a is rejected. Based on table 7, it is known that the significance value of F-statistics is greater than alpha ($0.901369 > 0.05$). Therefore, it can be concluded that the third hypothesis in this study is rejected.

Discussion

The results of data analysis for the first hypothesis which states that there is an effect of financial literacy on economic growth, it is found that partially financial literacy has no significant effect on economic growth in Indonesia. The results of data analysis for the second hypothesis which states that there is an effect of financial inclusion on economic growth also found that partially financial inclusion has no significant effect on economic growth in Indonesia. Likewise, the results of data analysis for the third hypothesis which states that there is an effect of financial literacy and financial inclusion on economic growth, it is found that simultaneously financial literacy and inclusion have no significant effect on economic growth in Indonesia.

This finding contradicts the research conducted by Kendall et al. (2010), Ghosh (2011), Mihasonirina and Kangni (2011), Martinez et al. (2011), Sarma and Pais (2011), Masoud and Hardaker, 2012; Demirgüç-Kunt and Klapper, 2012; Falahaty and Hook (2013), Law, Azman-Saini, and Hui (2014), Sarma (2016), Pradhan et al. (2016), Gul et al., (2018), Kim et al (2018) and Raza et al (2019) which prove that financial literacy and inclusion have a positive and significant effect on economic growth.

However, this rejected hypothesis can be explained by the phenomenon of the global economy which is keep

slowing down from 2018 to 2019 which is one of the research periods. The global economic slowdown was caused, among others, by the escalation of the trade war between the United States and China, the decline in global demand, stagnation in world commodity prices, as well as the economic crisis and political tensions in a number of regions.

In the midst of the weakening condition and uncertainty of the global economy throughout 2019, Indonesia was able to demonstrate its economic resilience, as can be seen from Indonesia's ability to maintain economic growth in the range of 5%, namely by growing at 5.02%, as well as several important achievements in macroeconomic terms. and the financial sector. This shows that financial literacy and inclusion actually play an important role in maintaining economic growth in Indonesia in the midst of a slowing global economy.

This lack of evidence of the effect of financial literacy and inclusion on economic growth in Indonesia shows that efforts to increase financial literacy and inclusion in Indonesia still need to be further improved in order to achieve its main goal, namely inclusive growth. In the era of globalization and dynamic economic conditions, the Government needs to optimize all resources to encourage the public to be involved in economic development, including in the financial sector. Community involvement in the financial sector can be realized in a condition when every member of the community has access to take advantage of various formal financial services that are in accordance with their needs and abilities in order to achieve prosperity.

The findings of this study can be used by Otoritas Jasa Keuangan (OJK) as a material consideration in the preparation and improvement of policy strategies in order to increase financial literacy and inclusion as stated in the National Strategy for Financial Literacy and Inclusion. Not only for OJK, this strategy is expected to be a guide for Financial Services Businesses in preparing programs in order to increase financial literacy and inclusion.

Furthermore, the findings of this study can be used as a measuring tool to evaluate the effectiveness and efficiency of financial literacy and inclusion programs that have been jointly pursued by both the Otoritas Jasa Keuangan (OJK) and the financial services industry.

The results of this research become valuable input for OJK and Financial Services Businesses in determining educational activities and innovation of financial products or services in the midst of the financial services industry which is undergoing dynamic changes and continues to move forward.

CONCLUSIONS

Increasing financial literacy and financial inclusion has become a global issue believed to play an important role in increasing economic growth. However, the phenomenon that occurred in Indonesia, the increases in financial literacy and financial inclusion in several provinces were not followed by the economic growth of the province. Therefore, this study aims to analyze the effect of financial literacy and financial inclusion on economic growth in Indonesia. The object in this study is 34 provinces in Indonesia with 2 survey periods, 2016 and 2019. The data analysis method used is panel data regression using EViews 10 software. Chow test and Hausman test are carried out to determine the best model. The results of the hypothesis test show that financial literacy and financial inclusion have no significant effect on economic growth in Indonesia, either partially or simultaneously. This shows that efforts to increase financial literacy and inclusion in Indonesia need to be increased more in order to achieve its main goal of inclusive growth. The results of this research become valuable input for OJK and Financial Services Businesses in determining educational activities and innovation of financial products or services in the midst of the financial services industry which is undergoing dynamic changes and continues to move forward.

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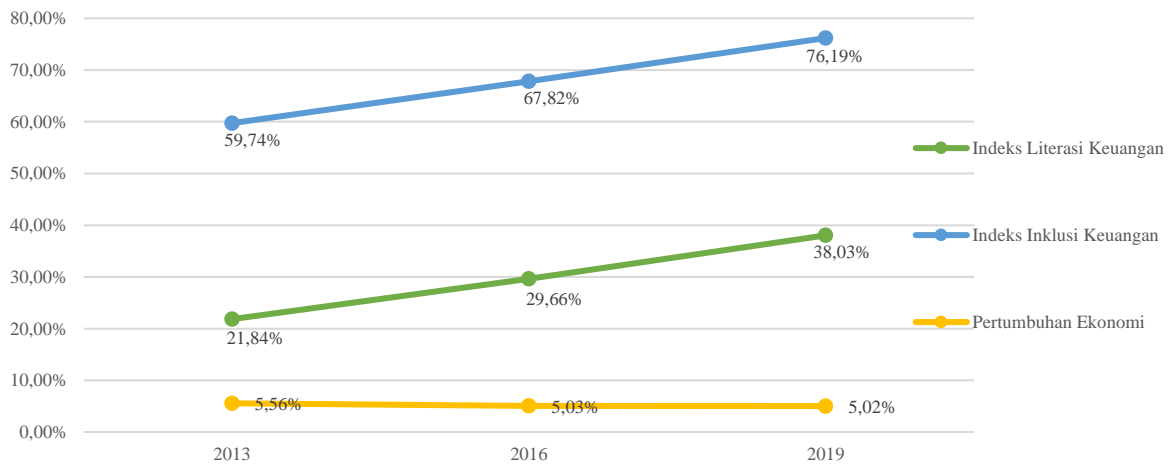


Figure 1 | Financial Literacy Index, Financial Inclusion Index and Economic Growth in Indonesia

Source: SNLIK 2016, SNLIK 2019, BPS 2020 processed in 2021

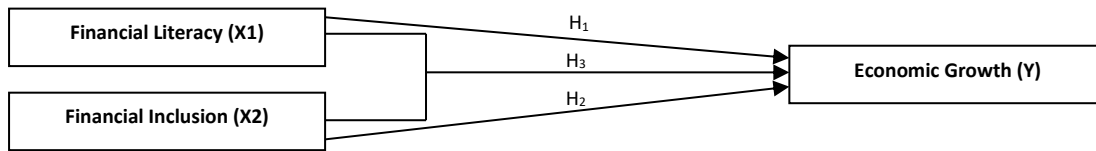


Figure 2 | Research Model

Source: Data processed by researchers, 2021

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TABLE 1 | Variables, Operational Definitions and Indicators

Variable	Operational Definitions	Indicator
Financial Literacy (X1)	The knowledge, beliefs and skills possessed by the community that can influence the attitudes and behavior of the community in improving the quality of decision making and the quality of financial management so as to achieve community welfare	Financial Literacy Index (in %)
Financial Inclusion (X2)	he availability of access to various financial institutions, products, and services in accordance with the needs and capabilities of the community in order to improve the welfare of the community.	Financial Inclusion Index (in %)
Economic Growth (Y)	An increase in the production capacity of an economy embodied in national income.	GDP per capita growth (in %)

Source: Data processed by researchers, 2021

TABLE 2 | Descriptive Statistics of Research Variabels

	N	Minimum	Maksimum	Mean	Std. Deviation
Economic Growth (Y)	68	-15.7%	9.9%	5.0%	0.0303
Financial Literacy (X1)	68	19.3%	59.2%	33.9%	0.0767
Financial Inclusion (X2)	68	58.6%	94.8%	72.1%	0.1005

Source: Data processed by researchers, 2021

TABLE 3 | Financial Literacy Index, Financial Inclusion Index and Indonesia's Economic Growth in 2016 and 2019

Provinces	Financial Literacy Index		Financial Inclusion Index		Economic Growth	
	2016	2019	2016	2019	2016	2019
Aceh	32.73%	44.36%	73.09%	86.09%	3.3%	4.1%
Sumatera Utara	32.36%	37.96%	75.27%	93.98%	5.2%	5.2%
Sumatera Barat	27.27%	34.55%	66.91%	66.75%	5.3%	5.1%
Riau	29.46%	43.19%	69.45%	86.39%	2.2%	2.8%
Jambi	26.91%	35.17%	66.91%	64.83%	4.4%	4.4%
Sumatera Selatan	31.27%	40.05%	72.36%	85.08%	5.0%	5.7%
Bengkulu	27.64%	34.12%	67.27%	85.56%	5.3%	5.0%
Bangka Belitung	29.45%	30.97%	69.09%	61.94%	5.1%	5.3%
Lampung	26.91%	35.70%	69.82%	64.57%	4.1%	3.3%
Kep. Riau	37.09%	45.67%	74.55%	92.13%	5.0%	4.9%
DKI Jakarta	40.00%	59.16%	78.18%	94.76%	5.9%	5.9%
Jawa Barat	38.70%	37.43%	68.31%	88.48%	5.7%	5.1%
Jawa Tengah	33.51%	47.38%	66.23%	65.71%	5.2%	5.4%
DIY	38.55%	58.53%	76.73%	76.12%	5.0%	6.6%
Jawa Timur	35.58%	48.95%	73.25%	87.96%	5.6%	5.5%
Banten	38.18%	39.27%	69.45%	84.29%	5.3%	5.5%
Bali	37.45%	38.06%	76.00%	92.91%	6.3%	5.6%
NTB	21.45%	34.65%	63.27%	62.73%	5.8%	4.0%
NTT	28.00%	27.82%	62.18%	60.63%	5.1%	5.2%
Kalimantan Barat	30.55%	36.48%	65.45%	75.35%	5.2%	5.0%
Kalimantan Tengah	26.18%	37.01%	60.36%	74.80%	6.3%	6.2%
Kalimantan Selatan	23.27%	36.22%	59.27%	74.54%	4.4%	4.1%
Kalimantan Timur	30.55%	39.63%	74.91%	92.39%	-0.4%	4.8%
Kalimantan Utara	26.55%	35.43%	61.45%	65.09%	3.6%	6.9%
Sulawesi Utara	28.73%	38.85%	68.36%	83.99%	6.2%	5.7%
Sulawesi Tengah	22.55%	39.63%	65.09%	84.51%	9.9%	7.2%
Sulawesi Selatan	28.36%	32.46%	68.00%	86.91%	7.4%	6.9%
Sulawesi Tenggara	26.55%	36.75%	66.91%	75.07%	6.5%	6.5%
Gorontalo	23.27%	31.23%	62.55%	60.89%	6.5%	6.4%
Sulawesi Barat	26.91%	34.91%	65.45%	62.99%	6.0%	5.7%

Maluku	26.18%	36.48%	64.00%	65.62%	5.7%	5.6%
Maluku Utara	27.27%	37.53%	64.00%	75.85%	5.8%	6.1%
Papua Barat	19.27%	28.87%	58.55%	59.84%	4.5%	2.7%
Papua	22.18%	29.13%	61.45%	60.89%	9.1%	-15.7%

Source: Data processed by researchers, 2021

TABLE 4 | Estimation Results of CEM, FEM, and REM

Variabel	Common Effect Model		Fixed Effect Model		Random Effect Model	
	t-Stat	Prob.	t-Stat	Prob.	t-Stat	Prob.
Financial Literacy	- 0.342	0.733	0.128	0.899	- 0.044	0.965
Financial Inclusion	0.483	0.631	- 0.768	0.448	- 0.319	0.751

Source: Data processed by researchers, 2021

TABLE 5 / Chow Test Results

Effects Test	Statistic	d.f.	Prob.
Cross-section F	4.836825	(31,30)	0.0000
Cross-section Chi-square	114.651826	31	0.0000

Source: Data processed by researchers, 2021

TABLE 6 / Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	1.202545	2	0.5481

Source: Data processed by researchers, 2021

TABLE 7 / Panel Data Regression Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.	Note
Konstanta (C)	0.057584	0.009369	6.146316	0.0000	Significant
Literasi Keuangan (X1)	-0.000893	0.020126	-0.044393	0.9647	Not significant
Inklusi Keuangan (X2)	-0.005242	0.016437	-0.318927	0.7509	Not significant
R-squared		0.003399			
F-statistic		0.104018			
Prob (F-statistic)		0.901369	Tidak Signifikan		

Source: Data processed by researchers, 2021