



The Effect of Investment, Unemployment, Inflation, Human Development and Government Expenditure on Economic Growth and Poverty in Indonesia

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ABSTRACT

This study aims to determine the effect of investment, unemployment, inflation, human development and government spending on economic growth and poverty in Indonesia. This study uses panel data for 2012-2021 in 33 provinces, which is analyzed using a simultaneous equation approach using the Two Stage Least Square (2SLS) method and to look at the mutual relationships between endogenous variables using the Granger model (Causality Test). This research uses hypothesis testing, namely the F test and t test. The results of this research; First, equation 1. The influence of investment, unemployment and inflation together have a significant effect on economic growth. Partially, first, poverty has no significant effect on economic growth. Second, investment has no significant effect on economic growth. Third, unemployment has a significant effect on economic growth. Fourth, inflation has a significant effect on economic growth. Then equation 2 the effects of inflation, human development and government spending together have a significant effect on poverty. Partially, first, economic growth has no significant effect on poverty. Second, inflation has a significant effect on poverty. Third, human development has a significant effect on poverty. Fourth, government spending has no significant effect on poverty. The result of Granger's model (causality test) is that there is no reciprocal relationship between economic growth and poverty.

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INTRODUCTION

Indonesia's economic growth continues to show economic sluggishness in line with the world economy contracting quite deeply. Since the emergence of the Covid-19 pandemic in early 2020, the Indonesian economy has been severely affected by the Covid-19 pandemic. There have been disruptions in both the output market and the input market, considering that most industries have experienced disruptions to the export destination market, including raw

materials, most of which must also be imported. The Central Statistics Agency announced that Indonesia's economy in the second quarter of 2020 contracted by 5.32%. The weakening of economic growth has actually been suspected by the government by trying to accelerate the realization of the national economic recovery program (PEN). The government detected that the considerable decline in this regard was due to a slowdown in public spending, investment and including trade activity. The following is the rate of economic growth in Indonesia in 2014-2021:

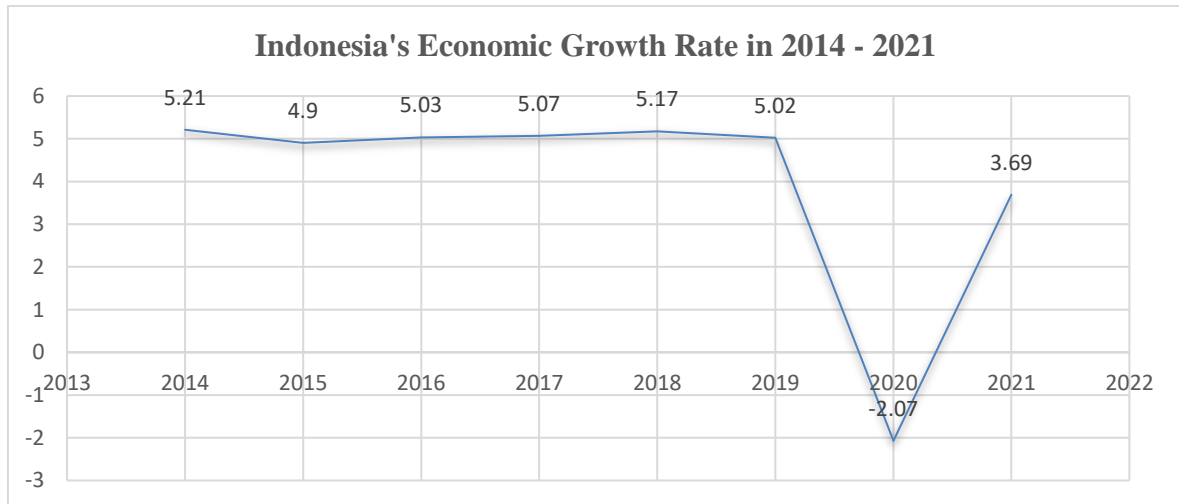


Figure 1.
Indonesia's Economic Growth Rate in 2014 - 2021

Source: BPS 2022

From the chart above, it can be seen that the economic growth rate in the Indonesian region from 2014-2019 experienced a uniform (homogeneous) movement. In 2015 economic growth decreased from the previous year of 5.21% to 4.9%. However, in 2016 economic growth increased from 4.9% to 5.03%. Likewise, in 2017 where economic growth increased from 5.03% to 5.07%. In 2018, economic growth rose again to 5.17% from 5.07%. In 2019, economic growth decreased by 5.02% from 5.17%. Not only 2019, but in 2020 there was also a significant decrease in economic growth, namely -2.07 from 5.02%. So that in 2021, economic growth experienced a significant increase, from -2.07% to 3.69%. This happened due to economic instability in Indonesia and policies designed by the government that were not right on target in the economic development of the Indonesian region.

Poverty is a problem that must be handled properly and seriously by the government. Because the high poverty rate will certainly affect the rate of economic growth in Indonesia. Poverty can occur due to several factors, namely an attitude that accepts what is, is not serious in trying, policies and government programs that are not evenly distributed, low levels of investment,

low levels of education, high unemployment, high prices of needs, limited access to resources. , income inequality and social inequality and the slow pace of economic growth. The following is a graph of the poor population and economic growth for 2014-2021:

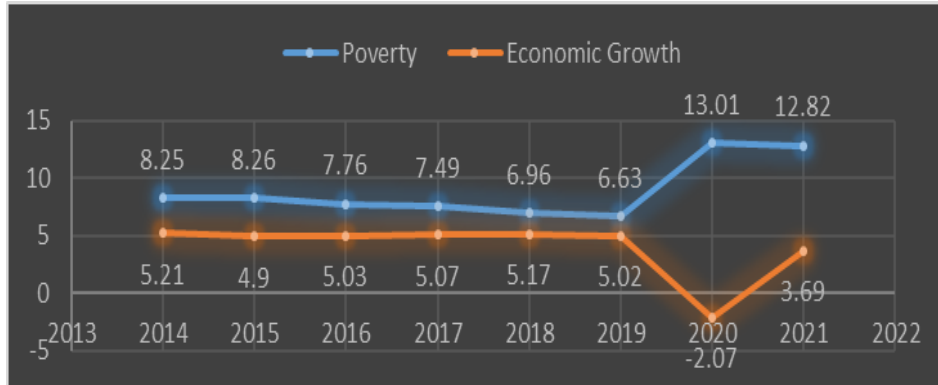


Figure 2.

Graph of Indonesia's Economic Growth and Poverty Rate in 2014-2021

Source: BPS 2022

The graph above explains that from 2014-2019 economic growth with poverty was at a uniform (homogeneous) rate, but in 2020 economic growth experienced a significant decline at -2.07% with an increase in the poverty rate of 13.01%. This is caused by many business sectors, companies and other fields that lay off workers due to the lack of production and losses that are large enough so that they cannot operate and do not earn profits which have an impact on the inability to pay for the services of workers. That fluctuations in economic growth and poverty are caused by exogenous variables, namely investment, unemployment, inflation, human development and government spending. According to (Juliansyah et al., 2022) in Sukirno (2011: 121) said that investment is capital or expenditure for capital goods and production equipment to increase the production capacity of goods and services in the economy. If investment in a region experiences an increase, it will have a good impact on economic growth in Indonesia, but if investment in a region decreases, it will have a bad influence on the development process of Indonesia's economic growth. From 2014-2019 the level of investment with economic growth and missions looks uniform (homogeneous). However, in 2020 investment experienced a significant decline, namely from 9.54% to 7.92%, accompanied by a decline in the value of economic growth from 5.02% to -2.07% and poverty from 6.63% to 13.01%. This is supported by research conducted by Primary & Utama, (2019) explains that investment has a positive and significant impact on economic growth in the districts/cities of Bali Province. It can be interpreted that there is a positive direction between the

investment variable and economic growth (GDP per capita) where investment can be used as a benchmark for the success and sustainability of development.

Based on the explanation, it can be seen that the unemployment rate has increased significantly in 2020, namely at the position of 7.1%. This is because in 2020 there has been an outbreak of the Covid-19 pandemic in Indonesia. There are not a few various sectors and companies that have laid off employees or workers and laborers have been laid off due to the inability of the sector or company to provide salaries to workers because the production of goods has decreased so that the sector or company no longer earns a profit on the goods produced. or sold on the market. So that in 2020 the unemployment rate will increase quite high. The high unemployment rate is also due to limited work space for job seekers. So if there is a high increase in the unemployment rate, of course this will slow down (decrease) the rate of economic growth and have an impact on the poverty rate which also increases in Indonesia. However, if government policy can emphasize reducing unemployment rates, then this will have a good impact on economic growth and reduce poverty rates. This was clarified by (Oshiokpekhai, 2021) who stated that the unemployment coefficient was marked negative in both the long and short term. Statistically significant only in the long term. With increasing unemployment in Nigeria, GDP has decreased. This means that the increasing unemployment rate causes Nigeria's economic growth to decline, both in the long and short term.

According to (Ningsih & Andiny, 2018), inflation has a positive impact on poverty. If inflation increases, so does poverty. On the other hand, if inflation falls, the poverty rate also falls. This is also supported by the theory which states that inflation will cause an increase in the prices of goods and services. Rising prices cause people's purchasing power to decrease and lead to an increase in poverty rates. So in this case economic growth and poverty are affected by inflation. Inflation development can be seen to be on a downward trend from 2017 to 2020. In 2020, inflation decreased by 1.6%, followed by an increase in poverty of 13.01%. This is inversely proportional to the theory that states that if inflation decreases in price, purchasing power increases and poverty decreases along with inflation. Research conducted by (Dong, 2012), (Achyar & Hakim, 2021) and (Wollie, 2018) states that inflation has a positive and significant impact on economic growth. (Mohseni & Jouzaryan, 2016), (Mhlaba & Phiri, 2019) and (Alam & Alam, 2021) concluded that inflation has a negative and significant impact on economic growth.

According to Beik & Arsyianti (2016: 147), human development is a concept that combines life expectancy index, education index, and purchasing power index. Low education makes it difficult for some companies to accept

them as workers in the company. For this reason, education is an indicator used for the Human Development Index (HDI) variable. The better the quality of human development, the better this will have a good impact on increasing the rate of economic growth in Indonesia. However, the low quality of human development (HDI) will affect the rate of decline in the rate of economic growth in Indonesia.

In 2020, human development increased from 71.92% to 71.94%. In the same period, economic growth actually experienced a very drastic decline, from 5.02% to -2.07%. During the same period, poverty was seen to increase from 6.63% to 13.01%. In 2021, human development increased from 71.94% to 72.29%. In the same period, economic growth increased from -2.07 to 3.69%. Not only that, in the same period poverty also decreased from 13.01% to 12.82%. Because there is no increase in human development in 2020, this will cause low stability of our economy in Indonesia, so it is necessary to analyze the effect of the human development index on economic growth and poverty in Indonesia. Based on the explanation above, it can be seen in a study conducted by (Elistia & Syahzuni, 2018) entitled "The Correlations of Human Development Index (HDI) Toward Economic Growth (GDP Per Capita) In 10 ASEAN Member Countries" which states that the Human Development Index (HDI) has a significant effect on economic growth in 10 ASEAN Countries.

In economic growth and poverty, government spending has a huge share in determining economic growth and poverty. Government spending is part of fiscal policy as a form of government intervention in the economy. The functions carried out by the government can be carried out or carried out by fiscal policy (with one of its emphasis) through expenditure policy or can be with regional spending. Here, the government sees its economic growth and poverty through government expenditure.

Government expenditure in Indonesia has increased from 2014 to 2021. In 2020 and 2021, government spending increased from 14% to 16%, which stagnated in government spending from 2020 to 2021. In the same period, economic growth fell significantly from 5.02% to -2.07% and rose by 3.69%. Likewise, poverty in the same period increased from the previous year which was 6.63%, rose to 13.01 and fell to 12.82%. So we can conclude that the proportion of government expenditure causes the realization of regional spending has not been able to encourage Indonesia's economic growth. According (Haryanto, 2013) research explained that the variable of government spending on direct spending has a positive and significant effect on economic growth. This means that if government spending on direct spending increases, economic growth also increases. While the variable of government spending on

indirect spending has a positive and significant effect on economic growth. This means that if government spending on indirect spending increases, it will increase economic growth.

In connection with what has been explained above, the condition of fluctuations in economic growth and poverty cannot be separated from the influence of fluctuations in macro and micro variables. Economic growth and poverty are very interesting variables to be studied further before they can describe economic conditions in Indonesia. The importance of assessing economic growth and poverty in developing regions in Indonesia because economic growth and poverty are indicators of determinants of economic stability to evaluate or become a reference and assessment of economic performance of a regional region.

Based on the explanation above, the author is interested in examining "Analysis of the Effect of Investment, Unemployment, HDI and Government Expenditure on Economic Growth and Poverty in Indonesia in 2014-2021."

RESEARCH METHOD

The type of data based on the data source in this study is secondary data. Secondary data is data obtained from third parties outside the researcher. The data in the study was sourced from data from the Central Statistics Agency (BPS) of West Sumatra Province. The data used in this study is panel data with the number of time series data is 8 years (2014 to 2021) and the number of cross section data is 33 provinces in Indonesia. This study used descriptive analysis techniques. The analysis equations used are simultaneous equations and granger causality tests

RESEARCH RESULT AND DISCUSSION

Table 1.
Causality Test Results

Pairwise Granger Causality Tests
 Date: 02/17/23 Time: 13:38
 Sample: 2012 2021
 Lags: 2

Null Hypothesis:	Obs	F-Statistic	Prob.
Y2 does not Granger Cause Y1	264	0.57176	0.5652
Y1 does not Granger Cause Y2		0.01313	0.9870

So from the results above, it is concluded that economic growth and poverty do not affect each other and there is no relationship between these variables reciprocally (causality). This happens because the rate of economic growth in Indonesia is considered uneven which causes inequality. This condition is clarified by Albert Hirschman known as the trickle-down effect, explaining that the progress obtained by a group of people will itself hatch downwards so as to create jobs and various economic opportunities which in turn will foster various conditions for the creation of an even distribution of the results of economic growth. Not only is economic growth and poverty unrelated, poverty and economic growth are also not interconnected. This is because the poor contribute little to the formation of economic growth even though the income of the poor rises from the poverty line. Because this does not have a major effect on increasing economic growth even though the income of the poor actually exceeds the poverty threshold. 3.2

The Result of the Economic Growth Equation The coefficient of determination (R^2) in equation 1 (economic growth) is seen at the R-Squared value of 0.108759 or equal to 10.87%. This means that only 10.87% of the influence of investment, unemployment and inflation variables on economic growth in Indonesia and the remaining 89.13% is influenced by other variables outside the equation of this model. For the t-test in Table 4.9 each exogenous variable on economic growth (Y_1); First, it is known that the regression coefficient of the poverty variable (Y_2) on economic growth (Y_1) is -0.023061 with a probability value of $s = 0.1748$ greater than 0.05. Based on these results it can be concluded that there is a negative but not significant effect of poverty on economic growth in Indonesia. This happens because the income received by the poor, even though it has exceeded the poverty line threshold, does not have a major influence on economic growth because the nominal value of economic growth is trillions of rupiah, while the increase in income or contributions from the poor only increases in the tens of millions. Therefore there is inequality which results in suboptimal economic growth even though income or contributions cross the poverty line threshold.

Table 2.
Results of Economic Growth Equation Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.813111	1.114575	3.421134	0.0007
Y2_Poverty	-0.023061	0.016959	-1.359830	0.1748
X1_Investment	0.020879	0.055467	0.376425	0.7068
X2_Unemployment	-0.127547	0.030183	-4.225850	0.0000
X3_Inflation	0.526590	0.080900	6.509184	0.0000
R-squared	0.108759	Mean dependent var		5.151818
Adjusted R-squared	0.097790	S.D. dependent var		0.959746
S.E. of regression	0.911612	Sum squared resid		270.0868
F-statistic	15.18522	Durbin-Watson stat		1.041600
Prob(F-statistic)	0.000000	Second-Stage SSR		255.3265
Instrument rank	5			

The two regression coefficients of the investment variable (X1) on economic growth (Y1) are 0.020879 with a probability value = 0.7068 greater than 0.05. Based on these results it can be concluded that there is a positive but not significant effect between investment on economic growth in Indonesia. We can see that while investment conditions have increased, this has not had a major impact on increasing economic growth in Indonesia to the fullest through the Gross Regional Domestic Product (GRDP). According to BKPM, Indonesia's current investment is more focused on the tourism sector, capital flows into the digital economy and startups which are still Indonesia's mainstay as investment saviors and investment has not been evenly distributed across all sectors, so that economic growth cannot increase optimally. The results of this study are in line with research conducted by (Hellen et al., 2017) which states that investment has an insignificant effect on economic growth. According to (Nujum & Rahman, 2019) also produced research which stated that investment had an effect but not significantly on economic growth. The three regression coefficients of the unemployment variable (X2) on economic growth (Y1) are -0.127547 with a probability value = 0.0000 which is less than 0.05. Based on these results it can be concluded that there is a negative and significant effect of unemployment on economic growth in Indonesia. This happens because when job seekers are given soft skills training with the aim of being able to open jobs so they can overcome the unemployment rate so that it will have a good impact on economic growth in Indonesia. This was clarified by Omolua et.al (2022) who stated that the unemployment coefficient is negative in both the long and short term. In theory, this research is in line with Okun's Law which states that the unemployment rate and economic growth have a negative direction. This means that unemployment slows down the rate of economic growth. The four regression coefficients of the inflation variable (X3) on economic growth (Y1) are 0.526590 with a probability value of = 0.000 which is less than 0.05. Based on

these results it can be concluded that there is a positive and significant influence of inflation on economic growth in Indonesia. When inflation can be controlled properly and the policies implemented by the government are rational, market prices can also be controlled so that consumers can make transactions and have a positive effect on economic growth in Indonesia. However, if the government cannot control inflation in the market, this will have a negative impact on economic growth. The research results are supported by the research of (Kryeziu & Durguti, 2019) and (Mhlaba & Phiri, 2019) which concluded that inflation has a positive and significant effect on economic growth. This is due to the stability of inflation developments within limits that can be calculated and predicted so that economic activity and people's purchasing power can be measured correctly.

The Result of the Poverty Equation

Rable 3.

Results of Poverty Equation Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	115.0604	16.65062	6.910279	0.0000
Y1_Economic Growth	-1.965700	1.345100	-1.461378	0.1449
X3_Inflation	-1.883688	0.838156	-2.247418	0.0253
X4_Human Development	-1.072979	0.092168	-11.64159	0.0000
X5_Government Expenditure	-0.601950	0.610875	-0.985391	0.3252
R-squared	0.216453	Mean dependent var		11.11476
Adjusted R-squared	0.206809	S.D. dependent var		5.312094
S.E. of regression	4.731018	Sum squared resid		7274.323
F-statistic	65.60736	Durbin-Watson stat		0.361064
Prob(F-statistic)	0.000000	Second-Stage SSR		5136.354
Instrument rank	5			

The coefficient of determination (R²) in equation 2 (poverty) is seen in the R-Squared value of 0.216453 or equal to 21.64%. This means that only 21.64% of the influence of inflation, human development and government spending on poverty in Indonesia and the remaining 78.36% is influenced by other variables outside the equation of this model. First, it is known that the regression coefficient of the variable economic growth (Y1) on poverty (Y2) is -1.1965700 with a probability value = 0.1449 greater than 0.05. Based on these results it can be concluded that there is a negative but not significant effect between economic growth on poverty in Indonesia. This can happen because the rate of economic growth in the Indonesian region is considered to be uneven which causes inequality. Because the sectors that create economic growth are the trade industry sectors. However, poor people cannot access the sector. This insignificant result of economic growth in reducing poverty is a manifestation of the failure of the Trickle Down Effect theory in several provinces in Indonesia. The results of this study are in line with research conducted by

(Vania Grace Sianturi et al., 2021) that economic growth has a negative and insignificant effect on poverty.

The two regression coefficients of the inflation variable (X3) on poverty (Y2) are -1.883688 with a probability value of = 0.0253 which is less than 0.05. Based on these results it can be concluded that there is a negative and significant influence of inflation on poverty in Indonesia. The cause of the negative inflation on poverty is because Figure 1.5 illustrates the condition of inflation in 2020 which has decreased from 2.72% to 1.6% and in the same year it was followed by an increase in poverty from 6.63% to 13.01%. In 2021, inflation will increase slightly from 1.6% to 1.8%, while poverty will decrease from 13.01% to 12.82%. The three regression coefficients of the human development variable (X4) on poverty (Y2) are -1.072979 with a probability value of = 0.0000 which is less than 0.05. Based on these results it can be concluded that there is a negative and significant effect of human development on poverty in Indonesia. This is because human development in Indonesia is still at a stage of improvement in terms of education, health and purchasing power. Not only that, the government also plays an important role in human development by making various policies in order to overcome poverty in Indonesia. The results of this study are in accordance with the new growth theory which emphasizes the important role of the government in increasing human capital development.

The results of this study are in line with research conducted by (Vania Grace Sianturi et al., 2021) that human development has a negative and significant effect on poverty. The four regression coefficients of the government spending variable (X5) on poverty (Y2) are -0.601950 with a probability value = 0.3252 greater than 0.05. Based on these results it can be concluded that there is a negative but not significant effect of government spending on poverty in Indonesia. This happens because of the government's policies that are not pro-poor towards the poor. Pro-poor is the government's way of providing protection and affirmation through social assistance, social security, subsidized goods, basic needs and improving public services for the poor. However, the reality is that government spending is more inclined towards government projects such as the construction of lighthouses, trains, toll roads and other things, which do not necessarily mean that the poor can enjoy these facilities. This research is in line with research conducted by (Fazaryani Irma Febby & Juanda Reza, 2022) that government spending has no effect and is not significant on poverty in North Sumatra. This is the same as (Pateda et al., 2019) which concludes that government spending has no effect and is not significant on poverty.

CONCLUSION

For the first equation, investment, unemployment and inflation simultaneously have a negative and insignificant effect on economic growth. Poverty and investment have an effect but not significant on economic growth. Unemployment and inflation have significant impact on economic growth. For the second equation simultaneously inflation, human development and government spending together have a negative and insignificant effect on poverty in Indonesia. Economic growth and government spending have a negative and insignificant effect on poverty. Inflation and human development have a negative and significant impact on poverty

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