



# Impact of Covid-19 and Foreign Direct Investment on Indonesia's Economic Growth

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## ABSTRACT

This study seeks to investigate the effects of COVID-19, foreign direct investment, inflation and rents from natural resources on Indonesia's economic growth from 1990 to 2021. The analysis method used in this research is ordinary least square (OLS). A time-series data from an Indonesian study between 1990 and 2021. The results of this study indicate that COVID-19 and inflation have a significant adverse effect on Indonesia's economic growth. Foreign direct investment and natural resource rents have a considerable beneficial impact. The results of this study are expected to be one of the key references in developing policy; strengthening basic needs facilities, controlling inflation, making policies that stimulate FDI, and continuing natural resource management.

**Keywords:** Economic Growth, Covid-19, Foreign Direct Investment and Inflation, Natural Resource Rents

**JEL Classifications:** E01, E22, P48

## 1. INTRODUCTION

The Covid-19 pandemic, which decimated the global economy, struck the world at the end of 2019 amid the many economic issues that every nation was experiencing. The Covid-19 pandemic has presented new difficulties for every nation trying to boost its own economies. Covid-19 is a highly important issue since it has the potential to alter global customs, starting with the lockdown policy that restricts mobility. Additionally, Covid-19 causes a variety of issues. According to research by Fahrika and Roy (2020) some of the issues Covid-19 has with the Indonesian economy include the following: (a) Termination of employment relations (PKH) from the formal and informal sectors, (b) The number of tourists fell significantly; which reduced the amount of tourism foreign exchange, causing the air sector to lose almost Rp 207 billion in revenue; (c) decreased hotel occupancy rates in Indonesia by 50%; (d) decreasing trade in Micro, Small, and Medium Enterprises, and (e) creating fear from investors to invest and on the other hand investors delaying investment due to lack of demand.

The Harrod-Domar theory states that investment is necessary to develop a mature economy over term (Marselina, 2020). Both domestic and foreign sources of investment are possible. This study examines the impact of foreign direct investment on Indonesia's economic expansion. The following graph shows the association between Indonesian economic growth during 1990 through 2021 and foreign direct investment.

According to Figure 1, there is a largely favorable correlation between foreign direct investment (FDI) and economic growth. Research undertaken by Kholis (2012) indicated that foreign direct investment had a beneficial influence on economic growth. Indonesian investments are so volatile, foreign investors do not choose to place their money there. The author's backdrop for further examining the impact of foreign direct investment on economic growth is comprised of the existence of various occurrences in Indonesia.

Inflation is one of the macroeconomic factors that influence economic growth. A general, sustained increase in the cost

of goods and services over a given time period is referred to as inflation (Bank Indonesia, 2022). According to Salim et al. (2021) inflation affects the economy both favorably and unfavorably. Bank Indonesia can execute an expansionary monetary policy by cutting interest rates when a nation's economy is weak. Therefore, inflation that is not too high can be beneficial for economic growth since it can spur entrepreneurs to raise their output. The graph below shows the relationship between Indonesian inflation and economic development from 1990 to 2021.

Figure 2 demonstrates that there is typically a negative correlation between inflation and economic growth in Indonesia. 1998 marked the start of the 1990-2021 period of inflation. There was a financial crisis in 1998. In 1998, Indonesia's high inflation rate, which was 75.27117%, had a negative impact on the country's economic growth. According to the Indonesian phenomenon, excessive inflation slows down economic expansion. According to research by Priyono and Candra (2016) inflation is one of the economic issues that practically all nations face. These phenomena is in line with their findings.

Indonesia is the largest archipelagic country in the world which has 17,000 islands (World Bank, 2014). As an archipelagic country, Indonesia is rich in natural resources, but the blessings of natural resources owned by Indonesia have not been able to lead Indonesia to a developed country. Based on the classification of the World Bank (2021) Indonesia is one of the countries in the Asian region with the category of a lower middle-income country, in other words, Indonesia is a developing country (Asanuma, 2008). This phenomenon identifies Indonesia as experiencing the natural resource curse hypothesis. The failure of areas with ample natural resources to benefit from industrialization is alluded to as the "Natural Resource Curse" (Ayumi, 2018).

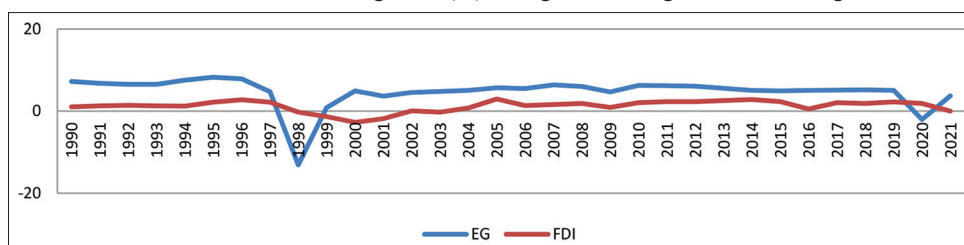
Research conducted by Nwani and Adams (2021) found that developing countries with abundant natural resources tend to experience slow economies. Ultimately, the country's natural resources are a curse instead of a benefit. A state's natural resources can be considered a burden if its institutions are of poor quality (Nwani and Adams, 2021).

Natural resources are one of the acceleration and braking of the production system, according Adam Smith's classic theory. This indicates that an economy's growth is impacted by its natural resources. The effect of natural resource rents on Indonesia's economic growth is investigated in this research using indicators of such rents (total natural resource rents). Rent is known as net income in economics if natural resources are harvested with reduced costs of production (Al-Mulali and Ozturk, 2015). The following graph depicts the connection among Indonesia's economic growth between 1990 until 2021 and natural resource rents.

Figure 3 shows the relatively favorable link between natural resource rents (NRR) and economic growth. Only in 1998 when natural resource rents were high but Indonesia's economic growth conditions were very low, this was due to the monetary crisis in 1998. The phenomenon in Indonesia, whereas study by Haseeb et al., (2021) revealed that natural resource rents impair economic growth, the situation when natural resource rents have a favorable and large impact on economic growth is inconsistent. The author will further investigate the impact of natural resource rent on economic growth in light of the many phenomena that exist in Indonesia and the research done by Haseeb et al. (2021).

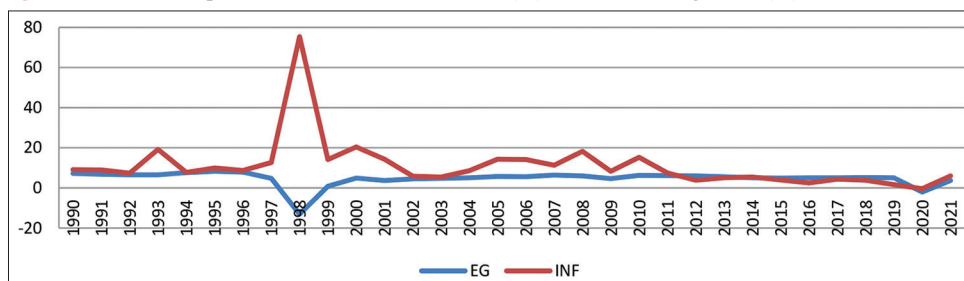
Various strategies have been carried out by each country to create high economic growth. Because economic growth is one of the indicators used to measure the success of a country's economy

**Figure 1:** Association between Indonesian economic growth (%) during 1990 through 2021 and foreign direct investment (% GDP)



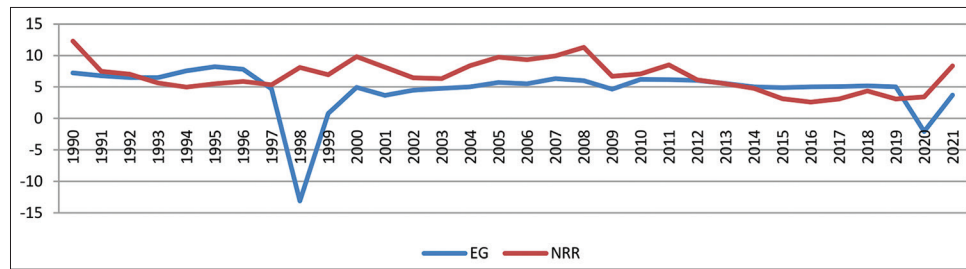
Source: World Bank (2022)

**Figure 2:** Relationship between Indonesian inflation (%) and economic growth (%) from 1990 to 2021



Source: World Bank (2022)

**Figure 3:** The connection among Indonesia's economic growth (%) 1990-2021 and natural resource rents (% GDP)



Source: World Bank (2022)

(Zulfa, 2016). Every country certainly wants high economic growth through development in various fields. According to Febryani (2017), if many products and services are produced than the previous year, the economy is thought to be expanding. Economic growth is the method of continuing to increase per capita outcome of the a nation sustainable way in the long term (Adianto, 2011).

It is crucial to understand the factors that influence economic growth because of the various issues and challenges Indonesia has in achieving steady economic growth. The goal of this study is to determine the impact of Covid-19, foreign direct investment, inflation, and the natural resource rent on Indonesia's economic growth from 1990 to 2021 based on the background information provided.

## 2. RESEARCH AND METHODS

The research being done is quantitative and descriptive. The dependent variable in this study is the economic development in Indonesia between 1990 and 2021. The initial year of this study was 1990, chosen because according to Ginting (2014) the development of FDI that entered Indonesia in the early 1990s-2013 had a positive trend and increased almost every year, except for the crisis that hit America and Europe in 2008-2009. Then 2021 was chosen as the end of the research year because of the Covid-19 pandemic and the availability of adequate data for this study. The year 2021 is still relevant to see how Covid affects economic growth. Natural resource rent, foreign direct investment, inflation, and the Covid-19 dummy are the independent variables. Secondary data, in the form of time series data acquired from the World Bank, are the sort of data required for this study.

The multiple regression equation applied in this investigation is as follows.

$$EG_t = \beta_0 + \beta_1 NRR_t + \beta_2 FDI_t - \beta_3 INF_t - \beta_4 COV_t + \varepsilon_t \quad (1)$$

Information:

EG: Economic growth (%)

NRR: Natural resource rent (% GDP)

FDI: Foreign direct investment (% GDP)

INF: Inflation (%)

COV: Covid-19 (0 before (1990-2019); 1 after (2020-2021))

$\beta_0$ : Constant

$\beta_{1,2,3,4}$ : Coefficient

$\varepsilon$ : Residual (error term)

$t$ : Time (1990-2021).

## 3. RESULTS AND DISCUSSION

### 3.1. Descriptive Statistical Analysis

As markers that describe the distribution of data in the study, descriptive statistics include the average value (mean), the lowest value (minimum), and the greatest value (maximum). The importance of descriptive analysis is identifying and describing patterns in time series data. The following is a summary of the descriptive statistics from the research data:

Based on Table 1, it is known that 32 data observations from Indonesian data from 1990 to 2021 were used. The following will be a description of the descriptive results for each variable: The economic growth rate (EG) of Indonesia from 1990 to 2021 was 4.680578% on average. The highest rate of economic growth for Indonesia was 8.220007% in 1995, and the lowest rate was -13.12673% in 1998.

The average value of natural resource rent (NRR) in Indonesia 1990-2021 is 6.726979%. The highest rental value for natural resources in Indonesia was 12,27417% in 1990, while the lowest rent for natural resources in Indonesia was 2.612890% in 2016. The average value for foreign direct investment (FDI) in Indonesia 1990-2021 was 1.252671%. The highest value of Indonesian foreign direct investment was 2.916115% in 2005, while the lowest value of Indonesian foreign direct investment was -2.757440% in 2000. The average value of inflation (INF) in Indonesia 1990-2021 was 11.00558%. Indonesia's highest inflation rate was 75.27117% in 1998, while Indonesia's lowest inflation was -0.436578% in 2020.

### 3.2. Time Series Data Regression Estimation Results

To examine the impact of Covid-19, foreign direct investment, inflation, and the Covid-19 on economic growth in Indonesia from 1990 to 2021, time series data regression estimate method was used. The regression output is shown in the table below.

The estimation outcomes of the regression equation are shown in Table 2 results of regression estimation.

$$EG_t = 3.800332 + 0.527139NRR_t^* + 0.433427FDI_t^* - 0.257315INF_t^* - 6.029526COV_t^* \quad (2)$$

Note: \*Significant at = 5%

**Table 1: Variable Descriptive Statistics**

Descriptive Statistics	EG	NRR	FDI	INF	COV
Mean	4.689578	6.726979	1.252671	11.00558	0.062500
Maximum	8.220007	12.27417	2.916115	75.27117	1.000000
Minimum	-13.12673	2.612890	-2.757440	-0.436578	0.000000
Observation	32	32	32	32	32

Source: (2022)

**Table 2. Time Series Data Regression Estimation Result**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	3.899332	1.080453	3.517551	0.0016
NRR	0.527139	0.128360	3.809921	0.0007
FDI	0.433427	0.250070	1.733224	0.0945
INF	-0.257315	0.027333	-9.413963	0.0000
COV	-6.029526	1.294352	-4.658335	0.0001
R-squared				0.813867
F-statistics				29.51430
Prob (F-statistic)				0.000000
Durbin-Watson stat				1.327500

Source: (2022)

**Table 3: Normality test results**

Jarque-Bera	3.758066
Probability	0.152738

Source: (2022)

Based on equation (2), it is known that the constant value is 3.800332, which indicates that Indonesia's economic growth will be 3.800332% if the rent of natural resources, foreign direct investment, inflation, and Covid are all zero. The regression coefficient value of natural resources rent (NRR) is 0.527139, meaning that if the rent of natural resources increases by 1%, the economic growth in Indonesia 1990-2021 will increase by 0.527139%, ceteris paribus. The regression coefficient for foreign direct investment (FDI) is 0.074018, which indicates that, ceteris paribus, if FDI rises by 1%, Indonesia's economic growth will rise by 0.43342%. The inflation regression coefficient (INF) is -0.257315, which means that, ceteris paribus, if inflation rises by 1%, Indonesia's economic growth will fall by 0.257315%. The Covid-19 regression coefficient (COV) is -6.029526, meaning that when the Covid-19 pandemic occurs, economic growth in Indonesia 1990-2021 will decrease by 6.029526%, ceteris paribus.

### 3.3. Classic Assumption Test

#### 3.3.1. Normality test

To determine if the variables were regularly distributed or not, a normality test was performed. To test whether the variables are normally distributed or not, the Jarque-fall test and t-statistics can be performed. Here's the hypothesis:

$H_0$ : Normal distribution

$H_a$ : Distributed abnormally

The test conditions state that  $H_0$  is accepted and  $H_a$  is rejected if the likelihood of Jarque-Bera is  $>5\%$ , while  $H_0$  is rejected and  $H_a$  is approved if the chance of Jarque-Bera is  $<5\%$ . Below are the findings of the normalcy test.

Based on the normalcy test findings, as displayed in Table 3, it can be seen that the Jarque-Bera  $P = 0.152738$  which is greater than

( $\alpha$ ) 5% (0.05). So it can be concluded that in this research model the data is normally distributed.

### 3.4. Multicollinearity Detection

Multicollinearity detection is used to see whether or not there is a relationship between independent variables in one regression. Models with multicollinearity in the data have a tendency to be deceptive due to improper variable estimate. As a result, the model cannot be used for forecasting. This study detects multicollinearity using the Pearson correlation test. With the criteria, if the coefficient value between variables exceeds 0.85, it can be said that there is a correlation coefficient between variables in the model (Widarjono, 2018). Here is the output of multicollinearity detection.

There is no correlation coefficient between the variables in the model, according to the multicollinearity detection results in Table 4, which show that the coefficient between variables is  $<0.85$ .

### 3.5. Heteroscedasticity Test

To determine if the residuals of a model are constant or not, a heteroscedasticity test is run. If the variance of each residual is constant, a model is said to be heteroscedasticity-problem-free. By regressing the absolute value with the independent variable, the Breusch-Pagan-Godfrey test can be used to examine heteroscedasticity. Regarding the following supposition:

$H_0$ : There is no heteroscedasticity

$H_a$ : There is heteroscedasticity

$H_0$  is accepted and  $H_a$  is rejected if the likelihood of each variable is higher than the 5% level of confidence, and vice versa (Winarno, 2017). The estimated heteroscedasticity test yielded the following findings.

Because the probability value of Obs\*R-squared 0.3285 is more than 5%, it can be inferred from Table 5 that this study is not heteroscedastic.

### 3.6. Autocorrelation Test

A common assumption test used to determine the connection between individuals from one observation and observations made at several times is the autocorrelation test (Widarjono, 2018). The Breusch-Godfrey test was used in this investigation to determine if autocorrelation existed or not. By contrasting the calculated Chi-squares value (Obs\*R-squared) with the critical Chi-squares value, the Breusch-Godfrey test is performed. Regarding the following supposition:

$H_0$ : There is no autocorrelation

$H_a$ : There is autocorrelation

The condition is that the model is autocorrelation-free if the estimated Chi-squares value is less than the critical value and



**Table 4. Multicollinearity Detection**

	NRR	FDI	INF	COV
NRR	1	-0.2740719812839133	0.35044364835537	-0.091504894562234
FDI	-0.2740719812839133	1	-0.33378250233169	0.055311336349713
INF	0.3504436483553726	-0.3337825023316902	1	-0.16797730120812
COV	-0.09150489456223499	0.05531133634971355	-0.16797730120812	1

Source: (2022)

**Table 5. Heteroscedasticity Test Results**

Heteroskedasticity Test: Breusch-Pagan-Godfrey			
F-Statistics	1.139213	Prob. F (4,27)	0.3592
Obs*R-squared	4.620842	Prob. Chi-Square(4)	0.3285
Scaled explained SS	3.226487	Prob. Chi-Square(4)	0.5207
Observation	32	32	32

Source: (2022)

**Table 6. Breusch-Godfrey Autocorrelation Test Results**

Breusch-Godfrey Serial Correlation LM Test			
F-Statistics	1.742689	Prob. F (4,25)	0.1956
Obs*R-squared	3.915416	Prob. Chi-Square(2)	0.1412
Scaled explained SS	3.226487	Prob. Chi-Square(4)	0.5207

Source: (2022)

fails to reject  $H_0$  (Widarjono, 2018). Conversely, if the Chi-squares count exceeds the critical number, it is unable to accept  $H_0$ , indicating the presence of autocorrelation in the model. The Breusch-Godfrey test results are shown here.

Obs\*R-squared has a value of 3.915416, Chi-squares' critical value with degree of freedom = 2 at  $\alpha = 5\%$  is 5.59. Based on this Breusch-Godfrey test, it failed to reject  $H_0$ , meaning that the model does not contain autocorrelation problems seen from the calculated Chi-squares value which is smaller than the critical value.

### 3.7. Statistical Test

#### 3.7.1. t-test

Each variable was only partially examined using the t-test.  $H_0$  is disregarded if the t-statistic is higher than the t-table. This indicates that the independent variable and its opposite have a statistically significant impact on one another. Following are the findings of the partial regression analysis of each independent variable on the dependent variable.

The t-statistical test findings show that the natural resource rents is 3.809921. This value exceeds the t-table value of 1.70329 at the 5% level of significance and the confidence level of df (degree of freedom) = 27, which is the value for the t-table. Thus, it can be said that the natural resource rental variable significantly contributes to Indonesia's economic growth between 1990 and 2021.

It is 1.733224 according to the findings of the t-statistical test of the foreign direct investment variable. This figure exceeds the t-table value, which is 1.70329 at 5% significance level and df (degree of freedom) = 27, by a factor of 27. Therefore, it can be said that between 1990 and 2021, Indonesia's economic growth was significantly positively impacted by the variable of foreign direct investment.

The inflation variable, as determined by the t-statistical test, is -9.413963. This value exceeds the t-table value of 1.70329 at the 5% level of significance and the confidence level of df (degree of freedom) = 27, which is the value for the t-table. Thus, it can be said that from 1990 to 2021, Indonesia's economic growth is significantly negatively impacted by the inflation component.

It is -4.658335 according to the outcomes of the t-statistic test for the Covid-19 dummy variable. This value exceeds the t-table value, which is 1.70329 at the 5% significance level and the df (degree of freedom) = 27 confidence level. Thus, it may be argued that Indonesia's economic growth in 2017 was significantly hampered by the Covid-19 pandemic.

#### 3.7.2. F Uji test

To identify whether the independent variables collectively had a substantial impact on the dependent variable, the F statistic test used to. Following are the outcomes of the F-statistical test:

According to Table 8, the F-statistic test yielded a result of 37.54080. This number exceeds the t-table value, which is 2.73 at the 5% level of significance and the level of confidence, or df (degree of freedom) = 4; 27. Thus, it may be inferred that the independent factors have an impact on the dependent variable, which is Indonesia's economic development between 1990 and 2021, simultaneously.

### 3.8. Coefficient of Determination

One technique to gauge how much the independent variable impacts the dependent variable is to look at the coefficient of determination. The coefficient of determination has a value that ranges from 0 to 1. The coefficient of determination is 0.813867 according to the outcomes of the regression calculations shown in Table 2. This indicates that 81.3867% of the independent variables can explain for Indonesia's rate of economic growth. While factors not included in the study can explain the remaining 18.6133%.

## 4. DISCUSSION

### 4.1. The Impact of the Covid-19 Pandemic on Indonesia's Economic Growth

The Covid-19 pandemic appears to have hampered Indonesia's economic expansion, according to the study's findings. These outcomes are consistent with studies carried out by (Malahayati et al., 2021; Oelietina, 2021). The Covid-19 pandemic, according to Oelietina (2021), had an impact on the social, FDI, and political sectors while all but paralyzing the economic one.

Governments in several nations must enact a "lockdown" strategy due to the Covid-19 outbreak. In Indonesia, the lockdown policy

**Table 7. Partial Test (t-Test)**

Variable	Coefficient	Std. Error	t-Statistic	t-table	Information
C	3.899332	1.080453	3.517551	1.70329	Significant
NRR	0.527139	0.128360	3.809921	1.70329	Significant
FDI	0.433427	0.250070	1.733224	1.70329	Significant
INF	-0.257315	0.027333	-9.413963	1.70329	Significant
COV	-6.029526	1.294352	-4.658335	1.70329	Significant

Source: (2022)

**Table 8. Simultaneous Test (F Test)**

DF	$\alpha$	Prob	F-table	F-Statistics	Conclusion
(4;27)	0.05	0.000	2.73	29.51430	Significant

Source: (2022)

in question is the Pembatasan Sosial Berskala Besar (PSBB). The existence of these policies reduces the mobility of people as well as goods and services. The lockdown policy is employed to stop the spread of Covid-19, which has pressures on global economic growth and further effects on already restricted economic activities, particularly Indonesia's economic growth (Syukur et al., 2021).

Covid-19 is giving a significant blow to the economy. The transportation and tourism sectors were the two hardest hit during the Covid-19 pandemic, with GDP losses ranging from 30 to 50% (Malahayati et al., 2021). Whereas the tourism sector is one sector that plays a major role in employment. In Indonesia, the unemployment rate has grown because to Covid-19. People have lost their employment, been laid off, changed jobs, had their working hours restricted, and their incomes have decreased as a result of the Covid-19 epidemic (Kurniasih, 2020). The purchasing power of people reduces while they are unemployed. The welfare of those whose purchasing power is declining is impacted by this. As a result, the production sector becomes sluggish and aggregate demand is low, which obviously hurts economic growth.

Infectious diseases have had a significant negative impact on many low-income nations; over time, these diseases may create "growth traps" where economic conditions diverge from the initial equilibrium growth path and growth slows or even stops (Xiang et al., 2021). The findings demonstrated that the COVID-19 pandemic epidemic had a direct impact on labor supply and output, which had a major detrimental effect on economic growth. The development of health capital can slow the spread of contagious diseases and speed up healing.

The Covid-19 challenge can also be an opportunity to increase mastery of technology in Indonesia, for example, since there is a pandemic, face-to-face meetings can be replaced with online meetings through various applications. This is an opportunity for the Indonesian people to be able to increase their knowledge of the Indonesian people, especially in the productive age to master the use of technology. In addition, there are opportunities in the fintech field where digital loans and online investments have the opportunity to grow rapidly.

## 4.2. The Impact of Foreign Direct Investment on Indonesian Economic Growth

The findings of this study show that, between 1990 and 2021, Indonesia's economic growth was significantly boosted by foreign

direct investment. According to the Harrod-Domar Theory, which holds that high investment determines economic growth (Chalid, 2017). The Harrod-Domar theory states that investment is necessary to survive in a developed economy over time (Marselina, 2020). The findings of this study support the theory put forth by Jhingan (1999) according to which investment plays a crucial role in the process of economic growth, particularly in light of its dual character.

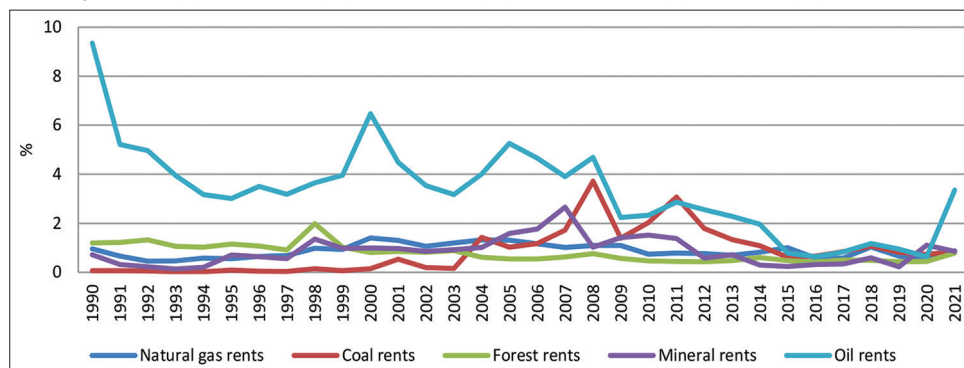
This conclusion is based on studies that shows foreign direct investment has a positive and considerable impact on economic growth (Agma, 2015; Bouchoucha and Ali, 2019). One of the developing nations is Indonesia. Complex economic, social, and political issues are common in emerging nations; also, these nations' lower incomes relative to wealthy nations make economic development efforts there more challenging. Because it increases capital, transfers technology, and transfers expertise from international investors to Indonesia, foreign investment directly influences economic growth. As a result, Indonesia's economy will flourish as a result of increased production of goods and services.

In order to improve the economic climate and promote economic growth, foreign direct investment is a crucial component (Agma, 2015). Because foreign direct investment has a positive and considerable impact on economic growth, Indonesia must foster an environment where international investors will be interested in putting their money to work. Indonesia may make efforts to improve labor quality, establish political stability, and make it easier for investors to obtain licenses to invest there.

## 4.3. The Impact of Inflation on Indonesia's Economic Growth

The findings of this analysis show that inflation has a detrimental impact on Indonesia's economic growth between 1990 and 2021. This study is in line with Stockman (1981) model that there is a conflict between inflation and economic growth. These findings come from research done by (Mukhtar et al., 2015; Wiriani and Mukarramah, 2020; Kusumatrisma et al., 2022).

High inflation can disrupt the mobilization of funds and the economy becomes less stable. High inflation causes the price of goods in Indonesia to be relatively higher than in other countries, this causes domestic goods to be unable to compete with goods from abroad (Mukhtar et al., 2015) in the end, the quantity of exports becomes lower, and the quantity of imports increases because the price of imports is relatively cheaper. The condition of imports which were higher than exports had an impact on Indonesia's balance of payments deficit and the value of the domestic currency experienced a decline.

**Figure 4:** Natural gas rents (%), coal rents (%), forest rents (%), mineral rents (%), oil rents (%), in Indonesia 1990-2021

Source: World Bank (2022)

High inflation causes people's real income to decrease (Kanwil DJPb Provinsi Gorontalo, 2018). People's purchasing power has decreased as a result of rising prices for goods and services and declining real incomes, which has an effect on aggregate demand and the deterioration of the production sector. The relationship between inflation and economic growth is negative because if this keeps happening, it will slow down the expansion of the economy.

#### 4.4. The Impact of Natural Resource Rents on Indonesia's Economic Growth

The findings of the calculations show that Indonesia's economic growth is positively and significantly impacted by the rents for natural resources. The natural resource curse hypothesis does not hold true in Indonesia, as evidenced by the positive association between natural resource rent and economic growth. Natural resources are one of the factors accelerating the production system, according to Adam Smith's Classical Economic growth theory, which produced this conclusion. These findings are in line with Redmond and Nasir (2020) study, which discovered that natural resource rentals significantly boost economic growth.

A study by Mohamed (2020) discovered a connection between natural resource rents and economic expansion. One of the variables of production that enables a nation to generate products and services are its natural resources. Natural resource abundance makes Indonesia one of the benefits for luring investors to put their money there. The existence of natural resources can enhance the rate of economic growth of a nation.

According to the World Bank's definition, which includes Indonesia as a low-middle-income country, Indonesia is one of the developing nations. Oil and gas leases have a good effect on the economy, whereas coal leases have a negative effect, according to research by (Paton, 2018). Pictures of Indonesia's gas, coal, forest, mineral, and oil rents from 1990 to 2021 are shown here.

Figure 4 illustrates how oil rents predominate in Indonesia whereas coal rents are comparatively less common. This shows that Indonesia is ready to realize the sustainable development goals (SDGs) because coal is one of the energy sources with high pollution due to its carbon content. Meanwhile, natural gas and oil have relatively lower pollution compared to coal.

Although natural resource leases hurt economic growth in Indonesia, Indonesia should reduce its dependence on natural resources and diversify its products more. This is done because natural resources are very limited while human needs are not limited, if it is not balanced with the increase in added value from the natural resources sector, he is worried that when natural resources are limited, Indonesia will not be able to meet the needs. This certainly requires a serious government role in efforts to manage renewable resources; resource management policies need to be adjusted to minimize the resulting damage (Bakar et al., 2020).

## 5. CONCLUSION

According to the results of the calculation of the partial significance test (t-test), it is evident that the Covid-19 and the inflation variable have a significant negative impact. The foreign direct investment and the rental of natural resources rents have a significant positive impact on Indonesia's economic growth from 1990 to 2021. The simultaneous significance test (F-test) calculation findings indicate that the Covid-19, inflation, foreign direct investment, and natural resource rent all together have a significant impact on Indonesia's economic growth from 1990 to 2021.

Based on the results found in this study, natural resource rents that have a positive influence on economic growth show that Indonesia's natural resources contribute positively to the economy. Thus, natural resources that are limited if used continuously will experience a reduction and require a relatively long time for recovery. Thus, Indonesia needs to transform the economy so that it does not depend on natural resources. One of the efforts that can be encouraged is to increase foreign investment by paying attention to price stability. And with the Covid-19 pandemic affecting the economy in the future, it will further optimize basic services, one of which is health.

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