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Indonesia's Economic Growth Rate

Abstract. *Economic growth can be a benchmark for a country's welfare and play a role as a determinant and direction for future development. This study aims to analyze the factors that influence the economic growth of 6 islands in Indonesia (Sumatra, Java, Bali and Nusa Tenggara, Borneo, Sulawesi, Maluku and Papua). The following factors were selected for analysis: government expenditure, non-oil and gas exports, investment, population, and the number of workers. This study used secondary data from publications by Bank Indonesia, the Central Statistics Agency (BPS), the Investment Coordinating Board, the World Bank, and other relevant institutions. The collected data covers the period from 2011 to 2020. This study used quantitative descriptive analysis methods with panel data regression analysis. The results of the regression of panel data show that variables of government spending, investment, and non-oil and gas exports did not have a significant influence on economic growth. In contrast, the number of people and the number of workers significantly influenced the economic growth of 6 islands in Indonesia during the analyzed period. The island with the highest economic growth rate is Sulawesi Island, while Borneo Island has the lowest economic growth rate among the six islands in Indonesia. The development of government spending and the highest value of non-oil and gas exports were led by Jawa Island, while the lowest value came from Bali and Nusa Tenggara islands. In addition, due to the rapid development of the population and becoming an industrial centre area, Jawa Island also has the highest investment development, a dense population and the most labour compared to other islands. Meanwhile, the opposite condition occurs in Maluku Island and Papua.*

Keywords: *Indonesia's economic growth, government spending, non-oil and gas exports, investment, population, number of workers.*

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Темпи економічного зростання Індонезії

Анотація. *Економічне зростання може бути орієнтиром для оцінки добробуту країни та прогнозування її майбутнього розвитку. Метою цього дослідження є аналіз факторів, які впливають на економічне зростання 6 островів Індонезії (Суматра, Ява, Балі та Малі Тенггара, Борнео, Сулавесі, Малуку та Папуа). Аналіз охоплює такі фактори: державні витрати, ненафтогазовий експорт, інвестиції, населення та кількість працівників. У цьому дослідженні використовуються вторинні дані, взяті з публікацій Банку Індонезії, Центрального статистичного агентства (BPS), Інвестиційної координаційної ради, Світового банку та інших відповідних установ. Зібрані дані охоплюють період з 2011 по 2020 рік. У цьому дослідженні використовувалися методи кількісного описового аналізу з регресійним аналізом панельних даних. Результати регресії панельних даних показують, що змінні державних витрат, інвестицій та ненафтогазового експорту не мали істотного впливу на економічне зростання. Поряд з цим, кількість населення і кількість працівників суттєво вплинули на економічне зростання 6 островів в Індонезії протягом аналізованого періоду. Виявлено, що острівом з найвищим темпом економічного зростання є острів Сулавесі, тоді як острів Борнео має найнижчий темп економічного зростання серед шести островів Індонезії. Розвиток державних витрат і найвищий обсяг експорту, не пов'язаного з нафтою та газом, спостерігається на острові Ява, тоді як найнижчими ці показники є на островах Балі та Малі Тенггара. Крім того, завдяки швидкому розвитку населення та перетворенню в промисловий центр, острів Ява також має найвищий розвиток інвестицій, щільність населення та найбільшу кількість робочої сили порівняно з іншими островами. Тим часом протилежна ситуація спостерігається на острові Малуку та Папуа.*

Ключові слова: *економічне зростання Індонезії, державні витрати, ненафтогазовий експорт, інвестиції, населення, чисельність працівників.*

INTRODUCTION

Economic growth is one of the important macroeconomic indicators to measure the needs and welfare of the people in the development of a country. A positive and stable pace of economic growth can reflect the well-being of the country in a good state. In addition to being a benchmark for the welfare of a country, economic growth can also be a determinant and direction for development in the future. The economic growth to be achieved can be measured using macroeconomic data, one of which is national income data (Sukirno, 2015). To measure the growth rate of a country's economy can use data on Gross Domestic Product (GDP).

In the economy, one of the economic actors who has an important role is the government. In general, government spending is intended for the needs of the community in order to build a country's economy for the better. This will encourage public welfare and will have an effect on increasing per capita income, as well as encouraging an increase in Gross Domestic Product. That way it can be said that government spending has an effect on Indonesia's economic growth, and this is in accordance with research conducted by Sari *et al*., (2016) which says that if government spending is in a state of improvement, then the economic growth rate will also increase.

In addition, to increase economic growth can be done by establishing relations with other countries, one of which is by conducting international trade in the form of export activities. Export is an activity carried out to sell goods and services produced by one country to another. According to Sihombing *et al*., (2021) exports are divided into two categories, namely oil and gas exports (oil and gas) and exports other than oil and gas (non-oil and gas). The contribution of non-oil and gas export commodities in Indonesia is in fact greater than that of oil and gas export commodities. The profits obtained from non-oil and gas export activities can increase the growth of economists due to the increasing amount of Gross Domestic Product (GDP) which is the best measure of a country's economic performance (Mankiw, 2006).

Economic growth can also be influenced by other factors, namely investment. Investment or in other terms investment is an activity carried out to collect and increase capital that has the aim of obtaining profits. Suhendro & Siregar (2019) said investment is the first step in a production activity and can be an aspect to increase economic growth. In addition to being influenced by investment, economic growth can also be

influenced by the number of inhabitants. In economic life, the number of inhabitants has a fairly important arrangement. This happens because with a large number of people, it should be able to produce a large number of products so that economic activities can develop and run sustainably (Darma & Wulansari, 2021).

Furthermore, if viewed from the increase in aspects of the number of residents, it will eventually increase the number of workers. The number of people of productive age available will then be able to increase the number of labor and in turn can create an increase in output production. Economists have the belief that the quantity and quality of labor possessing the knowledge, discipline and expertise of labor is the most important element for realizing growth in the economy (Rofii & Ardyan, 2017). Based on the conditions that have been described, researchers are interested in pouring it into a paper that examines the factors that affect the economic growth of 6 islands in indonesia which include government expenditure, non-oil and gas exports, investment, population, and number of workers.

THEORETICAL FRAMEWORK

Economic Growth

Sukirno (2015) said economic growth is a development of activities in the economy that causes an increase in the number of goods and services produced in society. Asnidar (2018) also interprets economic growth as continuous change in the form of improving the institutional system of various fields and efforts to increase income. A measuring instrument that can be used to see the rate of economic growth is gross domestic product (GDP) or GDP (Gross Domestic Product) which is the total amount or value of all output of final goods and services produced by both local and foreign citizens in the economy of a country (Nurmainah, 2013).

The neo-classical theory of economic growth from Solow and Swan explains that economic growth is not influenced by government, but rather influenced by capital stocks, labor and technology of an exogenous nature (Amalia *et al*., 2016). Furthermore, Solow and Swan said that the growth rate comes from three elements, namely capital accumulation, increasing job offers, and technological advances (Yunianto, 2021). This theory also states that economic growth depends on the growth of production factors such as population, labor, and capital accumulation.

Government Spending

Government expenditures are costs incurred by the government that aim to establish policies to purchase goods and services (Mishkin, 2011). Government spending is also part of fiscal policy which aims to level the distribution of income and stabilize the economy (Amalia *et al*., 2015). According to Keynes, the fiscal policy taken by the government in terms of imi is that government spending has an efference multiplier for the economy, which can improve the economy (Surjaningsih *et al*., 2012). The concept in the calculation of national income with the approach of expenditure is expressed in aggregate demand (d) as follows:

$$Yd = C + I + G + (X\text{-}M).....(1)$$

The above formula is known as the national income identity, as well as being a reflection of aggregate supply. Variable G expresses government expenditure, I = investment, X-M = net export is a variable included in aggregate demand.

Non-Oil and Gas Exports

Mahzalena & Juliansyah (2019) defines export as the process of legally moving goods or commodities from one country to another, generally in the process of trade and carried out to open new markets abroad. Then, non-oil and gas is everything that includes natural products and also industries except natural gas and petroleum (Ridwan & Huda, 2022). The increasingly small increase in exports and imports (X > M) indicates that economic growth has increased, and vice versa, if the decline in exports and imports is greater (X < M) then economic growth decreases. This relationship can be written in the following equation:

$$Economic\ Growth = X - M.....(2)$$

Economic growth can increase if exports increase from previous exports, at least two years ago. One type of export is non-oil and gas exports. Non-oil and gas exports in international trade activities still dominate the total value of exports in the trade balance (Ulfa & Andriyani, 2019). The types of non-oil and gas commodities exported consist of electronic goods, rubber and rubber products, palm oil, forest products, footwear, shrimp, cocoa and coffee.

Investment

Suhendro & Siregar (2019) defines investment as the investment or expenditure of a company to purchase and provide capital goods and production equipment with the aim of increasing the ability to produce goods and services available in the economy. Investment has products consisting of, among others, stocks, bonds, deposits, property, mutual funds, savings and gold (Kurniawan, 2016). In this case, investment is also divided into two types, namely local (domestic) investment and foreign investment (Sudirman & Alhudhori, 2018).

Population

The population is all people who are in a certain area. The number of people who increase over time can be both a driver and an obstacle to economic growth (Windayana & Darsana, 2020). If the number of workers in an area increases, the quality of people's living standards will increase which makes economic growth increase (Widayati *et al*., 2017).

Number of Workers

Labor is part of the population that has entered the working age (15-64 years) which is designated as one of the factors of production. According to Law No.13 of 2003 Manpower is everyone who is able to do work in order to produce goods and / or services both to meet their own needs and for the community. The workforce also has two groups, namely the labor force and not the labor force (Ningsih & Sari, 2018).

LITERATURE REVIEW

Research conducted by Anitasari & Soleh (2015) using a quantitative approach with spss 19 software tools resulted in a significant positive relationship between government spending and economic growth in Bengkulu Province during 2001-2012. This positive influence is supported by Keynes's theory that the domestic economy can be determined by government spending (Sari *et al*., 2016). Then, Ulfa & Andriyani (2019) conducting a study entitled "Analysis of Factors Affecting Exports of Non-Oil and Gas Commodities in Indonesia in 1985-2017" showed that non-oil and gas exports and Indonesia's economic growth have a positive and significant influence, while the exchange rate and inflation do not have a significant influence on non-oil and gas exports in Indonesia.

From 2012 to 2016 in the study area of Indonesia which used 20 quarters of data from the development of Gross Domestic Product (GDP) and investment. The use of multiple regression analysis techniques obtained a unidirectional relationship between investment and economic growth with a significance level of 0.000 < 0.005. This means that the better the investment, the more it will have an impact on economic growth (Suhendro & Siregar, 2019). There are many different opinions about the relationship between population and economic growth. By utilizing the ARDL model framework, in Nigeria in the period 1985-2018 revealed that the increase in population supports economic growth both in the short and long term. This means that there is a positive and significant relationship between the two variables (Orji *et al*., 2020).

Further research Yunita & Sentosa (2019) in the period of 30 years, namely 1987 to 2017, analyzing the influence of labor on economic growth in Indonesia with multiple linear regression techniques, there was a significance value of < 0.05. The value reveals that the number of workers can determine the rise and fall of economic growth in the study area. The increase in population and labor is considered to be one of the factors that can spur economic growth so that more and more labor can cause an increase in economic growth.

RESEARCH METHODOLOGY

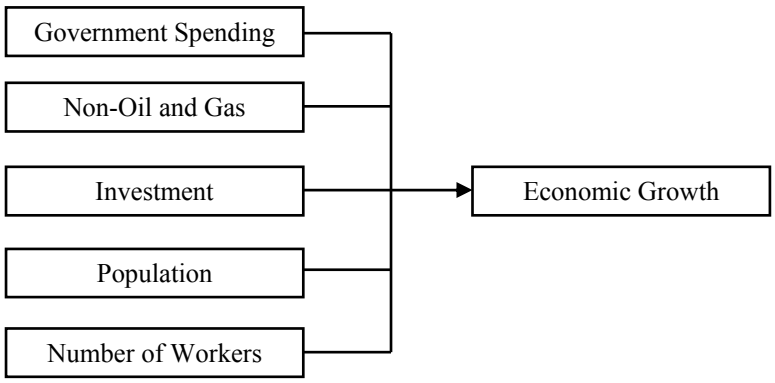

Figure 1. **Research Conceptual Framework**

Hypothesis

H_0: Government spending, non-oil and gas exports, the number of workers, the number of people, and investment have no influence on the variables of economic growth.

H_a: Government expenditures, non-oil and gas exports, the number of workers, the number of inhabitants, and investment have an influence on the variables of economic growth.

The scope of research

This research will focus on the analysis of how the influence of government spending, non-oil and gas exports, investment, population, and number of workers on the economic growth of 6 islands in Indonesia during 2011 to 2020.

Types, Sources and Methods of Data Collection

In this study using quantitative descriptive research. Quantitative research is a form of research that uses a lot of numbers, starting from collecting data, interpreting the data obtained, and presenting the results (Arikunto, 2006). The type of data used in this study is seen from its nature, namely using panel data. Cross section data in this study covers 6 islands in Indonesia and time series data in this study, namely from 2011 to 2020.

This study used secondary data. The data is sourced from publications by Bank Indonesia, the Central Statistics Agency (BPS), the Investment Coordinating Board, the World Bank, other relevant institutions, and literature studies through journals, papers, articles and other sources related to this research.

The data collection method used is a literature study. The literature study was carried out by collecting data in accordance with the variables of this study which include data on economic growth, government spending, non-oil and gas exports, investment, population, and the number of workers taken from books, scientific articles, and the internet.

Data analysis technique

The data analysis technique used in this study is to use panel data regression analysis techniques. In this study, panel data regression was used with the help of E-Views software 9. The regression model used in this study is:

$$GRW_{it} = \beta_0 + \beta_1 LnPP_{it} + \beta_2 LnXNM_{it} + \beta_3 LnINV_{it} + \beta_4 LnJP_{it} + \beta_5 LnJTK_{it} + e_i \text{.....(3)}$$

Where: GRW_{it} : Economic growth rate on the basis of constant prices island i year t (Percentage); PP_{it} : Government expenditure of the island i year t (Rupiah); XNM_{it} : Non-oil and gas export island i year t (Rupiah); INV_{it} : Island investment i year t (Rupiah); JP_{it} : Number of inhabitants of the island i year t (Unit of Soul); JTK_{it} : Number of island workers i year t (Soul Unit); i : Unit cross section (6 Islands in Indonesia); t : Time series units (2011-2020); Ln: Natural logarithms; $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$: Regression coefficient; β_0 : Constant; e_{it} : Standard error

RESULTS AND DISCUSSION

Model estimation

Table 1

Model estimation results of random effect method

Dependent variable: GRW				
Variables	**Coefficient**	**Std.Error**	**t-Statistic**	**Prob.**
Constant	-4.493881	9.700489	-0.463263	0.6450
PP	-1.036161	0.932629	-1.111011	0.2715
XNM	0.159958	0.400795	0.399102	0.6914
INV	-0.616285	0.415968	-1.481569	0.1443
JP	20.09673	7.147630	2.811663	0.0069
JTK	-18.84073	7.203830	-2.615377	0.0115
Summary				
R^2	0.241133			
Adj. R^2	0.170867			
F-statistic	3.431735 (0.009154)			
Chow Test	2.296781			
LM-Test	0.196735			

Source: Authors computation, 2022.

Based on the Chow test method and the LM test, the model used in this study is a random effect model. Furthermore, from the results of the regression that has been carried out, the equation model can be formulated as follows:

$$GRW = -4.493881 - 1.036161PP_{it} + 0.159958XNM_{it} - 0.616285INV_{it} + 20.09673JP_{it} - 18.84073JTK_{it} + e_{it}$$

The statistical F probability value (Table 1) is smaller than the significance level α 5 percent (0.009154 < 0.05). The value shows that h0 is accepted so that it can be concluded that the variables of government expenditure, non-oil and gas exports, investment, population, and the number of workers together (simultaneously) have a significant influence on economic growth on 6 islands in Indonesia during 2011 to 2020.

The Variable Government Expenditure (PP) negatively and insignificantly affected the economic growth of 6 islands in Indonesia (Sumatra, Jawa, Bali and Nusa Tenggara, Borneo, Sulawesi as well as Maluku and Papua) during 2011-2020. It can be determined based on the probability values and coefficients on this PP variable. The variable probability value of government spending is 0.2715. Meanwhile, the value of the coefficient in the government expenditure variable of -1.036161 shows that if government expenditure (PP) increases by 1 percent, then the economic growth of the six islands in Indonesia will decrease by 1.036161 percent.

The results of this study are in accordance with the theory of Rostow and RA Musgrave which states that the greater the role of the government in this case government spending can give rise to indications of a budget deficit and an increase in national debt, so as to reduce the level of economic growth in a country (Mankiw, 2006).

The results of the study are in line with the research Mamuane *et al*., (2021) which has the result of a partial government expenditure indirectly providing a multiplier effect of the economy and well-being for the people that makes economic growth low, this reflects that government spending has a negative influence on economic growth although it is not significant . Different results are obtained by Kaharudin *et al*., (2019) which states that if government spending is high, it will reduce poverty and alleviate poverty so that economic growth increases. The results show that government spending has a significant positive relationship to economic growth.

The non-oil and gas export variable (XNM) in this study obtained a probability value with a significance level above 0.05, which was 0.6914. Meanwhile, the coefficient in this variable is positive, namely 0.159958, which means that if the value of non-oil and gas exports increases by 1 percent, it can cause an increase in economic growth on 6 islands in Indonesia by 0.159958 percent. Based on the value of the coefficient and its probability, it can be seen the influence of the variable value of non-oil and gas exports on the variable economic growth of 6 islands in Indonesia, which is positive and insignificant during 2011-2020.

These results are in accordance with the theory put forward by Keynes that in an open economy, an increase in export activities can encourage an increase in national

income which will later have an impact on economic growth (Hasmarini & Murtiningsih, 2003).

Based on the strength of the relationship, in line with the research conducted by Risa & Salsabila (2021) which obtained the finding that although the quantity of non-oil and gas exports is greater than oil and gas exports, non-oil and gas exports have developments that are too volatile so that it is difficult to predict their movement in increasing economic growth. In terms of the relationship of the results of this study, it is supported by the research conducted Ridwan & Huda (2022) which results that non-oil and gas exports have a positive influence on economic growth, this happens because the decline in oil and gas resources will make the role of non-oil and gas exports high and the regulation of the job creation law that supports the increase in non-oil and gas exports that can increase economic growth. The same result is also obtained by Kurniawati & Islami (2022) which stated that the shift in Indonesia's export commodities from oil and gas to non-oil and gas in the 1980s made non-oil and gas exports the sector that had the highest contribution to economic growth.

The investment variable (INV) produces a negative coefficient value of -0.616285. This result means that if investment increases by 1 percent, it will reduce economic growth on the six islands in Indonesia (Sumatra, Jawa, Bali and Nusa Tenggara, Borneo, Sulawesi as well as Maluku and Papua) by 0.616285 percent. In addition, when viewed from the probability of this investment variable, the value obtained is at a significance level above 0.05, which is 0.1443. Therefore, judging from the acquisition of these values, it can be concluded that in the 10-year period (2011-2020) the investment variable (INV) has a negative but not significant influence on the economic growth variable in 6 provinces in Indonesia.

This result contradicts Harrod-Domar's theory which suggests that investment has a positive role in increasing income through a multiplier effect. Investment can increase capital inventory which will then increase production capacity. Large investments can increase positive net capital goods and promote economic growth (Fatihudin, 2019).

The same result is obtained by Sulistiawati (2012) according to the study, investment has a negative but not significant relationship due to the impact of the global crisis in 2009 as well as natural disasters and uneven investment, making economic growth decline even though investment is increasing, but its ability to encourage economic growth is weak. The result of the regression is different from the result performed by Purba (2020) which states that high investment will increase capital stocks which will further increase productivity and quality of production which will ultimately increase economic growth, this indicates a significant positive relationship between the two variables. Differences are also found in the research conducted Lainus *et al*., (2018) according to the study, investment has a significant positive influence on economic growth, this can happen because high investment can create income and enlarge production capacity so that economic growth will increase.

The population variable (JP) has a probability value that is smaller than the alpha level of 5 percent, which is 0.0069 while the coefficient value is 20.06973. This means that if the population increases by 1 percent, it can cause economic growth on 6 islands, namely Sumatera, Jawa, Bali and Nusa Tenggara, Borneo, Sulawesi as well as Maluku and Papua will increase by 0.482142 percent. Based on the probability value and coefficient obtained, it can be seen that the Population Variable has a positive and significant effect on economic growth on the six islands of Indonesia in the period 2011 to 2020.

These results are in accordance with the classical theory of one of its originators, Adam Smith, which states that population growth can increase output growth. Then the increased output will reflect the process of economic growth (Kamaroella & Kutsiyah, 2018). This means that the number of inhabitants in a region can affect the process of economic growth. The large population will encourage the increase in production levels and can increase the number of consumers so that later it will affect economic growth that continues to increase.

Research conducted by Erikat *et al*., (2021) getting the same result, according to the study, the increasing number of people will cause the poverty rate to be lower which has an impact on economic growth in a region to increase, the results show that the number of residents has a significant positive influence on economic growth. But different results are obtained by Datu *et al*., (2021) an increasing population accompanied by a decrease in people's living standards will reduce economic growth, this illustrates that there is a significant negative relationship between variables.

The variable number of workers (JTK) has a significant effect and has a negative relationship with economic growth in 6 Indonesian islands. This condition can be viewed from the probability value which is below 5 percent, namely 0.0115 with the coefficient obtained of -18.84073. The negative relationship also means that if there is an increase in the number of workers by 1 percent, it will cause a decrease in economic growth for 10 years, namely 2011-2020 on the six islands in Indonesia, including Sumatera, Jawa, Bali and Nusa Tenggara, Borneo, Sulawesi, as well as Maluku and Papua by 18.84073 percent.

The findings in this study reveal that the large number of workers in an area that is not accompanied by their quality and ability to work will have an impact on reducing the production process so that the demand for needs in society is not met. Then it will result in a decrease in economic activity. This condition will also have an impact on declining economic growth. The results of this study contradict the theory of one of the economic figures, namely Michael P. Todaro, who stated that labor growth would increase production levels and spur economic growth (Yunita & Sentosa, 2019).

The results of the study are different from the results obtained in the study Buana *et al*., (2015) which states that the large number of workers will make the number of goods and services increase so that it will have an impact on increasing economic growth, this shows that there is a significant positive influence between the number of

workers on economic growth. Different results are also obtained by Hellen *et al*., (2017) according to the study, the number of workers has a significant positive influence on economic growth, the causative factor is that an increased labor force will have an impact on people's income which will ultimately increase economic growth.

The R-squared result of 0.241133 means that only 24.11 percent of the economic growth of the six islands in Indonesia can be explained by the variables of government spending, non-oil and gas exports, investment, population, and number of workers. Meanwhile, the remaining 75.89 percent was explained by other variables not studied in this study.

Table 2, it can be seen the results of the regression of research data with the study area of 6 islands in Indonesia showing that there are three islands in Indonesia that have a positive intercept value, namely Jawa at 0.0000000000375, Borneo at 0.00000000000312, and Sulawesi at 0.0000000000062626. This means that the three islands in Indonesia affect economic growth in Indonesia individually. If the variable is equal to 0, economic growth will increase in the three islands, namely Jawa can increase by 0.00000000375 percent, Borneo by 0.000000000312 percent, and Sulawesi by 0.00000000626 percent. The positive value of the intersection of the three islands in Indonesia is caused by one of the factors, namely the value of economic growth in these regions over a period of 10 years is quite stable and has not received the impact of economic turmoil due to the Covid-19 pandemic which spread almost all regions in Indonesia.

Table 2

Individual interception results (Island)

Number	Island	Effect
1	Sumatera	-0.0000000000732
2	Jawa	0.0000000000375
3	Bali and Nusa Tenggara	-0.0000000000251
4	Borneo	0.00000000000312
5	Sulawesi	0.0000000000626
6	Maluku and Papua	-0.00000000000496

Source: E-views Regression Result 9, data processed, 2022.

Meanwhile, there are also three islands in Indonesia that have a negative intercept value, namely Sumatera with a value of -0.0000000000732, Bali and Nusa Tenggara are as big as -0.0000000000251, and the Maluku and Papua -0.00000000000496. The negative intercept values state that from an individual aspect per island, economic growth is not influenced by the islands of Sumatra, Bali and Nusa Tenggara as well as Maluku and Papua. This condition is also indicated if the variable is equal to 0, there will be a decrease in economic growth on the islands of Sumatra, Bali and Nusa Tenggara, Maluku and Papua respectively by 0.0000000000732 percent, 0.0000000000251 percent, and 0.00000000000496 percent.

CONCLUSIONS

The development of economic growth of 6 islands in Indonesia has undergone a fluctuating change from year to year during 2011 to 2020. The island with the highest economic growth rate is Sulawesi Island while Borneo Island has the lowest economic growth rate among the six islands in Indonesia. The development of government spending and the highest value of non-oil and gas exports were led by Jawa Island, while the lowest value came from the islands of Bali and Nusa Tenggara. In addition, due to the rapid development of the population and becoming an industrial center area, Jawa Island also has the highest investment development, a dense population and the most labor compared to other islands. Meanwhile, the opposite condition occurs in Maluku Island and Papua.

The results of the regression of panel data, the variables of government spending, investment, and non-oil and gas exports did not have a significant influence on economic growth, while the number of people and the number of workers had a significant influence on the economic growth of 6 islands in Indonesia during 2011-2020.

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References

Amalia, K., Kiftiah, & Sulistianingsih. (2016). Penerapan Teori Solow Swan. *Buletin Ilmiah Mat. Stat. Dan Terapannya (Bimaster)*, *05*(1), 39–44.

Amalia, R., Madris, & Razak. (2015). Pengaruh Pengeluaran Pemerintah Terhadap Kemiskinan di Provinsi Sulawesi Barat. *Jurnal Analisis*, *4*(2), 183–189.

Anitasari, & Soleh. (2015). Pengaruh Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi di Provinsi Bengkulu. *EKOMBIS REVIEW: Jurnal Ilmiah Ekonomi Dan Bisnis*, *3*(2), 117–127. https://doi.org/10.37676/ekombis.v3i2.139

Arikunto. (2006). *Metode Penelitian Kualitatif*. Jakarta: Bumi Aksara.

Asnidar. (2018). Pengaruh Indeks Pembangunan Manusia (IPM) dan Inflasi terhadap Pertumbuhan Ekonomi di Kabupaten Aceh Timur. *Jurnal Samudra Ekonomi*, *2*(1), 1–12.

Buana, Juni, Saragih, Aritonang, & Pertahanan. (2015). *Pengaruh Pengeluaran Pemerintah, Investasi Pemerintah, Investasi Swasta dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi di Pulau Jawa Tahun 2011 - 2015*. 1–20.

Darma, & Wulansari. (2021). Pengaruh Jumlah Penduduk Terhadap Pertumbuhan Ekonomi Kabupaten Batang Hari Tahun 2010-2020. *J-MAS (Jurnal Manajemen Dan Sains)*, *6*(2), 444–447. https://doi.org/10.33087/jmas.v6i2.309

Datu, Engka, & Rorong. (2021). Analisis Pengaruh Dana Alokasi Umum dan Jumlah Penduduk terhadap Pertumbuhan Ekonomi di Sulawesi Utara. *Jurnal EMBA*, *9*(1), 1447–1454.

Erikat, Dedat, Akasumbawa, Adim, & Gafur. (2021). *Faktor-faktor yang Mempengaruhi Pertumbuhan Ekonomi di Negara Dengan Jumlah Penduduk Terbesar di Dunia (Studi Pada Negara China, India, Indonesia, Pakistan dan Amerika Serikat)*. *1*, 67–74.

Fatihudin. (2019). *Membedah Investasi Menuai Geliat Ekonomi*. Yogyakarta: Deepublish (CV Budi Utama).

Hasmarini, & Murtiningsih. (2003). Analisis Kausalitas Ekspor Non Migas dengan Pertumbuhan Ekonomi Menggunakan Metode Final Prediction Error. *Jurnal Ekonomi Pembangunan*, *4*(2), 147–161.

Hellen, Mintarti, & Fitriadi. (2017). *Pengaruh Investasi danTenaga Kerja Serta Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi Serta Kesempatan Kerja*. *13*(1), 28–38.

Kaharudin, Kumenaung, Niode, Pembangunan, Ekonomi, Bisnis, & Ratulangi. (2019). *Pengaruh Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi, Pengangguran dan Kemiskinan (Studi Kasus Pada Kota Manado Tahun 2001-2017)*. *19*(04), 13–23.

Kamaroella, & Kutsiyah. (2018). *Isu-isu Strategi Makro Ekonomi*. Surabaya: CV. Zifatama Jawara.

Kurniawan. (2016). Pengaruh Investasi Terhadap Perekonomian Indonesia. *Jurnal Media Wahana Ekonomika*, *12*(4), 1–9.

Kurniawati, & Islami. (2022). *Analisis Pengaruh PMA, PMDN dan Ekspor Migas-Nonmigas Terhadap Pertumbuhan Ekonomi Indonesia*. *2*(1), 13–28.

Lainus, George M.V Kawung, & Hanli. (2018). *Pengaruh Investasi dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Provinsi Papua*. *18*(06), 45–55.

Mahzalena, & Juliansyah. (2019). Pengaruh Inflasi, Pengeluaran Pemerintah dan Ekspor Terhadap Pertumbuhan Ekonomi di Indonesia. *Jurnal Ekonomi Regional Unimal*, *02*(01), 37–50. https://doi.org/10.29103/jeru.v2i1.1742

Mamuane, Kalangi, & Tolosang. (2021). *Pengaruh Pengeluaran Pemerintah, Investasi, dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi di Sulawesi Utara*. *21*(02), 205–216.

Mankiw. (2006). *Makroekonomi* (Edisi Ke-6). Jakarta: PT Gelora Aksara Pratama.

Mishkin. (2011). *The Economics of Money, Banking and Finance Markets. Edisi ke-8. Terjemahan olch: Lana Soelistianingsih dan Beta Yulianita G.* Jakarta: Salemba Empat.

Ningsih, & Sari. (2018). Pengaruh Investasi dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi di Kota Batam. *Jurnal Akuntansi Barelang, Universitas Putera Batam*, *3*(1), 21–31. Retrieved from https://doi.org/10.33884/jab.v4i1.1488

Nurmainah. (2013). Analisis Pengaruh Belanja Modal Pemerintah Daerah, Tenaga Kerja Terserap, dan Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi dan Kemiskinan (Studi Kasus 35 Kabupaten/Kota di Provinsi Jawa Tengah). *Jurnal Bisnis Dan Ekonomi*, *20*(2).

Orji, Ogbuabor, Iwuagwu, & Anthony-Orji. (2020). Empirical Analysis of the Impact of Population Increase on the Economic Growth of Africa's Most Populous Country. *Socio-Economic Research Bulletin*, *2*(73), 27–45. https://doi.org/10.33987/vsed.2(73).2020.27-45

Purba. (2020). Analisis Tentang Pengaruh Investasi Terhadap Pertumbuhan Ekonomi dan Penyerapan Tenaga Kerja Provinsi di Pulau Sumatera, Indonesia. *Jurnal Humaniora*, *4*(1), 196–204.

Ridwan, & Huda. (2022). Pengaruh Ekspor Migas, Ekspor Non Migas , PMA , dan PMDN Terhadap Pertumbuhan Ekonomi Provinsi Jawa Timur. *Jurnal Ilmiah Multidisiplin*, *1*(6), 1440–1451.

Rofii, & Ardyan. (2017). Analisis Pengaruh Inflasi, Penanaman Modal Asing (PMA) dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi di Jawa Timur. *Jurnal Ekonomi & Bisnis*, *2*(1), 303–316.

Salsabila. (2021). Analisis Pengaruh Ekspor Migas dan Non Migas Terhadap Pertumbuhan Ekonomi Indonesia. *Jurnal Akuntansi Dan Manajemen*, *18*(01), 1–8.

Sari, Syechalad, & Majid. (2016). Pengaruh Investasi, Tenaga Kerja dan Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi di Indonesia. *Jurnal Ekonomi Dan Kebijakan Publik*, *3*(2), 109–115.

Sihombing, Sihotang, & Purba. (2021). Analisis Pengaruh Ekspor Migas, Ekspor Non Migas dan Penanaman Modal Asing Terhadap Pertumbuhan Ekonomi Indonesia Tahun 2000-2019. *Journal of Economics and Business*, *02*(02), 40–51.

Sudirman, & Alhudhori. (2018). Pengaruh Konsumsi Rumah Tangga, Investasi Terhadap Pertumbuhan Ekonomi di Provinsi Jambi. *Journal of Economics and Business*, *2*(1), 81–91. https://doi.org/10.33087/ekonomis.v2i1.33

Suhendro, & Siregar. (2019). Pengaruh Investasi dan Ekspor Terhadap Pertumbuhan Ekonomi Indonesia (Periode Tahun 2012 Sampai Dengan Tahun 2016). *Tansiq*, *2*(1), 68–92.

Sukirno. (2015). *Makroekonomi Teori Peengantar*. Jakarta: PT Raja Grafindo Persada.

Sulistiawati. (2012). *Pengaruh Investasi Terhadap Pertumbuhan Ekonomi dan Penyerapan Tenaga Kerja Serta Kesejahteraan Masyarakat di Provinsi di Indonesia*. *3*(1), 29–50.

Surjaningsih, Utari, & Trisnanto. (2012). Dampak Kebijakan Fiskal Terhadap Output dan Inflasi. *Buletin Ekonomi Moneter Dan Perbankan*, *14*(4), 389–420. https://doi.org/10.21098/bemp.v14i4.365

Ulfa, & Andriyani. (2019). Analisis Faktor-Faktor Yang Mempengaruhi Ekspor Komiditi Non Migas Di Indonesia Tahun 1985-2017. *Jurnal Ekonomi Regional Unimal*, *02*(03), 128–140.

Widayati, Laut, & Destiningsih. (2017). *Pengaruh Jumlah Tenaga Kerja, Tingkat Pendidikan dan Jumlah Pengangguran Terhadap Pertumbuhan Ekonomi Kabupaten Magelang Tahun 1996-2017*. *1*, 182–194.

Windayana, & Darsana. (2020). Pengaruh Tingkat Pendidikan, UMK, Investasi Terhadap Penyerapan Tenaga Kerja dan Pertumbuhan Ekonomi, Kabupaten/Kota Di Provinsi Bali. *E-Jurnal Ekonomi Dan Bisnis Universitas Udayana*, *9*(1), 57–72. https://doi.org/10.24843/eeb.2020.v09.i01.p04

Yunianto. (2021). Analisis Pertumbuhan Penduduk terhadap Pertumbuhan Ekonomi. *Forum Ekonomi*, *23*(4), 687–698.

Yunita, & Sentosa. (2019). Pengaruh Pajak, Penanaman Modal Dalam Negeri (PMDN) dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi di Indonesia. *Jurnal Kajian Ekonomi Dan Pembangunan*, *1*(2), 533–540. https://doi.org/10.24036/jkep.v1i2.6265