

# The Influence Of Foreign Direct Investment On Indonesia Economic Growth: Inclusive Or Exclusive?

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## Abstract:

**Background:** A country needs inclusive economic development to growth. Inclusive economic development is a development with these principles: pro-growth, pro-job, pro-poor, pro-equality and pro-environment. Government of Indonesia opens up great opportunity for foreign investors to invest in Indonesia in order to increase Indonesia economic growth. This study aims to know and to analyze the impact of foreign direct investment to economic growth in Indonesia whether it is an exclusive growth or inclusive growth. This research use economic growth as an intervening variable. Income distribution inequality, open unemployment rate, and human development index as development direction of exclusive or inclusive growth measurement.

**Materials and Methods:** This study using a panel data from 33 provinces of Indonesia from 2015 to 2019. All data were taken from Statistics Indonesia. Path analysis is used to analyze the variables with SmartPLS3 Software.

**Results:** The results shows that (1) Foreign direct investments has positive and not significant effect on economic growth in Indonesia. (2) Economic growth has negative and significant effect on income distribution inequality, (3) Economic growth has negative and not significant effect on open unemployment, (4) Economic growth has negative and not significant effect on human development index. (5) Foreign direct investment that had been received are still has effect on exclusive growth.

**Conclusion:** Foreign Direct Investment (FDI) only has effect on the changes of inequality income distribution. It means FDI could only solve the inequality problems while for other variables it has no effect. The FDI that had been received by the government still has effect on economic growth only exclusively

**Key Word:** foreign investments, economic growth, exclusive growth, inclusive growth

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Date of Submission: 02-03-2022

Date of Acceptance: 16-03-2022

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## I. Introduction

One thing that is expected from a successfulness of economic growth is an equitable distribution of community prosperity. However, to strive for it is not easy. It requires the involvement of all economic actors to work together to increase economic growth. As one of the actors, the government of Indonesia release policies that stated direct investments may be a way to increase economic growth of Indonesia. There are two types of direct investment, Foreign Direct Investment (FDI) and Domestic Direct Investment (DDI). Both FDI and DDI are expected to boost Indonesia's economy to become better.

**Figure 1** is showing the graphic of Direct Investment Realization in Indonesia. The total of Direct Investment both FDI (PMA) and DDI (PMDN) are increasing every quarter year. Realization of FDI, although it is quite volatile, still contributes more funds than DDI. This research aims to know and to analyze the impact of foreign direct investment on Indonesia economic growth, whether it is an exclusive or inclusive growth. Exclusive growth may cause inequality of community welfare. It is marked with high poverty rates, high unemployment rates, and high gini ratios (income distribution inequality). Statistics Indonesia stated that since 2010 to 2019 the inequality of income distribution in Indonesia is at a moderate level. Therefore, Indonesia needs inclusive growth that the focus of development is not only on enhancing economic growth but also considering absorption of labor, reducing poverty, and paying attention to the environment.

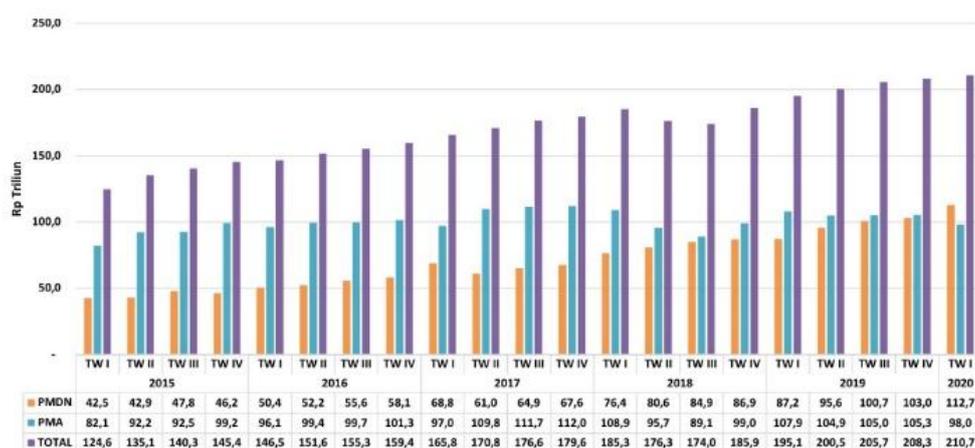


Figure 1. Realization of Direct Investment in Indonesia

## II. Material and Methods

This section discuss definitions and hypothesis of this study. Then, followed by research method used. There are five variables in this study: Foreign direct investment (FDI), Income distribution inequality (Gini ratio), Unemployment rate, Human development index, and Economic growth.

### Economic Growth

Economic growth is an increase in per capita income of a society over a long time period [1]. According to Barro and Martin, Economic Growth Rate can be used as an analysis tool to see economic performance of one country and it also can be used to compare the economic performance of one country to others [2].

### Foreign Direct Investment

Foreign Direct Investment (FDI) is an investment that carried out by investors from outside Indonesia. Investors can be individuals, business entities, or governments. These activities could be carry out with sources of foreign capital only, or combining foreign and domestic capital.

### Income Distribution Inequality

A situation where there are differences in income between people that ultimately lead to an unequal income distribution is Income Distribution Inequality. Wibowo stated that the continuous increase in inequality could be a cause of inhibiting economic growth. High inequality causing social and economic problems [3]. One of the most known theory of inequality income distribution is “Inverted-U” Hypothesis by Simon Kuznets. It states when development through the expansion of the modern sector begins, it initially results an increase in inequality incomes between households, then reaches a certain average level of income, and finally begins to decrease when it reaches a certain level of development [4].

### Open Unemployment Rates

Open Unemployment consists of two categories of unemployment, voluntary unemployment and forced unemployment. Voluntary unemployment is the part of workforce that does not want to have a job because they do not agree with the certain amount of the wage or they are still looking for other job options. Meanwhile, forced unemployment is other parts of workforce that want to have a job very soon but do not have it yet. The higher the open unemployment rate, the more people in the workforce that have not entered into the job market.

### Human Development Index

Human Development Index (HDI) describes society’s condition to access development outcomes, especially to have education, health, and income. HDI is generally used to classify developed countries, developing countries, and underdeveloped countries. It can also be used to measure the effect of economic policies on the quality of life [5]. In general, the Human Development index has four elements: productivity, equity, sustainability, and community empowerment.

### Exclusive and Inclusive Development

Exclusive development is a development that only focus on increasing the rates of economic growth, so it causing social exclusion. Social exclusion is a phenomenon that shows there are groups of poor, groups of disadvantaged and even groups of people that are exclude from normal society’s life in a country. The opposite side of exclusive development is inclusive development. Inclusive development is a process of development that not only focus on increasing economic growth but also oriented in building social aspects of society. The goal is

to deliver a civilized area and produce a prosperous society. Badrudin states that inclusive development is a higher quality of development. It is focusing on many more aspects, such increasing economic growth (pro-growth), absorption of labor (pro-job), reducing poverty (pro-poor), reducing inequality income distribution (pro-equality), and paying attention to the environment (pro-environment) [6][7].

Foreign Direct Investment received by government of Indonesia can be used as a funds to develop the country. This investment expected to support Indonesia's economic development. Both are in accordance with the purpose of receiving FDI that is for increasing economic growth. Harrod-Domar's economic growth theory mentioned that an economy can set aside a few parts of its national income for managing or replacing damaged capital goods, and in order to grow the economy it need new investments as additional capital [8]. Arta mentioned that FDI has a negative and insignificant effect on economic growth [9]. Panel study by Rizky stated that FDI partially has a positive and significant effect on economic growth in Indonesia in 2010-2013 [8]. Other researchers also stated different results of their study. The gaps on this field of study lead us to the first hypothesis (H1).

H<sub>1</sub>: Foreign Direct Investment has effect on Indonesia's economic growth

According to Simon Kuznets' inverted-U theory, economic growth and inequality income distribution have opposite directions. If there is an increase in economic growth, it will decrease the inequality of income distribution. Each regions in Indonesia has a different economic growth rate because it has different resources. In addition, the investment is not evenly distributed between regions. If the investments is evenly distributed to every regions throughout Indonesia, it will give better impact on equitable regional economic development while reducing inequality income distribution. Adipuryanti and Sudibia show that investment has a positive and significant effect on economic growth, and the impact of investment on inequality income distribution is positive and insignificant [10]. Meanwhile, Pramesti and Yasa mention that investment through economic growth has a negative and not significant effect on inequality income distribution [11]. Therefore, this study is trying to fill the gap of different results in this field of study by forming next hypothesis (H2)

H<sub>2</sub>: Economic growth has effect on inequality income distribution in Indonesia

Providing great opportunities for investors to invest in a country will increase the possibility to opening more employment. The society will have better opportunity to have a job at investing companies. If more people are absorbed by the labor market, it will reduce the number of unempld. Okun Law mentioned that there is a negative effect between economic growth and unemployment. Senet and Yuliarmi claim that investment has no impact on unemployment in Bali. This study was done in the period of 1986-2012 [12]. Meanwhile, Hasan in his research shows that there is a positive effect of economic growth on the open unemployment rate decrease [13]. Here is the third hypothesis (H3) of this study.

H<sub>3</sub>: Economic growth has effect on open unemployment rates in Indonesia

Human Development Index (HDI) measures a development not only from income/ amount of production but also determines the education and health in society. In Indonesia, FDI can play a major role in industrial development and economic growth. It is could become source of knowledge and technology transfer [14]. By the time foreign companies invest in Indonesia and recruits workers from Indonesia, the companies will improve human resources in Indonesia by letting the workers learn about companies' systems and share knowledge. Therefore, HDI is expected to form a human capital, which will help the development process in Indonesia. A study by Wicesa claims that HDI positively and significantly affects investment in both DDI and FDI [15]. Furthermore, a research in East Nusa Tenggara in 2001-2016 by Salem shows that FDI is not affected by regional economic growth [16]. It lead us to the next hypothesis of this study (H4)

H<sub>4</sub>: Economic growth has effect on Human Development Index in Indonesi

This research using data from 34 provinces in Indonesia. It consists of (1) Realization of Foreign Direct Investment, (2) Gini Index, (3) Open Unemployment Rates, (4) Human Development Index, and (5) Economic Growth Rates. All data were taken from Indonesia Statistics Official Website ([www.bps.go.id](http://www.bps.go.id)). The data used are period of 2015-2019. This study using path analysis and SmartPLS3. Foreign Direct Investment is the only one independent variable tested in this study. The realization of Foreign Direct Investment data shows in American Dollar (\$) currency, but then converted to Indonesian Rupiah currency (Rp). There are three dependent variables: inequality income distribution, open unemployment rates, and human development index. Then, Economic growth as an intervening variable.

### III. Result

There are 170 data processed in this study. It consists of 34 Indonesia's provinces from 2015 to 2019. Table 1 shows information about descriptive statistical analysis of each variable tested in this study.

**Table no 1:** Shows descriptive statistical analysis of the variables tested.

Variable	N	Minimum	Maximum	Mean	Std. Of Deviation
FDI (in million rupiah)	170	27,590	81,751,781	12,037,273	16,984,851.56
Economic Growth (%)	170	-15.72	21.76	5.25	2.78
Gini Index	170	0.26	0.44	0.36	0.04
Open Unemployment (%)	170	1.37	9.93	5.14	1.82
HDI	170	57.25	80.76	69.78	4.11

Mean of FDI realization is Rp12,037,000,000.00. The highest FDI is Rp81,751,781,000,000.00 that received by West Java in 2020. Meanwhile, the lowest is received by West Sulawesi in 2015 is worth Rp27,590,000,000.00. Then, standard deviation of FDI realization is at Rp16.984.841.560.000,00. more than its average, so FDI variable has wide distribution.

Next, economic growth as an intervening variable has mean score 5.25%. West Nusa Tenggara achieved the highest economic growth in 2015 with a 21.76%. Meanwhile, Papua in 2019 has the lowest economic growth at -15.72%. Negative economic growth rate does not mean the area experienced a setback nor does not developing, but its previous year economic rate is higher. Deviation standard of this variable is 2.78%. It is lower than its mean, so economic growth has a narrow data distribution.

The first dependent variable is inequality income distribution (Gini index). Gini index mean is 0.36. The Special Region of Yogyakarta in 2017 has the highest gini index with gini index 0.44. Meanwhile, Bangka Belitung in 2019 is the lowest with 0.26 gini index. Deviation standard of this variable is at 0.04. It is smaller its average, so inequality income distribution has narrow data distribution.

The next dependent variable is open unemployment rate. Open unemployment rate mean is 5.15%. The highest rate of open unemployment are Aceh and Maluku that reached 9.93% in the same year, 2015. Bali in 2018 become the lowest with 1.37%. Deviation standard of open unemployment is 1.82. There is no big gap in the rates of open unemployment tested

**Table no 2:** Shows result of reliability test.

Variable	Cronbach's Alpha
Foreign Direct Investment (FDI)	1.000
Economic Growth	1.000
Gini Index	1.000
Open Unemployment	1.000
Human Development Index	1.000

**Table no 3:** Shows result of multicollinearity test.

Variable	Cronbach's Alpha
Foreign Direct Investment (FDI)	1.000

**Table no 4:** Shows result of partial test.

Path Coefficient	Original Sample (O)	Sample Mean (M)	T Statistics	P Values	Hypothesis result
FDI → Economic Growth	0.055	0.058	0.657	0.512	H <sub>1</sub> is rejected
Economic Growth → Gini Index	-0.185	-0.18	2.111	<b>0.035*</b>	H <sub>2</sub> is supported
Economic Growth → Open Unemployment	-0.022	-0.027	0.328	0.743	H <sub>3</sub> is rejected
Economic Growth → HDI	-0.025	-0.026	0.369	0.713	H <sub>4</sub> is rejected

On table no 2, there are result of reliability test. Each variable tested has Cronbach's alpha score 1.000 > 0.60. It means all variables tested are reliable. The data in this study are stable and consistent. On Table 3, there is result of multicollinearity test. VIF score of FDI is 1.000 < 10.00. It means that there is no multicollinearity issue.

The results of the T-test are shown on table no 4. Foreign Direct Investment (FDI) has no significant effect on economic growth. It is indicated by p value of 0.512 bigger than 0.05 ( $\alpha$ ). In other words, FDI could not affect economic growth changes. Next, economic growth effect on inequality income distribution is negative and significant with p values  $0.035 < 0.05$  and original sample  $-0.185$ . So, economic growth could affect inequality income distribution. Since the effect is negative, it means that if economic growth rates were increased, it will decrease the inequality income distribution. Next, economic growth effect on open unemployment is negative and not significant. It is shown by p values of  $0.743 > 0.05$  and original sample  $-0.022$ . Based on its p-values, it means that economic growth could not affect open unemployment rate. Last, effect of economic growth on Human Development Index (HDI) is negative and not significant. It is shown by its p values  $0.713 > 0.05$  and original sample  $-0.025$ . So, economic growth could not affect the changes of HDI.

**Table no 5:** Shows coefficient of determination result

Variable	R Square	R Square Adjusted
Economic Growth	0.003	-0.005
Gini Index	0.034	0.029
Open Unemployment	0.000	-0.005
Human Development Index	0.001	-0.005

According to table no 5, FDI only independent variable can describe its effect on changes in inequality income distribution as much as 3.4%, while 96.6% of gini index changes are described by others variable outside of this model. FDI has weak ability to describe its effect of open unemployment. It is shown from its R-square that score 0%. To HDI, FDI could only describe its effect as 0.1% and the rest 99.9% of HDI changes are described by other variables that are not included in this model. Then toward economic growth as an intervening variable, R-square of FDI is scored only 0.3%. It means that FDI could only explain 0,3% of economic growth, and the 99.7% others are explained by variables other than FDI.

#### IV. Discussion

In the previous section, we know that only one hypothesis is supported, that is H2. Meanwhile, result of path analysis rejects three others hypothesis. means FDI has positive and insignificant effect on economic growth in Indonesia. So, H<sub>1</sub> is not supported. the p value is 0.512 which is higher than significance ( $\alpha$ ) 0.05 and its original sample is 0,055. Therefore, FDI could not affect the changes of economic growth in Indonesia. This result is in line with Pauzi and Budiana's, and Bimantoro and Adriana's research. They said that FDI has no effect on economic growth [17] and direct investments have strong linkages with Indonesia's economic growth only in a short time period [18]. Next, this study supported second hypothesis (H2). Economic growth could affect the changes of gini index. It shows by its p values 0.035 that is smaller than the significance ( $\alpha$ ) 0.05. This result is in line with economic growth theory by Simon Kuznets. In addition,s, this research result is also supported by some previous researchers, one of them is Pauzi and Budiana's that stated direct investment has a significant effect on inequality income distribution indirectly through economic growth [17]. Rinjani also stated that inequality income distribution is affected by FDI negatively [19]. The result of this study reject the third hypothesis. P-values at 0.743 is higher than its significance ( $\alpha$ ) 0.05 and original sample is negative (-0.022) which means economic growth has negative and not significant effect on open unemployment. Suprianto supports this result, FDI has no significant effect on unemployment [20]. Then, Helvira and Rizki also stated the same conclusion that investments are not significant on open unemployment rate [21]. Finally, the last hypothesis of this study (H<sub>4</sub>) is not supported. Original sample is negative at -0.025 and p value is 0.713 higher than its significance ( $\alpha$ ) 0.05. It means that economic growth has negative and no significant effect on HDI. Choirunnisa had similar research results with this study which stated that FDI has a negative effect on HDI [14]. Salem is also supporting this study. He found that economic growth has no effect on East Nusa Tenggara's HDI in 2001-2016 [16].

#### V. Conclusion

Foreign Direct Investment (FDI) only has effect on the changes of inequality income distribution. If the foreign direct investment increases, it would decrease the inequality income distribution. It means FDI could only solve the inequality problems. Therefore, FDI that had been received by the government of Indonesia only exclusively effect economic growth. The use of FDI has not shown any benefits to improve welfare of the society and has not been able to promote economic growth into a sustainability or inclusive development.

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