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ANALYSIS OF THE EFFECT OF GOVERNMENT EXPENDITURE, FOREIGN INVESTMENT, AND ENVIRONMENTAL QUALITY INDEX ON ECONOMIC GROWTH IN EASTERN INDONESIA 2013-2023

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Abstract

The eastern part of Indonesia has abundant natural resources, but its economic growth still lags behind other regions in Indonesia. Various challenges such as difficult geographical conditions, inadequate infrastructure, and uneven investment distribution are the main obstacles in accelerating economic development in Eastern Indonesia. This study aims to identify and analyse the factors that influence economic growth in Eastern Indonesia during the period 2013-2023. The focus of the study includes the role of government spending, foreign direct investment (FDI), and the Environmental Quality Index (EQI) in supporting economic growth in the region. The approach used in this study is the Generalised Method of Moments (GMM) method, with panel data analysis covering various provinces in eastern Indonesia. The main findings show that government spending has a significant impact on economic growth. On the other hand, foreign investment (FDI) and Environmental Quality (IKLH) do not have a significant impact on economic growth. The results highlight the important role of government spending as a key driver of economic development, as well as the need for more effective strategies to attract foreign investment and strengthen sustainable development approaches in eastern Indonesia. Keyword :

Keywords: economic growth, government spending, foreign direct investment (FDI) and the Environmental Quality Index (EQI).

Introduction

Economic growth describes how people's economic activities generate increased income and is a benchmark for countries in evaluating development progress over time. According to Niode, et al (2019) a country's economic progress can be seen from its economic expansion, therefore every country always strives to increase its economic growth rate.

As stated by Kusuma and Yuniasih (2021), economic growth is the main goal that every country wants to achieve. Increasing economic conditions show the success of a country in managing its economy. The improved economic conditions make a significant contribution to improving people's welfare. The importance of economic growth in improving people's welfare encourages the government to continue to strive to improve economic development in its region.

To encourage economic growth both nationally and regionally, Indonesia as a developing country is pursuing various development initiatives with the aim of achieving the expected economic goals. The importance of regional economic development is in line with national economic development initiatives, which are a measure of the success of a country's economic growth. Economic growth occurs when the value of GRDP increases from year to year, which leads to an increase in the production of goods and services.

The provinces in Eastern Indonesia have diverse characteristics. The resource potential of a region affects its economic structure. While economic growth in eastern Indonesia has increased, the Indonesian economy as a whole is still concentrated in western Indonesia, especially in Java and Sumatra. The following is the average rate of economic growth in each Eastern Indonesia Province from 2013 to 2023, as follows:

Table 1. Average Economic Growth Rate

PROVINCE	Average Economic Growth Rate
BALI	2,9
NTB	2,66
NTT	2,75

NORTH SULAWESI	3,88
GORONTALO	4,18
CENTRAL SULAWESI	9,72
WEST SULAWESI	3,11
SOUTH SULAWESI	4,66
SOUTHEAST SULAWESI	4,03
NORTH MALUKU	8,1
MALUKU	3,14
WEST PAPUA	0,2
PAPUA	1,46

Source: BPS Indonesia 2024

Table 1 above shows that although eastern Indonesia experienced a significant rate of economic growth, especially in provinces such as Central Sulawesi (9.72%), North Maluku (8.1%), and Gorontalo (4.18%), this growth is still hampered by infrastructure inequality, market access, and dependence on the primary sector. According to Sky and Azwardi (2023), eastern Indonesia is indeed famous for its rich natural resources. However, when compared to KBI, KTI's economic progress is still the lowest because development has not reached remote and isolated areas. This means that there is a gap in government spending in each province of Eastern Indonesia. The Central Bureau of Statistics recorded government expenditure in each Eastern Indonesian province from 2013 to 2023 as follows:

Table 2. Average Government Expenditure

PROVINCE	Average Government Spending
BALI	6439363,818
NTB	4891897,273
NTT	4594393,182
NORTH SULAWESI	3754725,909
GORONTALO	1728415,545
CENTRAL SULAWESI	3632203,545
WEST SULAWESI	1858215,818
SOUTH SULAWESI	7989055,636
SOUTHEAST SULAWESI	3967294,909
NORTH MALUKU	2635326,455
MALUKU	2802545,091
WEST PAPUA	7273087,636
PAPUA	12545959,91

Source: BPS Indonesia 2024

In table 2 above, high-growth provinces such as Central Sulawesi and North Maluku have relatively lower government spending than other provinces, with Central Sulawesi recording spending of 3.63 trillion and North Maluku around 2.64 trillion. Meanwhile, provinces with higher government spending, such as Papua (12.55 trillion) and Bali (6.44 trillion), still dominate the infrastructure and resource development sectors, which contribute to development inequality. According to Abdillah and Primitasari (2023) government spending is a form of policy represented by the budget that the government can implement in order to improve the welfare of its citizens and towards superior and advanced economic development.

However, the lack of adequate spending in eastern Indonesian provinces with high growth rates indicates that there is a lack of investment in infrastructure and public services. The lack of investment in Eastern Indonesia makes it difficult for the primary sector to develop, hindering economic growth. The following is the average foreign investment in each province of Eastern Indonesia Region from 2013 to 2023, as follows:

Table 3. Average Foreign Direct Investment

PROVINCE	Average FDI
BALI	553,0091
NTB	413,7636
NTT	79,74545
NORTH SULAWESI	206,1636
GORONTALO	53,19091
CENTRAL SULAWESI	2571,355
WEST SULAWESI	13,87273
SOUTH SULAWESI	393,9909
SOUTHEAST SULAWESI	666,7455
NORTH MALUKU	1574,9
MALUKU	79,41818
WEST PAPUA	140,2
PAPUA	1182,636

Source: BPS Indonesia 2024

Table 3 above shows the low level of foreign investment (FDI) in most provinces in the region, which is reflected in the relatively low average FDI data in several provinces, such as Gorontalo (53.19 million USD), West Sulawesi (13.87 million USD), and NTT (79.75 million USD). Even in provinces with high growth rates, such as Central Sulawesi (USD 2.57 billion) and North Maluku (USD 1.57 billion), foreign investment is still far below provinces in western Indonesia, such as Bali (USD 553.01 million) and South Sulawesi (USD 393.99 million). This low flow of foreign investment reflects the challenge of attracting external capital that is essential to support the development of its non-primary sectors, such as manufacturing and technology. According to Sihombing, et al (2021), there are a lot of natural resources in various regions, especially in Eastern Indonesia, but some people and local governments do not have the knowledge to manage these resources due to constraints in obtaining capital and attracting investors for regional development which aims to improve the community's economy and encourage economic growth.

Limited foreign investment in several provinces in eastern Indonesia not only affects the development of the economic sector but also has the potential to impact environmental sustainability. The low flow of investment into strategic sectors such as green infrastructure and environmentally friendly technologies can slow down efforts to improve the Environmental Quality Index (IKLH). The following is the level of the Environmental Quality Index in Eastern Indonesia from 2013 to 2023, as follows:

Table 4. Average Environmental Quality Index

PROVINCE	Average IKLH
BALI	66,826
NTB	64,88
NTT	66,93
NORTH SULAWESI	68,15
GORONTALO	73,97
CENTRAL SULAWESI	74,15
WEST SULAWESI	71,94
SOUTH SULAWESI	69,02
SOUTHEAST SULAWESI	73,42
NORTH MALUKU	76,61
MALUKU	76,09
WEST PAPUA	82,99
PAPUA	80,95

Source: BPS Indonesia 2024

In Table 4 above, environmental problems in eastern Indonesia as reflected in the Environmental Quality Index (EQI) over the past ten years show challenges that are closely related to the dynamics of economic growth in the region. The link between economic growth and environmental degradation has emerged as an important issue in economic development over the past few decades. In general, economic growth in eastern Indonesia still faces a dilemma between resource exploitation for economic growth and environmental protection. This emphasizes the importance of sustainable development planning to maintain a balance between these two aspects. According to Rahmawati (2024), the problems that arise in the decline of environmental quality are not only caused by excessive consumption of natural resources but also by large-scale activities.

Economic growth is an important indicator in assessing the performance of a region, because it reflects an increase in the production capacity of goods and services and the welfare of society. According to Rahmawati (2024) economic growth can be understood as an increase in a country's overall production, an increase in income per person, and an increase in people's welfare. Economic actors, particularly the government that enforces public and fiscal policies, the private sector that encourages investment, and society itself that functions as a factor of production and ensures markets, each contribute to economic growth. However, in Indonesia, economic growth tends to be concentrated in the western region, particularly in Java and Sumatra. The eastern region of Indonesia, despite its abundant natural resource potential, still lags behind economically compared to the western region. This imbalance raises questions about what factors influence economic growth in the region.

Government spending is one of the main instruments that can encourage economic development, especially in areas with inadequate infrastructure. Government spending generally has a positive and significant effect on economic growth in Indonesia. (Istiqomah et al., 2019). It plays a role in improving accessibility, supporting strategic sectors, and creating a conducive environment for economic growth. On the other hand, foreign investment (FDI) also plays an important role in accelerating economic growth through technology transfer, job creation, and increasing the competitiveness of the local economy. FDI has a positive and significant impact on economic growth in eastern Indonesia. (Istiqomah et al., 2019).. However, FDI flows in eastern Indonesia are still relatively low compared to western regions, so they have not had an optimal impact on economic growth.

In addition, the sustainability of economic development must be in line with environmental protection. The Environmental Quality Index (IKLH) is an important indicator in measuring how economic activities in a region affect the environment. The eastern Indonesian region, which is rich in natural ecosystems such as tropical forests, seas, and biodiversity, faces great challenges in maintaining environmental quality amidst the drive for economic growth. Based on the description of the problems above, this study was conducted with the aim of analyzing the effect of government spending, foreign investment, and the Environmental Quality Index on economic growth in eastern Indonesia during the period 2013-2023.

Grand Theory

Keynesian theory

Keynes' theory states that government spending affects economic growth (G->Y) (Azwar, 2016). Keynes argued that increased government spending can increase economic development. Regarding the relationship between public spending and economic expansion, Keynes argued that relatively high government spending leads to an increase in aggregate demand, which in turn increases economic growth. The primary responsibility of governments in developing countries is to accelerate development and increase economic growth, as reflected in government spending in various sectors. To improve government services for the community, public sector funding is usually directed at government spending, which supports the advancement of human resources and improves the quality of life of the community (Wahyudi, 2020).

Keynes argued that overall economic conditions are affected by changes in society's aggregate demand. If total demand exceeds total supply (or output produced) over a period of time, then a state of "underproduction" will arise. In the coming period, output will increase, prices will increase, or both will occur simultaneously. Aggregate demand refers to the total amount of money spent by all sectors of society to buy goods and services in one year. In a closed economy, total demand consists of 3 components:

1) Consumption Expenditure by Households (C)
2) Investment Expenditure by Company (I)
3) Government Expenditure (G), The government can influence aggregate demand directly through government expenditure and indirectly on consumption expenditure and investment expenditure. If formulated as follows:

$$Z = C+I+G$$

Various factors influence each component of aggregate demand. Household spending depends on the income it earns and its propensity to spend. Investment spending is affected by anticipated returns (marginal efficiency of capital) and the expenditure of funds (interest rates). Government spending is affected by the complex political process and is considered exogenous in macroeconomic theory.

Solow-Swan Theory

The Solow-Swan growth theory is a model that explains how capital accumulation, labor, and technology contribute to the output growth of an economy in the long run. This model assumes that economic growth is determined by the savings rate, population growth, and technological development, with total factor productivity as the main determinant in achieving a steady state, which is the point at which output per worker grows constantly along with technological advances. (Mankiw Gregory et al., 1992).. One of the main implications of this theory is the existence of diminishing returns to capital, which means that additional capital will produce smaller and smaller increases in output if it is not accompanied by technological innovation.

The Solow-Swan model also predicts convergence, where countries with low levels of initial capital tend to grow faster than richer countries, as long as they have comparable levels of savings and technology. The equation for this theory is Y=F(K, AL), where Y is the amount of goods and services produced, K is capital accumulation, L is the amount of labor, and is technological progress.

$$Y=f(K,AL)$$

K = capital accumulation (investment)
L = number of laborers
A = technology

The Solow-Swan model has undergone various modifications and developments to incorporate factors such as unproductive assets, exogenous variables, growth cycles, and population growth. Research has also shown the importance of investment and technology in economic growth, as well as the influence of economic distance in multi-country models. While the model provides a robust framework for understanding economic growth, its validity may vary depending on the context and variables used.

Environmental Kuznets Curve (EKC)

The link between stages of economic development and environmental degradation in the form of a Kuznets Curve is known as the Environmental Kuznets Curve (EKC) (Kaika & Zervas, 2013). The Kuznets Curve (EKC) is a curve that explains the inverted U-shaped relationship between several indicators of environmental degradation and per capita income (Setyadharma et al, 2020). The EKC hypothesis explains that an increase in per capita income will initially increase environmental degradation. This is because the country will focus on increasing production without paying attention to environmental aspects. The production process that is continuously carried out will cause degradation to the environment in the form of pollution. Then at a certain point, an increase in the economy will reduce environmental degradation due to public awareness about the importance of managing and improving the environment. This point is called a turning point where economic growth will reduce environmental degradation (Shaharir & Alinor, 2013).

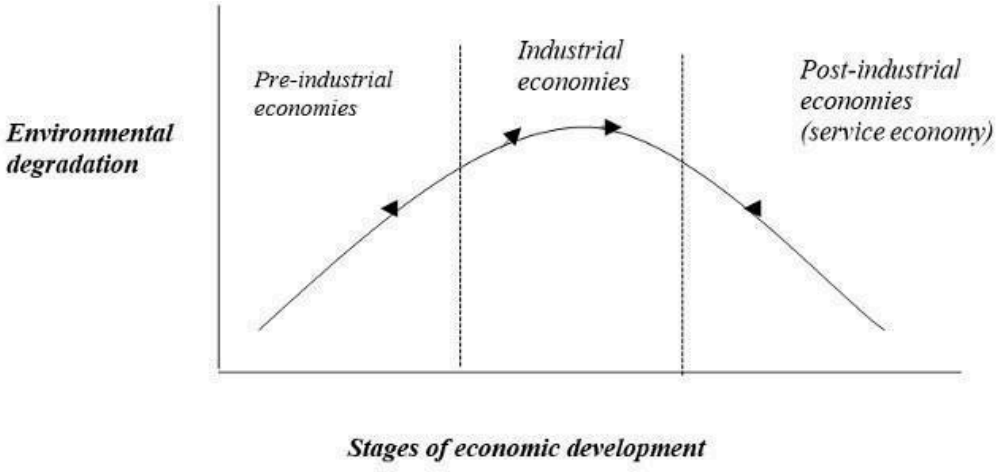

Figure 1.
Kuznet Curve

Based on the curve, in the early stages there is an increase in Economic Growth that leads to environmental degradation. This area is called Pre Industrial Economies. In some higher levels of economic growth, the trend will move in the opposite direction. At this stage, economic growth will improve environmental quality. This area is called Post Industrial Economies. With a high level of economic growth, it allows people to be capable of environmental insight, technology and pro-environmental regulations and policies (Baland et al., 2010). According to the Kuznet curve, in the early stages of development, people are more interested in the consumption of basic goods to meet the needs of life than good environmental quality. When a country's economic growth is still relatively low, the country's attention will be focused on how to increase the country's income, either through production or investment that encourages increased income and overrides environmental problems (Jain, 2015). As a result, an increase in economic growth will be followed by an increase in pollution levels and then decrease again as growth continues (Mason & Swanson, 2003).

Methods

This study uses quantitative analysis with secondary data in the form of panel data with a total sample of 117 samples. The data used is sourced from the Indonesian Central Bureau of Statistics from 2013 to 2023. Eastern Indonesia became the research location with 13 provinces including Bali, West Nusa Tenggara, East Nusa Tenggara, North Sulawesi, Gorontalo, Central Sulawesi, West Sulawesi, South Sulawesi, Southeast Sulawesi, North Maluku, Maluku, West Papua, and Papua. Economic growth is the dependent variable in this study. The rest, government spending, foreign investment, and environmental quality index became independent variables. The data analysis technique was carried out using the Generalized Method of Moment (GMM) method through E-Views 12 software. The equation of this research model is as follows:

$$PE = \beta 0 + \beta 1\ PE(-1) + \beta 2\ LOG(PM) + \beta 3\ LOG(FDI) + \beta 4\ IKLH + \varepsilon it$$

Table 5. Measurement of Research Variables

Variables	Definition	Measurement Scale
Dependent Variable		
Economic Growth	The rate of change in the average value of economic output per resident in a region in a year, calculated using constant prices.	Percent
Independent Variable		
Government Expenditure	Government expenditure is the realization/calculation of the provincial APBD in each fiscal year.	Million Rupiah
Foreign Investment	Foreign Direct Investment (FDI) according to BPS is investment by foreign	USD

	parties in Indonesia, in the form of establishing, purchasing, or developing a business, to obtain economic benefits.	
Environmental Quality Index	The Environmental Quality Index (IKLH) is an aspect to determine the performance of environmental management. Useful in order to be able to take policies related to environmental management.	Index

Source: Data processed in 2024

Results and Discussion

This study applies the Panel Generalized Method of Moments (GMM) method to analyze economic data in eastern Indonesia over the period 2015-2023, with the following main results:

Variable	Coefficient	Std. Error	t-Statistic	Prob.
PE(-1)	0.045490	0.085010	0.535117	0.6023
LOG(PM)	-7.205869	2.438377	-2.955191	0.0120
LOG(FDI)	1.675501	0.897129	1.867626	0.0864
IKLH	0.074407	0.147004	0.506156	0.6219

a. Government Expenditure (PE). The analysis shows that government expenditure has a significant effect on economic growth, with a probability value of 0.0120 (<0.05). However, the regression coefficient of -7.205869 indicates that although government expenditure increases, it has a negative impact on economic growth.
b. Foreign Direct Investment (FDI). Foreign direct investment shows no significant effect on economic growth, with a probability of 0.0864 (>0.05). Despite a positive coefficient of 1.675501, the relationship between FDI and economic growth remains weak and not strong enough to substantially affect the economy.
c. Environmental Quality Index (IKLH). Environmental quality also has no significant impact on economic growth, with a probability of 0.6219 (>0.05). The positive coefficient of 0.074407 indicates a relationship, but with a very weak impact.

Test order	m-Statistic	rho	SE(rho)	Prob.
AR(1)	-0.382573	-1650.684322	4314.695502	0.7020

Validity and Model Test

Based on the J-statistic result with a probability of 0.480053 (>0.05), the model used in this study can be considered valid. In addition, the Arellano-Bond AR(1) test shows no autocorrelation problem, which supports the credibility of the analysis results obtained.

Effect of Government Spending on Economic Growth

Eastern Indonesia, which includes Papua, Maluku, Sulawesi, and Nusa Tenggara, is a region with great natural resource potential, such as mineral reserves, fisheries wealth, and renewable energy. This study shows that government spending has a significant influence on economic growth in Eastern Indonesia. This finding is in line with Keynesian theory which argues that an increase in government spending can increase economic development. This means that when government spending increases, economic growth will also increase. This suggests that government spending will drive economic expansion. Government expenditure being positively correlated with economic growth indicates that an increase in government expenditure leads to a greater contribution in encouraging economic activities that drive economic growth.

According to Jubir, et al (2023) the importance of the government's role in encouraging economic growth, local governments need to implement a budget deficit policy as a fiscal expansion measure to support the trajectory of economic growth and increase per capita income. Government spending is a component of fiscal policy, which is implemented for various purposes including stabilizing prices, increasing production, creating jobs, and promoting economic growth (Najmi, et al 2022).

The results of this study are in line with research conducted by Fakhrizal, et al (2023) and research by Kharazi and Nuraini (2024) which states that there is a significant influence between government spending variables on economic growth in Indonesia. Contrary to the results of research by Hutagaol, et al (2024) which states that government spending has no significant effect on economic growth in Banten Province. Therefore, understanding and applying Keynesian theory which emphasizes the importance of government spending is a strategic foundation that makes a positive contribution to increasing economic growth in Eastern Indonesia.

The Effect of FDI on Economic Growth

Foreign Direct Investment (FDI) is one of the main drivers of economic growth in many countries, including Indonesia. The eastern region of Indonesia, which includes Papua, Maluku, Sulawesi, and Nusa Tenggara, has abundant natural resource potential, such as mineral wealth, renewable energy, and natural beauty that supports the tourism sector. Nonetheless, the region still faces a number of challenges that hinder its growth. Despite the positive impact of FDI, this study shows that the contribution of FDI to economic growth in eastern Indonesia is limited and insignificant, with a probability of 0.0864 (>0.05). Although there is a positive coefficient indicating that any additional foreign investment has the potential to boost economic growth, its contribution is highly dependent on solving the existing structural challenges.

One of the main reasons why FDI in eastern Indonesia has not made a significant impact is the lack of supporting infrastructure. Regions such as Papua and Nusa Tenggara, which consist of remote islands with difficult terrain, are often considered less attractive by foreign investors. Limited transportation accessibility, high logistics costs, and regulatory uncertainty make the region less competitive compared to other regions such as Java and Sumatra. The findings of Widjaja et al. (2022) suggest that FDI is more concentrated in regions with better infrastructure, where inter-regional connectivity allows goods and services to be produced and distributed more efficiently. Without substantial infrastructure improvements, especially in the transportation and communication sectors, eastern Indonesia will struggle to attract large amounts of foreign investment.

However, despite infrastructure challenges being a major bottleneck, eastern Indonesia has great potential to attract more foreign investment if basic infrastructure can be improved. The development of roads, ports, airports, and other logistics facilities will speed up the flow of goods and services, reduce logistics costs, and open wider market access for local products. Better infrastructure will also strengthen the eastern region's connectivity with domestic and global markets, which in turn will increase the region's attractiveness to foreign investors. In the long run, FDI has the potential to have a significant impact on the economic growth of eastern Indonesia.

Foreign investment brings not only financial capital, but also technology transfer, technical expertise and access to global markets, which can improve the competitiveness of the local economy. Gunawan et al. (2020) highlighted that the presence of foreign investors in certain sectors can help increase productivity and create more quality jobs, thus strengthening the regional economy in the long run. Furthermore, FDI directed at strategic sectors-such as renewable energy, tourism, and agribusiness sectorscan lead to the creation of a more sustainable and diversified economy in the eastern region. Santoso & Putri (2021) note that the tourism sector in Papua and Maluku has great potential that can be developed through foreign investment.

Tourism infrastructure development driven by foreign investment can trigger an increase in other sectors, such as trade and services, which in turn will increase regional income and create jobs. With sustainable utilization of natural potential, FDI can make a greater contribution to the eastern region's longterm economy. In addition, FDI can introduce new technologies that will improve production efficiency in the manufacturing and energy sectors. Rahmat & Widodo (2021) revealed that the presence of foreign investors in the manufacturing and renewable energy sectors can introduce advanced technologies that not only improve production efficiency, but also contribute to the development of local industries.

This will strengthen the region's competitiveness in international markets and open up opportunities for greater economic expansion. Synergy for Growth FDI also has an important role to play in infrastructure development through public-private partnership (PPP) schemes. Suryawan & Indrawati (2022) note that the private sector, including foreign investors, can play a major role in infrastructure development needed to address connectivity challenges and increase the attractiveness of the eastern region. PPP schemes allow the government to share risks and utilize private sector expertise and capital in the development of critical infrastructure, such as roads, ports, and airports.

In the long run, FDI-driven infrastructure improvements will speed up the flow of goods and services, reduce logistics costs, and increase the attractiveness of the eastern region to other investors. This will create synergies between economic sectors, such as trade, manufacturing and tourism, ultimately strengthening more equitable and sustainable economic growth in the region. Better infrastructure will open up new market opportunities, improve business efficiency, and accelerate the distribution of products from the eastern region to domestic and international markets.

The Effect of IKLH on Economic Growth

The Environmental Quality Index (EQI) is an important indicator that describes the environmental conditions in a region, which is often considered as a factor that can affect economic growth. In eastern Indonesia, which is rich in natural resources such as forests, fisheries, and mines, maintaining environmental quality is crucial to ensure long-term economic sustainability. However, the analysis results of this study show that IKLH has no significant influence on economic growth in eastern Indonesia, with a probability value of 0.6219 (>0.05). Although the regression coefficient indicates a positive relationship between IKLH and economic growth, the impact proved to be weak and not strong enough to make a significant contribution to the economy.

One of the reasons why IKLH does not have a significant impact on economic growth is because environmental management is still sub-optimal in eastern Indonesia. Although this region has great potential in the natural resource sector, such as forestry and fisheries, many areas are still facing environmental damage problems due to uncontrolled exploitation. Pradipta et al. (2021) noted that overexploitation of forests and marine pollution in Papua and Maluku negatively impact ecosystem sustainability. This environmental damage not only destroys natural habitats, but also reduces the productivity of economic sectors that depend on these natural resources, such as agriculture and fisheries, which should support long-term economic growth. Under these conditions, while good environmental quality has the potential to support the economy, the damage that occurs actually reduces the effectiveness of the environment's contribution to economic growth.

On the other hand, the lack of attention to environmental sustainability in economic development planning is another barrier. Hidayat & Lestari (2023) highlighted that development policies in Indonesia often focus on short-term economic growth without considering ecological impacts that could reduce the potential of natural resources in the future. This approach to development that often ignores ecological impacts is detrimental in the long run as it can lead to the degradation of natural resources which results in a decrease in the carrying capacity of the environment to the economic sectors that depend on it. While the influence of IKLH on economic growth is currently limited, there is great potential that with better management, the impact could be very significant in the long run. Maintaining environmental quality can create more stable conditions for economic sectors that depend on natural resources, such as agriculture, fisheries, and tourism. Gunawan et al. (2020) noted that maintaining good environmental quality supports the sustainability of production in the agribusiness and fisheries sectors, both of which have great potential to grow in eastern Indonesia. By maintaining water, soil and air quality, the productivity of these sectors can increase, providing higher incomes for local communities and ultimately contributing to economic growth. In addition, maintaining good environmental quality can extend the lifespan of natural resources, allowing these sectors to continue growing without undermining long-term sustainability.

The tourism sector, which is based on natural sustainability, can also be a very profitable sector for eastern Indonesia. Santoso & Putri (2021) mentioned that Papua and Maluku, with their natural wealth, have great potential to be developed as international tourism destinations. These regions offer unique natural beauty and high biodiversity, which can attract global tourists if managed well. Tourism infrastructure development driven by concern for environmental sustainability can increase tourist arrivals, create jobs, and increase regional income. By promoting sustainable tourism, eastern Indonesia can strengthen its economy without damaging the ecosystems that are the main attraction for tourists. Therefore, good environmental quality management can be an asset to drive more inclusive and sustainable economic growth, which benefits both local communities and local governments.

One way to optimize the positive impact of environmental sustainability on economic growth is through increased public-private partnerships (PPPs) that focus on sustainable development. Suryawan & Indrawati (2022) revealed that the private sector, especially foreign investors, can play a major role in supporting environmentally friendly infrastructure development. FDI directed towards renewable energy sectors, such as wind and solar power plants, and sustainable tourism sectors can help improve environmental quality while supporting economic growth. The government needs to provide incentives for investment in these sectors, such as tax reductions or ease of licensing, to attract more FDI that supports sustainable development.

Conclusion

Based on the results of data analysis and discussion in this study, it is concluded that the government expenditure variable has a significant influence on economic growth in Eastern Indonesia. Government spending is positively correlated with economic growth indicating that an increase in government spending leads to a greater contribution in encouraging economic activities that drive economic growth. Meanwhile, the variables of foreign investment and environmental quality do not show a significant influence on economic growth in Eastern Indonesia. Foreign investment in eastern Indonesia has not had a significant impact due to the lack of supporting infrastructure and limited transportation accessibility, high logistics costs, and regulatory uncertainty making this region less competitive compared to other regions such as Java and Sumatra. IKLH does not have a significant impact on economic growth because environmental management is still less than optimal in eastern Indonesia. Although the region has great potential in the natural resources sector, such as forestry and fisheries, many areas are still facing problems of environmental damage due to uncontrolled exploitation. The findings in this study can contribute to knowledge and as a basis for consideration of economic policy making by the government regarding economic growth in Eastern Indonesia. Thus, suggestions for future research are the use of research variables that can better represent the problems in eastern Indonesia such as GRDP per capita and environmental degradation in order to provide better results.

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