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## Article

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## Natural Resources Curse in Indonesia

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### ABSTRACT

The purpose of this study is to find out whether there is a curse or blessing of Indonesia's natural resources and to find out how the long-term influence of natural resource rents, foreign direct investment, inflation, and the Covid-19 pandemic on economic growth. Based on the purpose of the study, the method used is a Fully Modified Ordinary Least Square (FMOLS). The results show that Indonesia is free from the curse of natural resources, meaning that Indonesia's natural resources have blessings for economic growth. In addition, based on the FMOLS test, it is known that foreign direct investment has not influenced economic development. Meanwhile, inflation and Covid-19 have a negative and significant influence on Indonesia's economic growth.

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

**JEL Classifications:** O11, Q00, E22

### 1. INTRODUCTION

The country has carried out various strategies, and multiple multiplies economic growth is one of the indicators used to measure the success of a country's economy (Zulfa, 2016). Every country certainly wants high economic growth through development in various fields. According to Febryani (2017), the economy is thought to expand if more promotes and services are produced than the previous year. Economic growth is the method of increasing per capita outcomes sustainably in the long term (Adianto, 2011).

Indonesia is the world's largest archipelagic country, with 17,000 islands (World Bank, 2014). As an archipelagic country, Indonesia is rich in natural resources. Still, the blessings of natural resources owned by Indonesia have yet to be able to lead Indonesia to become a developed country. Based on the World Bank (2021) classification, Indonesia is one of the countries in the Asian region with the category of a lower middle-income country, in other words, Indonesia. In a developing country. This phenomenon identifies Indonesia as experiencing the natural resource curse

hypothesis. The failure of areas with ample natural resources to benefit from industrialization is called 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 need better quality (Nwani and Adams, 2021).

According to Adam Smith's classic theory, natural resources are one of the acceleration and braking of the production system. 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 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 between Indonesia's economic growth between 1990 and 2021 and natural resource rents.

Figure 1 shows the relatively favorable link between natural resource rents (NRR) and economic growth. Only in 1998, when natural resource rents were high, Indonesia’s economic growth conditions were shallow. This was due to the monetary crisis in 1998. The phenomenon in Indonesia, whereas a study by Haseeb et al. (2021) revealed that natural resource rents impair economic growth, the situation when natural resource rents have a favorable and significant impact on economic growth is inconsistent. The author will further investigate the effects of natural resource rent on economic growth in light of the many phenomena in Indonesia and the research done by Haseeb et al. (2021).

The Harrod-Domar Theory states that investment is necessary to develop a mature economy over the term (Marselina, 2020). Both domestic and foreign sources of acquisition 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 from 1990 through 2021 and foreign direct investment.

Figure 2 shows a clear correlation between foreign direct investment (FDI) and economic growth. Research undertaken by Kholis (2012) indicated that natural resource rents damage economic growth, which is at odds with the situation in Indonesia, where foreign direct investment had a beneficial influence on economic growth. Kholis (2012) claims that because Indonesian investments are so volatile, foreign investors choose to avoid placing their money there. The author’s backdrop for further

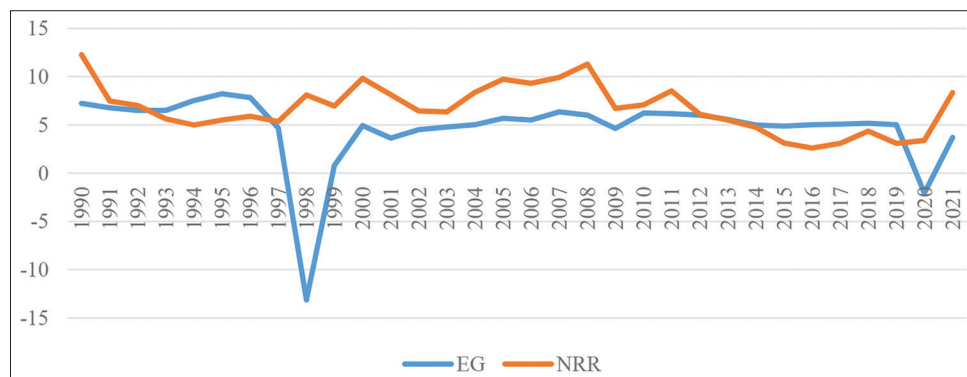
examining the impact of foreign direct investment on economic growth comprises various occurrences in Indonesia and the research done by Kholis (2012).

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 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, low inflation benefit 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 3 demonstrates that there is typically a negative correlation between inflation and economic growth in Indonesia. 1998 marked the start of the 19902–2021 period of inflation. There was a financial crisis in 1998. In 1998, Indonesia’s high inflation rate, 75.27117%, harmed 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 financial issues that practically all nations face. This phenomenon is in line with their findings.

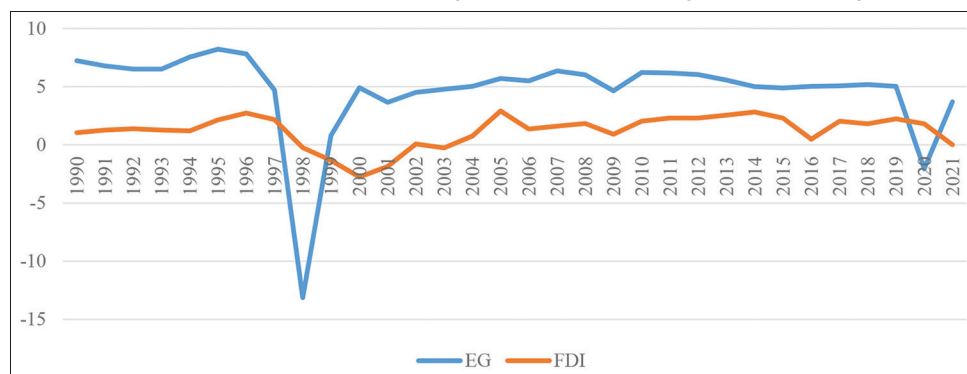
The Covid-19 pandemic, which decimated the global economy, struck the world at the end of 2019 amid the many economic issues that every nation was experiencing. The Covid-19 pandemic has

**Figure 1:** The connection among Indonesia’s economic growth 1990-2021 and natural resource rents

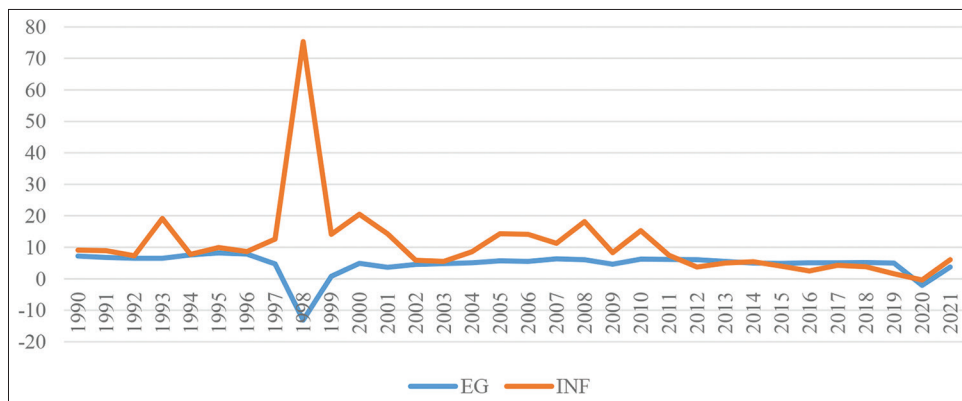


Source: World Bank (2023)

**Figure 2:** Association between Indonesian economic growth from 1990 through 2021 and foreign direct investment



Source: World Bank (2023)

**Figure 3:** Relationship between Indonesian inflation and economic development from 1990 to 2021

Source: World Bank (2023)

presented new difficulties for every government trying to boost its economy. Covid-19 is a critical 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 topics. According to research by Fahrika and Roy (2020), some of the problems 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 foreign tourism in 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.

Understanding the factors influencing economic growth is crucial because of Indonesia's various issues and challenges in achieving steady economic growth. This study aims to determine the impact of natural resource rent, foreign direct investment, inflation, and the Covid-19 dummy on Indonesia's economic growth from 1990 to 2021 based on the background information provided.

## 2. LITERATURE REVIEW AND DEVELOPMENT HYPOTHESIS

### 2.1. Theoretical Basis

#### 2.1.1. Adam Smith's classical economic growth theory

Adam Smith is often referred to as the "father" of modern economics. According to Bodiona (1992) (Chalid, 2017). Adam Smith's acceleration rests production system consisting of (a) available natural resources; (b) human resources; and (c) existing stock of capital goods. According to Adam Smith, natural resources are the most critical container of a society's production activities. The amount of natural resources available is the maximum limit for economic growth. This means that as long as these resources are not fully utilized, economic growth can still be increased.

#### 2.1.2 Harrod-domar theory

The Harrod-Domar theory concludes that the growth economy is determined by the height of savings and investment (Chalid, 2017). If protection and investment are low, the growth economy Public

or the country will low. Otherwise, if investment and savings are tall, so the growth of the country's economy is also high. The investment could increase requests effectively for producing goods and services.

#### 2.1.3. Hypothesis curse natural resources

An exciting phenomenon is "The Curse of Natural Resources" (Humphreys et al., 2007). A country with source power naturally overflows as oil and gas instead of own performance development economics and frequent governance government worse compared to countries with source power natural more little. Sachs and Warner (1995) researched large and diverse data sets from growing country's economies based on source power natural Among in 1971-1989 with results findings that source power abundant nature own correlation negative to the growing economy of a country. It shows that happen hypothec is a curse source of power nature.

#### 2.1.4. Stockman model

Stockman (1981) created an idea or theory about the impact of inflation on growth economics in 1981, known as the "Stockman Model." This model explains that future individuals will accept a return investment in the form of money. Thus, assets and accurate money balances will reduce because of inflation. As a result, decreased power buys cash so that the steady-state level of output becomes weak and falls the growth economy (Sattarov, 2011).

### 2.2. Development Hypothesis

According to the theory of Classical Economic Growth by Adam Smith, natural resources are the most critical container of the production activities of a society. With this urgent power source, nature is one influential factor in the growth economy. However, there is a theory that the source power nature owned by a country instead could become a curse for the country, which means there is a negative connection between source power nature and the growing economy. Based on the phenomenon already explained in the background behind seen the wonder in Indonesia relations Among source power nature and growing economy is optimistic. However, no can be displayed in the shape chart, but a statistical test was carried out with such a hypothesis study. This power source is naturally influential and favorable to the growth economy in Indonesia.

According to Harrod-Domar's Theory, investment is an investment that can increase effective demand to produce goods and services. As a developing country, Indonesia certainly needs funds to carry out development. Economists expressed the importance of investing in physical capital in technological progress. The accumulation of wealth can act as a transmission of growth. Foreign direct investment is used in research, and it is suspected that it positively affects economic growth in Indonesia.

Growth economy Keeps going sought by the government for the sake of the welfare of a resident. However, there is a problem new ones that arise when life is Public. The more prosperous possibility will happen enhancement consumption. However, sources of producing goods and services are limited, which increases prices for goods and services or is commonly called inflation. Inflation is considered to influence a negatively caught growth economy.

In the middle of problems faced by the nation, the growth economy faced a problem with the Covid-19 pandemic. The Covid-19 pandemic resulted in the government applying PSBB policy and weakening it in various sectors, raising many people who have lost jobs. With this hypothesis study, there is a negative effect of dummy Covid-19 on the Indonesian growth economy.

### 3. METHODS

Study this is study descriptive and quantitative. The research uses a dependent variable, the economic growth in Indonesia from 1990 to 2021. At the same time, independent variables are natural resource rents, FDI, inflation, and dummy Covid-19. In research, this is the type of data required, namely secondary data, in the form of sourced time series data from the World Bank (growth economics, resources power nature, investment, and inflation). Temporary Covid-19 dummy data, determined based on the information obtained from the Indonesian Ministry of Health, revealed that cases positive for Covid-19 in Indonesia were first detected on March 2, 2020. On April 9, 2020, the pandemic already spread to 34 provinces in Indonesia (Kementerian Kesehatan Republik Indonesia, 2021). Thus, for the years 1990-2019 is 0, and for the years 2020-2021 is 1.

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

Information: EG is economic growth (%), NRR is natural resource rent (% GDP), FDI is a foreign direct investment (% GDP), INF is inflation (%), COV is dummy Covid-19 (0 before (1990-2019); 1 after (2020-2021)),  $\beta_0$  is constant,  $\beta_{1,2,3,4}$  is coefficient,  $\varepsilon$  is residual (error term), and t is time (1990-2021).

## 4. RESULTS AND DISCUSSION

### 4.1. Results

#### 4.1.1. Statistical analysis descriptive

As markers that describe the distribution of data in the study, descriptive statistics include the average value (mean), the lowest value (minimum), and the most outstanding value (maximum).

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 describe the descriptive results for each variable: Indonesia's economic growth rate (EG) from 1990 to 2021 was 4.680578% on average. Indonesia's highest economic growth rate was 8.220007% in 1995, and the lowest rate was -13.12673% in 1998.

The average value of Natural Resource Rent (NRR) in Indonesia from 1990 to 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 foreign direct investment (FDI) value in Indonesia from 1990 to 2021 was 1.252671%. The highest value of Indonesian foreign direct investment was 2.916115% in 2005, while the lowest was -2.757440% in 2000. The average value of Inflation (INF) in Indonesia from 1990 to 2021 was 11.00558%. Indonesia's highest inflation rate was 75.27117% in 1998, while Indonesia's lowest inflation was -0.436578% in 2020.

#### 4.1.2. FMOLS method

##### 4.1.2.1. Stationarity Test

The not static variable will produce an estimate fake, i.e., some condition results in estimates showing coefficient regression that is not significant; however, the own score coefficient is high determination (Ekananda, 2016). According to Widarjono (2018), to avoid existing deterioration, false so must confirm, especially formerly that data used stationary using unit root tests. In researching this test, the unit-root panel used is tested with the unit-root individual process with the Phillips-Perron (PP) method. Following is the panel test unit-root test table with the Phillips-Perron method.

Based on the Unit-Root Test Table 2 can is known that unstable growth economy (EG), natural resource rents (NRR), investment foreign direct (FDI), inflation (INF), and dummy Covid-19 (COV) stationary at the first different level. This could see from the score that the probability of each variable used in the study more small compared level of significance. After the data has been confirmed stationary, testing next with the cointegration test.

##### 4.1.2.2. Cointegration Test

We used draft cointegration to know the connection balance period length of the variables studied (Sekaran et al., 2017). Study this using the Engle-Granger Cointegration Test method.

Based on Table 3 shows the equation model on the value of the ADF t - statistic (-3.819519) is higher big compared score critical value 1%, 5% 10% each value are 2.47863, 1.70562, and 1.31497. Based on the score, the variables tested in the study were connected in periods long or cointegrated. Thus tool analysis used is FMOLS (Fully Modified-OLS Test).

##### 4.1.2.3. Fully Modified-OLS (FMOLS) Test

FMOLS panel analysis was used to look at the period from variable natural resources rent, foreign direct investment, inflation, and



**Table 1: Statistics descriptive variable**

Statistics	EG	NRR	FDI	INF	COV
Means	4.680578	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
Observations	32	32	32	32	32

Source: EViews 10 (2023)

**Table 2: Unit-root test**

Variable	Level/First Different	Intercepts	Trends and Intercepts	None	Information
EG	Levels	0.0041***	0.0215**	0.0195**	stationary
	First Different	0.0001***	0.0000***	0.0000***	stationary
NRR	Levels	0.0280**	0.1464	0.1760	stationary
	First Different	0.0000***	0.0002***	0.0000***	stationary
FDI	Levels	0.1636	0.3679	0.0976*	stationary
	First Different	0.0002***	0.0014***	0.0000***	stationary
INF	Levels	0.0010***	0.0013***	0.0033***	stationary
	First Different	0.0001***	0.0000***	0.0000***	stationary
COV	Levels	0.9311	0.9636	0.6750	Not Stationary
	First Different	0.0001***	0.0002***	0.0000***	stationary

Source: EViews 10 (2023). \*Significant with a level of 90% confidence, \*\*Significant with a level of 95% confidence, \*\*\* Significant with a level of 99% confidence

the covid-19 pandemic against the growth economy in Indonesia. The second term consists of static and cointegration tests so that the FMOLS method can be used in data analysis (Hong and Wagner 2011).

Based on the FMOLS Test Table shows that t -statistics natural resource rents (NRR), inflation (INF), and dummy Covid -19 (COV) variables, respectively 2.712307, -7.188891, and -3.436610, more significant compared to t-table values 1.70329 (at level significance 5%). It means natural resource rents, inflation, and Covid -19 affect the growth economy. Temporary variable investment foreign direct (FDI) has a t-statistical value of 1.616367, small compared to t- table 1.70329, meaning no FDI influences an Indonesian growth economy.

Coefficient determination is one method for measuring how far the variable free influence variable bound. Coefficient value determination is Between zero and one. Based on the results calculation regression presented in Table 4, that coefficient determination is enormous at 0.811050. this could be interpreted that 81.1050% free variable could explain Indonesia's growing economy. The rest is as big as 18.895%, explained by variables outside research.

## 4.2. Discussion

### 4.2.1. Influence source power natural to economic growth in Indonesia

The results and calculation show that natural resource rents have a practical and significant effect on the Indonesian economy. Correlation positive Among source power nature and growth economics show that hypothesis curse source power natural no happened in Indonesia. This result corresponds with the Classical Economic Growth Theory from Adam Smith, who stated that source power natural is one acceleration system production. This result fits with research conducted by Redmond and Nasir (2020), which found that natural resource rents positively affect the growth economy.

**Table 3: Engle-granger cointegration test**

ADF t-statistics	Critical values			Probability	Conclusion
	1%	5%	10%		
-3.819519	2.47863	1.70562	1.31497	0.0006	Cointegrated

Source: EViews 10 (2023)

**Table 4: FMOLS test results**

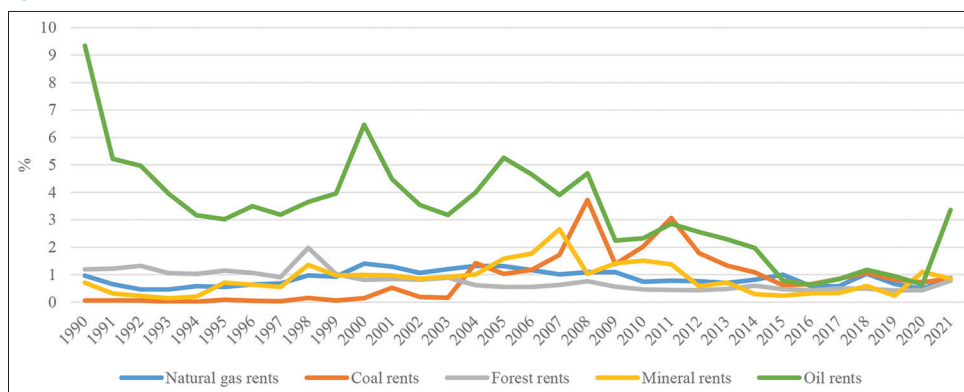
Variables	Coefficient	Standard error	t-Statistics	Prob.
NRR	0.516293	0.190352	2.712307	0.0117
FDI	0.497464	0.307766	1.616367	0.1181
INF	-0.245918	0.034208	-7.188891	0.0000
COV	-5.473622	1.592739	-3.436610	0.0020
C	3.648574	1.399641	2.606793	0.0149
R-squared	0.811050	Mean dependent var		4.598521
Adjusted R-squared	0.781980	SD dependent var		3.810301
SE of regression	1.779127	Sum squared residue		82.29764
Long-run variance	4.608996			

Source: EViews 10 (2023)

A study by Mohamed (2020) also found a connection positive between natural resource rents against the growth economy. Source power natural is one possible factor production produce goods and services in a country. The availability of natural source power could speed up a nation's growing economy. Wealth source power natural makes Indonesia's advantage in attracting investors to embed the capital.

Indonesia is a developing country. This is based World Bank classification where Indonesia is included in income countries medium to below (low middle-income). A study from Paton (2018) finds that the rent of oil and gas positively impacts the economy but impacts coal rent is damaging to the economy. Following served picture of the gas lease, coal leases, lease forest, mineral leases, and oil leases in Indonesia from 1990 to 2021.

Based on Figure 4, it can be seen that rent oil dominates in Indonesia, and coal rents are relatively below rent oil. This shows

**Figure 4:** Gas rentals, coal rentals, forest rentals, mineral rentals, and Indonesian oil rentals 1990-2021

Source: World Bank (2023)

that Indonesia is ready to realize the Sustainable Development Goals (SDGs) because coal is an energy source with high pollution because of its carbon. While natural gas and oil own relative decay lower if compared to coal.

Although source power naturally impacts Indonesia's growth economy negatively, Indonesia should reduce dependency on source power nature and more do diversification products. This is conducted because the source power nature is minimal and temporarily needs humans who don't feel limited. If there was no offset with enhancement score plus from sector source power natural, she worried that source power natural already limited Indonesia's capable fulfill needs. It, of course, needs a severe role of government in effort management source power renewable; policy management source power needs to be customized to minimize the damage that occurs (Bakar et al., 2020).

#### 4.2.2. Influence of foreign direct investment on economic growth in Indonesia

The results of this study indicate that foreign direct investment had a positive and insignificant impact on Indonesia's economic growth from 1990 to 2021. This result is in line with the findings of the study. Based on the findings of Cao and Jariyapan (2012), it was stated that the critical role of human resources is in driving economic expansion. FDI can positively affect economic growth when the host country can absorb advanced technology. The results of this study are also in line with research conducted by (Nuritasi, 2013). Foreign direct investment is insignificant because FDI invested in Indonesia tends to fluctuate. So, Indonesia has not become a priority for foreign investors to invest their capital. The many barriers to entry for foreign investors cause this.

No FDI influential significance to the economy's growth goes along with its research conducted (Istikomah and Kustituantio, 1999). Several things factor into FDI that are not influential to the growth economy, namely: (1) a small domestic market that resulted in low returns and perks fewer supporters in the host country, (2) convoluted bureaucracy, impact on investment foreign no growing, (3) minimal knowledge related source power banking industry finance in funding project, (4) existence competition strict for attract foreign investors well in developed countries

and developing countries, and (5) low productivity and quality source power human.

These findings contradict research conducted by (Agma, 2015; Bouchoucha and Ali, 2019) that investment in foreign life positively and significantly impacts the growth economy. Indonesia is a developing country. Developing countries tend to experience complex economic, social, and political; more growing country income is low cis compared to developed countries, causing efforts to build the economy in developing countries to be complicated. Foreign investment is influential to the growth economy because it pacts on the addition of capital, technology transfer, and knowledge from foreign investors to Indonesia. Thus, the production level of goods and services could increase Indonesia's economy.

The phenomenon in Indonesia differs from the Harrod-Domar Theory, which states that the growth economy is determined by the height of investment (Chalid, 2017). According to the Harrod-Domar Theory for is at an established economy in don't long need investment (Marselina, 2020). Research results do not correspond with the theory of Harrod-Domar Jhingan (1999), which states that investment plays a critical role in growth economics, particularly in character-owned double assets.

Investment in alien life is an element key to creating an environment that is more economically good with a practical positive to growth economy (Agma, 2015). Investment foreign live influential positive, and significant to the growth economy, with thus urgent for Indonesia to create a conducive climate for foreign investors interested in embedding capital. Efforts that can Indonesia is doing, among others: creating stability in politics, increasing quality middle work, and making it easier for investor licenses to embed capital in Indonesia.

#### 4.2.3. Effect of inflation on economic growth in Indonesia

The results of this study show a negative influence between inflation and economic growth in Indonesia from 1990 to 2021. This research is in line with Stockman's (1981) model that there is a negative relationship between inflation and economic growth. These results correspond to studies conducted by (Kusumatrismia et al., 2022; Mukhtar et al., 2015; Wiriani and Mukarramah, 2020).

High inflation can disrupt the mobilization of funds, making the economy 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 less competitive with goods from abroad (Mukhtar et al., 2015). In the end, the quantity of exports becomes lower, and the amount of imports increases because the price of imports is relatively lower. The condition of meanings higher than exports impacts Indonesia's balance of payments deficit, and the value of the domestic currency has experienced a decline.

High inflation causes people's real incomes to be reduced (Kanwil DJPb Provinsi Gorontalo, 2018). The increasing prices of goods and services coupled with the reduced real income of the people have resulted in a decrease in people's purchasing power. This impacts aggregate demand and causes a weakening of the production sector. If this continues to result in a decline in economic growth, thus the relationship between inflation and economic growth is negative.

#### *4.2.4. Influence of the Covid-19 pandemic against economic growth in Indonesia*

Research results from this show exist the Covid-19 pandemic effect negatively to growth economy in Indonesia. This result is in line with research conducted by (Malahayati et al., 2021; Oeliesta, 2021). Study Oeliesta (2021) finds that the Covid-19 pandemic has influenced sector social, political, and almost disabled sector economy.

The existence of the Covid-19 pandemic requires governments in various countries to apply a lockdown policy. The intended lockdown policy in Indonesia is Restrictions Social Large Scale (PSBB). There is a policy to reduce public mobility and goods and services. The lockdown policy is used to prevent the spread of Covid-19, more carry-on impact on activities, economic slowdown, and pressure on the growing world economy, including the growth of Indonesia (Syukur et al., 2021).

The sector economy has experienced vigorous shaking due to Covid-19. Two of the hardest-hit sector During the Covid-19 pandemic is sector transportation and tourism, which causes GDP losses between 30% and 50% (Malahayati et al., 2021). In contrast, sector tourist is one vital sector significant to the absorption of power work. Covid-19 is increasing number unemployment in Indonesia. The Covid-19 pandemic resulted in the Public losing their position, staying home, moving pieces, restricted working hours, and lowered wages (Kurniasih, 2020). When society had no profession, the power of buys Public decreased. Decline power buys Public impact on welfare descending community. With this, request aggregate is low, and sector production Becomes sluggish, p this, of course, is a significant negative to the growth economy.

Many income countries low hit hard by disease contagious; for periods long, the infectious disease could cause a "trap growth," i.e., condition economy deviates from track growth equilibrium recovery, and growth slows down or is even stagnant (Xiang et al., 2021). Research results show that the spread of the Covid-19 pandemic by live influences power supply and output work, so it significantly impacts a growth economy. Accumulating health

capital could hinder contagious disease deployment and increase the recovery level.

The challenge of Covid-19 can also create an opportunity for upgrading mastery of technology in Indonesia. For example, since there is a pandemic, meeting stare advance could replace with online meetings via various applications. This becomes an opportunity for Indonesian society to increase knowledge, especially since the Indonesian age productively masters the use of technology. Besides that, possibility. Where is the fintech sector? Digital loans and online investment earn a chance for development fast.

## 5. CONCLUSION

Based on the test results, it is known that there is no curse of natural resources in Indonesia. This means that natural resources in Indonesia can improve the economy, but this needs to be a further consideration in using natural resources. This is because the natural resources used continuously will decrease, and it will take time to restore them, and there are even natural resources that cannot be renewed. Thus, the government, private sector, and Indonesian people should work together to use natural resources as efficiently as possible and increase production with higher product diversification and technology. This is accompanied by creating an inclusive investment climate, providing convenience to foreign investors in Indonesia. Comfort can be in the form of how investors invest in Indonesia through various media, which can be done anytime and anywhere. In addition, the government and the private sector are trying to increase innovation from Indonesian companies so that investors are interested in investing. In addition, it is also necessary to plan the use of capital processed from development investors to improve community welfare, often seen using economic growth. In addition, Bank Indonesia and related agencies also maintain the price of goods and services so that inflation is manageable in Indonesia. This can be done by keeping people's purchasing power by paying attention to product prices and accompanied by the right tax policy.

During 2020 and 2021, Indonesia was hit by the Covid-19 pandemic, which harmed economic growth. Covid-19 has had a negative effect because it affects various sectors of the Indonesian economy. Entrepreneurs and the government should synergize in improving product quality and with the existence of Covid-19 in addition to complying with health protocols. Of course, the public has new business opportunities, for example, making masks, hand sanitizer, and mask connectors. Most Indonesian people are Muslims, so mask connectors are needed. Based on the conclusions and suggestions that have been put forward, it is expected to be able to increase Indonesia's economic growth.

## REFERENCES

- Adianto, T. (2011), Analisis Pengaruh Penanaman Modal Asing (PMA), Penanaman Modal Dalam Negeri (PMDN) Dan Ekspor Total Terhadap Pertumbuhan Ekonomi Indonesia. Indonesia: UIN Syarif Hidayatullah.
- Agma, S.F. (2015), Peranan foreign direct investment terhadap pertumbuhan ekonomi Indonesia. *J Ilmiah*, 3, 1-14.
- Al-Mulali, U., Ozturk, I. (2015), The effect of energy consumption, urbanization, trade openness, industrial output, and the political



- stability on the environmental degradation in the MENA (Middle East and North African) region. *Energy*, 84, 382-389.
- Ayumi, L. (2018), *Hipotesis Kutukan Sumber Daya Alam di Era Desentralisasi Indonesia : Analisis Data Panel Tingkat Kabupaten/ Kota (2010-2018) Natural Resource Curse Hypothesis in Decentralized Indonesia : A Panel Data Analysis on District/City (2010-2018)*. Indonesia: Universitas Indonesia Library.
- Bakar, A., Masrizal, M., Gultom, R. Z. (2020). Hubungan sumber daya alam dan pertumbuhan ekonomi serta pandangan islam terhadap pemanfaatan sumber daya alam. *Hukum Islam*, 20(1), 41-58.
- Bank Indonesia. (2022), *Definisi Inflasi*. Bank Indonesia. Available from: <https://www.bi.go.id/id/fungsi-utama/moneter/inflasi/default.aspx>
- Bouchoucha, N., Ali, W. (2019), The impact of FDI on economic growth: Evidence from Tunisia. *Journal of Smart Economic Growth*, 4(3), 23-46.
- Budiono, B. (1992). *Teori Pertumbuhan Ekonomi*. BPFE.
- Cao, X., Jariyapan, P. (2012), Foreign direct investment, human capital and economic growth of people's republic of China using panel data approach. *Journal of Economics*, 16(1), 1-14.
- Chalid, P. (2017), *Materi Pokok Teori dan Isu Pembangunan*. Indonesia: Universitas Terbuka. p.475.
- Ekananda, M. (2016), *Analisis Ekonometrika Data Panel*. 2<sup>nd</sup> ed. Indonesia: Mitra Wacana Media.
- Fahrika, A.I., Roy, J. (2020), Dampak pandemi covid 19 terhadap perkembangan makro ekonomi di indonesia dan respon kebijakan yang ditempuh. *Inovasi*, 16(2), 206-213.
- Febryani, T. (2017), Determinan pertumbuhan ekonomi di 4 Negara ASEAN. *Jurnal Ilmu Ekonomi Terapan*, 2(1), 10-19.
- Haseeb, M., Kot, S., Iqbal Hussain, H., Kamarudin, F. (2021), The natural resources curse-economic growth hypotheses: Quantile-on-Quantile evidence from top Asian economies. *Journal of Cleaner Production*, 279, 123596.
- Hong, S.H., Wagner, M. (2011), Cointegrating polynomial regressions: Fully modified ols estimation and inference. *Econometric Theory*, 32(5), 1289-1315.
- Humphreys, M., Sachs, J.D., Stiglitz, J.E. (2007), *Berkelut dari Kutukan Sumberdaya Alam*. United States: Columbia University Press.
- Istikomah, Kustituantio, B. (1999), Peranan penanaman modal asing (Pma) terhadap pertumbuhan ekonomi di Indonesia. *Jurnal Ekonomi Dan Bisnis Indonesia*, 14(2), 1-10.
- Jhingan, M.L. (1999), *Ekonomi Pembangunan dan Perencanaan*. Indonesia: PT Raja Grafindo Persada.
- Kanwil DJPb Provinsi Gorontalo. (2018), *Kajian Fiskal Regional 2018*. Indonesia: Kanwil DJPb Provinsi Gorontalo. p.1-106.
- Kementerian Kesehatan Republik Indonesia. (2021), *Penguatan Sistem Kesehatan dalam Pengendalian COVID-19*. Kementerian Kesehatan Republik Indonesia. Available from: <https://www.p2p.kemkes.go.id/penguatan-sistem-kesehatan-dalam-pengendalian-covid-19>
- Kholis, M. (2012), Dampak foreign direct investment terhadap pertumbuhan ekonomi Indonesia; Studi makroekonomi dengan penerapan data panel. *Jurnal Organisasi Dan Manajemen*, 8(2), 111-120.
- Kurniasih, E.P. (2020), Dampak Pandemi Covid 19 Terhadap Penurunan Kesejahteraan Masyarakat Kota Pontianak. In: *Prosiding Seminar Akademik Tahunan Ilmu Ekonomi Dan Studi Pembangunan 2020*. p.277-289.
- Kusumatrisma, A.L., Sugma, I., Pasaribu, S.H. (2022), Threshold effects on the relationship between inflation rate and economic growth in Tunisia. *International Economic Journal*, 31(2), 310-325.
- Malahayati, M., Masui, T., Anggraeni, L. (2021), An assessment of the short-term impact of COVID-19 on economics and the environment: A case study of Indonesia. *Economia*, 22(3), 291-313.
- Marselina, M. (2020), *Sejarah Pemikiran Ekonomi Suatu Tinjauan*. Indonesia: Fakultas Ekonomi dan Bisnis Universitas Lampung.
- Mohamed, E.S.E. (2020), Resource rents, human development and economic growth in Sudan. *Economies*, 8(4), 99.
- Mukhtar, S., Yolanda, S., & Sebayang, K. D. (2015). Effect Invesment and The Rate of Inflation to Economic Growth in Indonesia. *Trikonomika*, 14(1), 87.
- Nuritasi, F. (2013), Pengaruh Infrastruktur, PMDN dan PMA terhadap Produk Domestik Bruto Di Indonesia. *Economics Development Analysis Journal*, 2(4), 456-467.
- Nwani, C., Adams, S. (2021), Environmental cost of natural resource rents based on production and consumption inventories of carbon emissions: Assessing the role of institutional quality. *Resources Policy*, 74, 102282.
- Oeljestina. (2021), Analisis pengaruh pandemi Covid-19 terhadap pertumbuhan ekonomi dengan uji statistik Mc Nemar. *Jurnal Paradigma Ekonomika*, 16(3), 2085-1960.
- Paton, R. (2018), *The Effects of Natural Resource Rents on FDI Inflows*. Boulder: University of Colorado Boulder. p.1-37.
- Priyono, Candra, T. (2016), *Esensi ekonomi makro*. *Journal of Chemical Information and Modeling*, Zifatma, 201.
- Redmond, T., Nasir, M.A. (2020), Role of natural resource abundance, international trade and financial development in the economic development of selected countries. *Resources Policy*, 66, 101591.
- Sachs, D.J., Warner, A.M. (1995), *Natural Reaource Abundance and Econmic Growth*. Vol. 3. NBER Working Paper. p.47.
- Salim, A., Fadilla, F., Purnamasari, A. (2021), Pengaruh inflasi terhadap pertumbuhan ekonomi indonesia anggun purnamasari. *Ekonomica Sharia: Jurnal Pemikiran Dan Pengembangan Ekonomi Syariah*, 7(1), 17-28.
- Sattarov, K. (2011), *Inflation and Economic Growth Analyzing the Threshold Level of Inflation-Case Study of Finland, 1980-2010 Acknowledgement*. 29. Master's Thesis, 15 ECTS, Universitet UMEA.
- Sekaran, U., Bougie, R. (2017), *Metode Penelitian untuk Bisnis Edisi 6 buku 1 Pendekatan Pengembangan Keahlian*. 6<sup>th</sup> ed. Indonesia: Salemba Empat.
- Stockman, A.C. (1981), Anticipated inflation and the capital stock in a cash in-advance economy. *Journal of Monetary Economics*, 8(3), 387-393.
- Syukur, M., Salam, M.N., Junaidi, M.I. (2021), Dampak pandemi Covid-19 terhadap perekonomian Indonesia: Analisis terhadap sektor domestik dan stabilitas inflasi. *TRILOGI: Jurnal Ilmu Teknologi, Kesehatan, Dan Humaniora*, 2(3), 382-388.
- Widarjono, A. (2018), *Ekonometrika Pengantar dan Aplikasinya Disertasi Panduan EViews*. 5<sup>th</sup> ed. Indonesia: UPP STIM YKPN.
- Wiriani, E., Mukarramah, M., (2020), Pengaruh inflasi dan kurs terhadap pertumbuhan ekonomi Indonesia. *Jurnal Samudra Ekonomika*, 4, 41-50.
- World Bank. (2014), *World Bank and Environment in Indonesia*. Available from: <https://www.worldbank.org/en/country/indonesia/brief/world-bank-and-environment-in-indonesia>
- Xiang, L., Tang, M., Yin, Z., Zeng, M., Lu, S. (2021), The COVID-19 pandemic and economic growth: Theory and simulation. *Frontiers in Public Health*, 9, 741525
- Zulfa, A. (2016), Pengaruh pertumbuhan penduduk dan pertumbuhan ekonomi terhadap tingkat pengangguran di kota lhokseumawe. *Jurnal Visioner and Strategis*, 5(1), 13-22.