

ANALYSIS OF THE INFLUENCE OF INVESTMENT AND GOOD GOVERNANCE ON THE OPEN UNEMPLOYMENT RATE AND ECONOMIC GROWTH IN 34 PROVINCES IN INDONESIA

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ABSTRACT

The Sustainable Development Goals (SDGs) have become one of the main concerns and objectives to be achieved by the government by 2030, one of which is the eighth goal of decent work and economic growth, represented by the open unemployment rate and economic growth. As a target to be achieved by 2030, the open unemployment rate and economic growth in the period of 2016-2021 have not shown significant improvements, despite being supported by increased investment realization and improved government governance each year. The aim of this research is to analyze the influence of investment and good governance on the open unemployment rate and economic growth. The research was conducted in 34 provinces in Indonesia, using data from the period of 2016-2021. The type of data used in this study is secondary data collected through intermediaries or obtained and recorded by others. The analysis method used is simultaneous panel data analysis with Two Stage Least Squares (2SLS). The results of this research indicate that foreign direct investment and Indonesia's democracy index do not have an effect on the open unemployment rate, while capital expenditure has a significant negative effect on the open unemployment rate. On the other hand, domestic investment and Indonesia's democracy index do not have a significant effect, but the Human Development Index has a significant negative effect on economic growth. Economic growth has a significant negative effect on the open unemployment rate, and conversely, the open unemployment rate has a significant negative effect on economic growth. The implications of this research are that the government needs to create policies or guidelines to direct both foreign and domestic investment and the use of capital expenditure towards sectors that can generate employment and create a multiplier effect. It should also encourage local governments to maximize and improve their bureaucratic role, so that the impact will be felt by the community, such as implementing various training programs, job creation, or business mentoring, to ensure that the increase in economic growth is accompanied by an improvement in the quality of life for the people in terms of income, health, and education, thereby reducing the open unemployment rate.

Keywords: Unemployment Rate, Growth Rate, Foreign Direct Investment, Domestic Direct Investment, Indonesia Democracy Indeks, Human Development Indeks, Capital Expenditure, Two Stage Least Squares (2SLS).

1. Introduction



Sustainable Development Goals (SDGs) become one of the main concerns and goals that the government wants to achieve in 2030, where one of them is the eighth goal, namely decent work and economic growth, indicators in it include the level of open unemployment and economic growth. As a target achievement that must be achieved in 2030, the level of open unemployment and economic growth every year in the range of 2016-2021 has not shown significant improvement even though it has been supported by increased investment realization and better government governance every year. In that period, the level of open unemployment in Indonesia fluctuated and tended to increase, especially in 2020 reaching 7.07%. Meanwhile, for national economic growth, it has stagnated and tended to decline where it was at its lowest point in 2020 to -2.07, this is inseparable from the Covid-19 pandemic. Meanwhile, if viewed from the development of investment realization which is one of the important supporting factors in influencing the economic growth of a country, especially developing countries (Pramudita et al., 2019). The realization of investment each year continues to increase until in 2021 it reached 901 trillion rupiah from the previous year in 2016 of only 612.9 trillion rupiah. Then in terms of good governance which is defined as a management of development, empowerment, and services that are in line with democracy (government of, by, and for the people) (Widanti, 2022), In this case, the democracy index and the human development index as a result of good governance continue to improve and increase. With these conditions, action needs to be taken to maximize existing resources, in this case capital and human resources, to be able to increase economic growth and reduce the level of open unemployment so that the SDGs targets that have been set can be achieved and can maintain sustainability.

2. Literature Review

2.1 Unemployment

Sukirno, (2006) Unemployment is a condition in which someone who is classified as part of the workforce has a desire to obtain a job but has not been able to obtain a job. Meanwhile, Badan Pusat Statistik, (2023e) states that open unemployment is defined as those who do not have a job and are looking for a job, do not have a job and are preparing for business, do not have a job and are not looking for a job because they feel it is impossible to get a job and those who already have a job but have not started working.

2.2 Economic Growth

Rapanna & Sukarno, (2017) It is stated that economic growth is a process of increasing the production capacity of an economy which is manifested in the form of an increase in national income. In the Solow-Swan theory, economic growth depends on the increase in the provision of production factors such as labor and capital accumulation as well as the level of technological progress, increasing the skills and skills of workers in using technology. Then in his theory, Harrod-Domar stated that conditions must be met so that an economy can achieve strong or steady growth in the long term, investment is needed.

2.3 Investment

Investment is an activity of capital investment in various economic activities (production) with the hope of getting profits in the future (Badan Pusat Statistik, 2023b). Meanwhile Sukirno, (2003) describes investment as an activity that allows a society to sustainably increase economic activity and employment opportunities, national income and improve the standard of living of the



community. In the Undang Undang Republik Indonesia Nomor 25 Tahun 2007 Tentang Penanaman Modal, (2007) it is stated that domestic investment is an activity of investing capital to carry out business in the territory of the Republic of Indonesia carried out by domestic investors using domestic capital. Meanwhile, foreign investment is an activity of investing capital to carry out business in the territory of the Republic of Indonesia carried out by foreign investors, both those who use foreign capital completely and those who partner with domestic investors. Capital expenditure is related to investment (Waryanto, 2017). Capital expenditure is expenditure made by local governments whose benefits exceed one year of budget and will add assets or wealth to the region and will then add routine expenditures such as maintenance costs in the general administration expenditure group (Halim & Kusufi, 2012). Capital expenditure is expected to encourage economic growth and create jobs as well as reduce poverty and poor population (Widodo & Zakiah, 2022).

2.5 Good Governance

Bhuiyan, (2013) states that good governance is a process involving all citizens actively participating in every decision-making process, transparent and efficient use of public resources, and fair and equitable law enforcement. One of the principles of good governance is participation (United Nations Economic and Social Commission for Asia and the Pacific, 2009). Democracy itself is one form of participation where democracy is defined as government of, by, and for the people (Widanti, 2022). The human development index is an index that explains how people can access development results in obtaining income, health, education and so on (Badan Pusat Statistik, 2023a). Where the HDI indirectly reflects the presence or absence of good governance practices because good governance requires good policies and strategies, transparent and accountable institutions, responsive and efficient public services and civil society involvement in decision-making as well as government responsibility (United Nations Development Programme (UNDP), 2014).

3. Research Methodology

3.1 Simultaneous Equation Model for Panel Data

Panel data itself is a combination of time series data and cross-sectional data so that panel data shares more and more informative information (Baltagi, 2005). Meanwhile, the simultaneous equation system is a set of equations in which the dependent variable in one or more equations is also an independent variable in several other equations, namely the condition in which in the system of equations a variable simultaneously has two roles, namely as a dependent variable and an independent variable (Supranto, 2004). The form of simultaneous equations used in this study is:

$$Y_{1t} = \beta_{10t} + \beta_{12}Y_{2t} + \gamma_{11}X_{1t} + \gamma_{12}X_{3t} + \gamma_{13}X_{5t} + u_{1t} \dots \dots \dots \dots (1)$$

$$Y_{2t} = \beta_{11t} + \beta_{21}Y_{1t} + \gamma_{21}X_{2t} + \gamma_{22}X_{3t} + \gamma_{23}X_{4t} + u_{2t} \dots \dots \dots (2)$$

*Y*₁: Open Unemployment Rate

Y₂: Economic Growth

β: Coefficient of Endogenous Variable

γ : Coefficient of Exogenous Variable

*X*₁: Foreign Direct Investment (FDI)

X₂: Domestic Direct Investment (DDI)

 X_3 : Indonesian Democracy Index (IDI)

*X*₄: Human Development Index (HDI)

*X*₅: Capital Expenditure

it: Time (2015-2021)



u: error term

3.1.1 Panel Data Model Selection Test

In order to interpret the regression analysis in this study, the researcher chose a panel data regression model, namely through the Common Effect Model (CEM), Random Effect Model (REM) and Fixed Effect Model (FEM). In this study, in order to choose the best regression model, the Chow test, Hausman test and Lagrange Multiplier test were used. The Chow test is conducted to determine the comparison of which model is most suitable between the Common Effect Model and Fixed Effect Model, while the Hausman test is conducted to determine the comparison of which model is most suitable between the Fixed Effect Model and Random Effect Model. Then the Lagrange Multiplier Test is conducted to determine the comparison of which model is most suitable between the Common Effect Model and Random Effect Model.

3.1.2 Identification of Simultaneous Equation Models

The identification of simultaneous equation models is carried out to determine the appropriate method for estimating the model. Where in the simultaneous equation requires that each structural equation can be estimated. Therefore, identification needs to be done for each structural equation. In identification, there are 3 identification conditions, namely exactly identified equations, overidentified equations and underidentified equations. There are two ways to test identification, namely order conditions and rank conditions.

3.1.3 Estimation of Simultaneous Equation Models

- a. Indirect Least Square (ILS) is an approach in econometrics in which the coefficients in a simultaneous equation model are estimated from a reduced-form model using ordinary least squares. Used when the identification result of the order is identified.
- b. Two Stage Least Square (2SLS) is a regression method that is classified in the structural equation analysis group. In regression analysis calculations, this method is an extension of the OLS method used when the correlation conditions between the errors generated in the model are correlated with the independent variables. Used when the identification result of the order is overidentified.

3.3 Statistical Test

3.3.1 Coefficient of Determination (Adjusted R Square)

The coefficient of determination or Adjusted R Square measures how far the model's ability to explain the variation of independent variables (Ghozali, 2006).

3.3.2 Simultaneous Significance Test (F-Statistic Test)

The F-test (simultaneous test) is used to test whether independent variables together can interpret changes in the value of dependent variables or not (Gujarati, 2002).

3.3.3 t-test (Partial Test)

The t-test is used to determine whether independent variables have a significant effect on dependent variables or vice versa. A variable is said to have a significant effect if the calculated t-value is greater than the t-table value (Suliyanto, 2011). If the probability of error \geq a=5%, then the independent variable does not have a significant effect on the dependent variable.



4. Results

4.1 Simultaneous Equation Model

4.1.1 Results of Panel Data Model Selection Test

a. Chow Test Results

Table 1. Results of Chow Test for Open Unemployment Rate Equation

Effects Test	Prob.
Cross-section Chi-square	0.0000

Source: Secondary Data, 2022 (processed)

Table 2. Results of Chow Test for Economic Growth Equation

Effects Test	Prob.
Cross-section Chi-square	0.0000

Source: Secondary Data, 2022 (processed)

Based on the results of the Chow Test in Tables 1 and 2, the probability value (Prob.) of Cross-section Chi-square is 0.0000. This value when compared to α 5 percent (as the level of significance of this study), is smaller (Cross-section Chi-square $< \alpha$), which is 0.0000 < 0.05, so based on the Chow test Fixed Effect Model is more appropriate than Common Effect Model.

b. Hausman Test Results

Table 3. Results of Hausman Test for Open Unemployment Rate Equation

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	17.044224	4	0.0019

Source: Secondary Data, 2022 (processed)

Table 4. Results of Hausman Test for Economic Growth Equation

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	55.975413	4	0.0000

Source: Secondary Data, 2022 (processed)

Based on the results of the Hausman Test in Table 3, the probability value (Prob.) of Cross-section random is 0.0019. This value when compared to α 5 percent (as the level of significance of this study), is lower (Cross-section Random $< \alpha$), which is 0.0019 < 0.05.



And for the Hausman Test in Table 4, the probability value (Prob.) of Cross-section random is 0.0000. This value when compared to α 5 percent (as the level of significance of this study), is lower (Cross-section Random $< \alpha$), which is 0.0000 < 0.05. Therefore, from the two equations above it can be interpreted that Fixed Effect Model is more appropriate than Random Effect Model based on the results of the Hausman Test.

4.1.2 Results of Simultaneous Equation Model Identification

a. Order Condition Results

Table 5. Results of Order Condition Identification

Equation	K	k	K-k	M	M-1	Keterangan
TPT (1)	5	3	2	2	1	2 > 1 (Over identified)
Economic Growth (2)	5	3	2	2	1	2 > 1 (Over identified)

Source: Secondary Data, 2022 (processed)

Based on the order identification in Table 6, it is obtained that equation 1 and 2, namely equation Y1 for Open Unemployment Rate (TPT) and equation Y2 for Economic Growth are identified as overidentified, meaning that both equations can be estimated using the two-stage least squares method or Two Stages Least Square (2SLS).

b. Rank Condition Results

Table 6. Results of Rank Condition Identification for TPT Equation (Y1)

	Y 1	Y 2	X1	X2	Х3	X4	X 5
Equation 1	-1	β_{12}	γ.	0	γ	0	γ
Equation 2	β_{21}	-1	d	γ ₂₁	γ_{22}	γ ₂₃	0

Source: Secondary Data, 2022 (processed)

Dari Tabel 6. it can be concluded that the determinant value $\gamma_{23} \neq 0$ atau $\gamma_{23} \neq 0$ which means that the open unemployment rate equation (Y1) is an identified equation.

Table 7. Results of Rank Condition Identification for Economic Growth Equation (Y2)

	Y ₁	Y2	X1	X ₂	X 3	X 4	X5
Equation 1	-1	β_{2}	γ ₁₁	0	γ ₁₂	þ	γ ₁₃
Equation 2	β_{21}	_	0	7 1	γ ₂₃	7 22	0

Source: Secondary Data, 2022 (processed)

From Table 7, it can be concluded that the determinant value $\gamma_{11} \neq 0$ atau $\gamma_{13} \neq 0$ which means that the economic growth equation (Y2) is an identified equation. Based on the two identifications that have been carried out, it can be concluded that the open unemployment rate equation and the economic growth equation are identified because the order and rank condition requirements have been met and can proceed to estimate 2SLS.

4.1.3 Results of Simultaneous Equation Model Estimation

Table 8. Results of Open Unemployment Rate Equation Estimation with 2SLS



Variable	Coefficient	Prob.
C	6.195827	0.0000
Y2 (Economic Growth)	-0.130853	0.0017
X1 (Foreign Direct Investment (FDI))	1.30E-10	0.3758
X3 (Indonesian Democracy Indeks (IDI))	-0.002652	0.8473
X5 (Capital Expenditure)	-3.07E-07	0.0001

Table 9. Results of Economic Growth Equation Estimation with 2SLS

Variable	Coefficient	Prob.
С	99.56433	0.0000
Y1 (Open Unemployment Rate)	-1.690892	0.0400
X2 (Domestic Direct Investment (DDI))	2.72E-08	0.5999
X3 (Indonesian Democracy Index (IDI))	0.017441	0.7895
X4 (Human Development Index (HDI))	-1.254264	0.0002

Source: Secondary Data, 2022 (processed)

The results of simultaneous equation modeling with the 2SLS method on the open unemployment rate equation and economic growth.

$$Y_1 = 6.195827 - 0.130853Y_2 + 1.30E - 10X_1 - 0.002652X_3 - 3.07E - 07X_5 + u_1$$

$$Y_2 = 99.56433 - 1.690892Y_1 + 2.72E - 08X_2 + 0.017441X_3 - 1.254264X_4 + u_2$$

4.2 Statistical Test Results

4.2.1 Results of Coefficient of Determination (Adjusted R Square)

Table 10. Results of R^2 Coefficient of Determination for Open Unemployment Rate Equation

R-squared	0.892993	Mean dependent var	5.188824
Adjusted R-squared	0.869143	S.D. dependent var	1.851697
S.E. of regression	0.669837	Sum squared resid	74.48108
F-statistic	28.93512	Durbin-Watson stat	1.472973
Prob(F-statistic)	0.000000	Second-Stage SSR	93.43613
Instrument rank	39	Prob(J-statistic)	0.057698

Source: Secondary Data, 2022 (processed)

Table 11. Results of R^2 Coefficient of Determination for Economic Growth Equation

R-squared	0.460590	Mean dependent var	3.979461
Adjusted R-squared	0.340360	S.D. dependent var	3.718706
S.E. of regression	3.020266	Sum squared resid	1514.253
F-statistic	2.097245	Durbin-Watson stat	2.540714
Prob(F-statistic)	0.000833	Second-Stage SSR	1912.996
Instrument rank	39	Prob(J-statistic)	0.063712

Source: Secondary Data, 2022 (processed)



Based on the analysis results in Table 10, it can be seen that the coefficient of determination is 0.869143. Thus, 86 percent of the dependent variable, namely Open Unemployment Rate, can be explained by four independent variables, namely economic growth, FDI, IDI, and capital expenditure. Meanwhile, the remaining 14 percent is explained by other variables outside this study. Then in the analysis results in Table 11 or in the Economic Growth equation, it is known that the coefficient of determination is 0.340360 so that 34 percent of the dependent variable, namely economic growth, can be explained by four independent variables, namely Open Unemployment Rate, DDI, IDI and HDI while the remaining 66 percent is explained by other variables outside this study.

4.2.2 Simultaneous Significance Test (F-Statistic Test)

Table 12. Results of F Test for TPT Equation and Economic Growth Equation

Value F Statistic	28.93512	Value F Statistic	2.097245
Prob (F-statistic)	0.000000	Prob (F-statistic)	0.000833
Hasil	Signifikan	Hasil	Signifikan

Source: Secondary Data, 2022 (processed)

Based on the analysis that has been carried out, the F-test results in Table 12 or in the Open Unemployment Rate equation obtained a prob (F-statistic) of 0.000000 which is smaller than 0.05 (critical limit of research), meaning that economic growth variables, foreign investment capital expenditure, Indonesia's democracy index and capital expenditure simultaneously or together have a significant effect on open unemployment rate variables. Meanwhile, the F-test results in the economic growth equation obtained a prob (F-statistic) of 0.000833 which is smaller than 0.05 (critical limit of research), meaning that TPT, DDI, IDI and HDI simultaneously or together have a significant effect on economic growth variables.

4.2.3 t Test (Partial Test)

Table 13. Results of t Test for Open Unemployment Rate Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	6.195827	1.058363	5.854161	0.0000
Y2 (Economic Growth)	-0.130853	0.041010	-3.190757	0.0017
X1 (Foreign Direct Investment (FDI))	1.30E-10	1.47E-10	0.888016	0.3758
X3 (Indonesian Democracy Index (IDI))	-0.002652	0.013746	-0.192897	0.8473
X5 (Capital Expenditure)	-3.07E-07	7.55E-08	-4.063001	0.0001

Source: Secondary Data, 2022 (processed)

Based on the analysis results, the prob (t-statistic) value is obtained, namely the economic growth variable has a significant negative effect on open unemployment rate with a probability value of 0.0017. Foreign investment capital expenditure and Indonesia's Democracy Index have no significant effect on open unemployment rate. Capital expenditure variable has a probability value of 0.0001 thus there is a significant negative effect between capital expenditure and open unemployment rate.



Table 14. Results of t Test for Economic Growth Equation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
С	99.56433	21.25827	4.683559	0.0000
Y1 (Open Unemployment Rate)	-1.690892	0.816926	-2.069821	0.0400
X2 (Domestic Direct Investment (DDI))	2.72E-08	5.18E-08	0.525590	0.5999
X3 (Indonesian Democracy Index (IDI))	0.017441	0.065237	0.267344	0.7895
X4 (Human Development Index (HDI))	-1.254264	0.333090	-3.765539	0.0002

Source: Secondary Data, 2022 (processed)

For the Economic Growth equation, the TPT variable has a significant negative effect on economic growth with a probability value of 0.0400. PMDN and IDI have no significant effect on economic growth. IPM has a probability value of 0.0002 which means that the human development index variable has a significant negative effect on economic growth.

5. Discussion

The foreign investment capital expenditure variable in this study does not affect the open unemployment rate in 34 provinces in Indonesia that are the object of research, this is similar to Karisma et al., (2021) research which concluded that investment in the form of foreign investment capital expenditure has no significant effect on the unemployment rate in Java Island. Based on the research results, it is explained that foreign investment capital expenditure has no effect on TPT. This is due to foreign investment capital expenditure that enters being focused and directed towards the industrial sector where on average from 2016-2021 the realization of foreign investment capital expenditure in the industrial sector reached 39375.84 million US\$, which for working in the industrial sector people must have certain skills or expertise that are suitable for what is needed by the industry.

The democracy index has no effect on the open unemployment rate. This is because even though the democracy index continues to increase every year on average which can provide an overview of political stability, economic uncertainty still exists, factors such as commodity price fluctuations, currency stability, global economic conditions can affect the unemployment rate especially in 2020 there was a Covid-19 pandemic that directly had a major impact on the economy. In addition, if examined more deeply even though the democracy index has a high number but if viewed from one of the IDI constituent variables namely the role of local government bureaucracy shows a smaller number compared to other variables on average only touches 55.82 which means that local governments have not been able to fully play a role and have an impact on the community both in carrying out programs and missions that have been established, carrying out development and services and carrying out government management.

Capital expenditure has a significant negative effect on the open unemployment rate in 34 provinces in Indonesia that are the object of research, thus causing the previously made hypothesis to be accepted. This result is in line with Budiarto & Kartika, (2009) research hypothesis which states that capital expenditure has a direct negative (significant) effect on the unemployment rate in the Sarbagita region. This can happen because in the use of capital expenditure it can be used to

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stimulate the economy through the creation of new jobs such as in the construction sector and infrastructure development using local workers, so this can reduce the unemployment rate in the area and can increase their income. Then with the increasing infrastructure can also increase investor interest to invest in potential regional sectors which can later improve community welfare and add jobs.

The economic growth variable has a significant negative effect on the open unemployment rate in 34 provinces in Indonesia, therefore the hypothesis is accepted. This is in line with Patriamurti & Septiani, (2020) research hypothesis where PDRB has a negative effect on open unemployment. Then Sirait et al., (2018) research states that partial economic growth has a significant negative effect on the open unemployment rate in Jambi Province. This is also in accordance with Okun's law which states that there is a negative relationship between the unemployment rate and the growth rate which states that every 2 percent decrease in GDP related to potential GDP, the unemployment rate will increase by around 1 percent. And in Keynesian theory it is stated that unemployment occurs due to inhibited economic growth due to low aggregate demand.

Domestic direct investment does not have a significant effect on economic growth. This is because DDI that enters focuses on increasing in the industrial sector, making the industrial sector one of the sectors that contributes greatly to the increase in economic growth but in terms of labor absorption it is due to the need for certain skills and competencies to be able to work in this sector. So even though there is an increase in investment in DDI, it has not been able to provide a significant influence on economic growth, because there are still other factors that play an important role in driving economic growth such as labor which must also have adequate skills or skills according to needs. This research result is in line with Yanti et al., (2021) research which concluded that DDI does not have a significant effect on economic growth in Regencies/Cities in NTB Province.

Indonesian democracy index (IDI) does not have a significant effect on economic growth. This is because in conditions where the democracy index is high, it cannot ensure that the political situation will experience stability as when there is a change of leadership which can disrupt economic policies, with the political uncertainty that occurs causing investors to be hesitant to make long-term investments, where this will inhibit economic growth. And even though the IDI is high, but in the variables that make up the IDI itself it is found that the variable of the role of local government bureaucracy is quite low compared to others, this means that local governments are still unable to carry out their roles as bureaucratic institutions that can bring progress especially in the economic field in their area, so even though the IDI is high but this does not affect economic growth in the region. This result is also similar to research conducted by Damanik & Lubis, (2022) which concluded that democracy does not have a significant effect on economic growth in North Sumatra Province.

The HDI variable in the study has a negative effect on economic growth, which means that when HDI increases, economic growth decreases. This can happen because of the imbalance that occurs between each variable that makes up IPM such as education level, life expectancy, and per capita income. Even though the education level is high, if it is not balanced by other indicators such as low per capita income, it will reduce consumption levels. With the decrease in consumption levels, economic growth slows down. According to Arifin & Fadllan, (2018), increasing the quality of



human development requires sufficient investment and is followed by income distribution. When there is investment and equal income distribution, it will achieve an increase in development in the fields of health and education. In addition, differences in research objects and time span used can be a cause where there are differences in the conditions of research objects both in terms of government policies, political stability, infrastructure, and economic efficiency which can affect the relationship that occurs between HDI and economic growth. The results of this study are similar to research conducted by Utami, (2020)which concluded that IPM has a negative effect on economic growth rates in Aceh Province in 2008-2019 and Muqorrobin & Soejoto, (2017) research where HDI has a negative effect on economic growth in East Java.

Open Unemployment Rate has a significant negative effect on economic growth. Therefore, the hypothesis is accepted and this is also in line with Utami, (2020) research hypothesis which states that partially the Unemployment Rate has a significant effect on the Economic Growth Rate of Aceh Province. Meanwhile, the open unemployment rate variable in this study has a significant negative effect on economic growth, meaning that if the open unemployment rate increases, it will reduce economic growth. This happens when unemployed people increase which results in a decrease in purchasing power due to no income earned from being unemployed. The decrease in purchasing power will result in sluggishness for entrepreneurs to invest and expand their businesses, which can lead to a reduction in employment and a decrease in economic growth rates. This is also in line with the Solow-Swan theory which states that economic growth depends on the increase in the provision of production factors such as labor and capital accumulation.

6. Conclusion

The variables of economic growth and capital expenditure have a significant negative effect on the open unemployment rate. The variables of foreign investment and the Indonesian Democracy Index do not have a significant effect on the open unemployment rate. Then the variable of open unemployment rate has a significant negative effect on economic growth. Meanwhile, the variables of domestic investment and the Indonesian Democracy Index do not have a significant effect on economic growth. Meanwhile, the human development index variable has a significant negative effect on economic growth in 34 provinces in Indonesia within the time span of 2016-2021.

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