Proceeding of the 3rd International Conference of International Conference on Business and Economics
Faculty of Economy and Business, Universitas Pattimura,
December 11th, 2025
PATTIMURA PROCEEDING: Conference of Science and Technology
e-ISSN: 2829-3770 | February 2026 | pp.416-428

# Reconciling Theory and Context: How Geographic Frictions Sever the FDI-Growth Link in Maluku, Indonesia

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## *ABSTRACT*

*This study analyzes the influence of Foreign Direct Investment (FDI), Exports, and Employment on Economic Growth in Maluku Province, Indonesia, an archipelagic region characterized by significant geographic frictions. Employing time-series data (2000-2024) and the ARDL cointegration approach, we find that exports and employment opportunities significantly drive economic growth. However, contrary to conventional growth theory, FDI exhibits a statistically insignificant direct effect. We argue that this anomaly is not merely a statistical artifact but is empirically attributable to the mediating role of geographic frictions—exorbitant logistics costs and crippling infrastructure deficits inherent to the archipelago context. This finding challenges the direct applicability of standard FDI-growth models in archipelagic economies and underscores the critical importance of transaction costs and economic geography as intervening variables. The policy implication is that development strategy must prioritize reducing geographic frictions through logistics infrastructure and target export-oriented, labor-intensive investments rather than pursuing FDI quantity indiscriminately.*

***Keywords:*** *Archipelagic Economy, ARDL, Economic Growth, Employment, Exports, Foreign Direct Investment, Geographic Frictions*



## Introduction

Foreign Direct Investment (FDI) is an important instrument for economic development, especially in developing countries such as Indonesia (OECD, 2002; Dunning, 1988). FDI provides additional capital and brings new technologies and managerial skills, as well as opening access to international markets (Borensztein, De Gregorio, & Lee, 1998; Blomström & Kokko, 1998). In the context of Maluku Province, FDI has great potential to drive economic growth through increased export and job creation. The expected positive relationship between FDI and economic growth is rooted in Neoclassical (Solow, 1956) and Endogenous Growth theories (Romer, 1986; Lucas, 1988). FDI augments capital stock, introduces technology, and

DOI: https://doi.org/10.30598/pcst.2026.iconbe.p416-428

generates knowledge spillovers, enhancing productivity and long-term growth (Borensztein et al., 1998; Blomström & Kokko, 1998). Similarly, the Export-Led Growth (ELG) hypothesis posits that exports drive growth via efficient resource allocation, economies of scale, and foreign exchange earnings (Balassa, 1978; Awokuse, 2003). Employment growth, in turn, boosts aggregate demand and household income, further stimulating economic activity.

However, the realization of these theoretical benefits is contingent on the host region's institutional and geographic context (Asiedu, 2002; Iamsiraroj & Doucouliagos, 2015). New Economic Geography (Krugman, 1991) emphasizes how transportation costs and economies of shape economic activity. In archipelagic regions, high trade costs—a broader concept encompassing logistics, transportation, and connectivity expenses—can act as a severe brake on development (Hill & Tandon, 2021). These costs can negate the advantages of FDI by reducing profitability, fragmenting markets, hindering supply chain integration, and limiting knowledge spillovers to main islands. Thus, geographic frictions can sever the theoretical link between FDI and growth, making it a critical intervening variable. FDI in Archipelagic Regions: Studies consistently show that inadequate infrastructure is a primary deterrent to FDI in developing countries (Kummanont, 2014; Asiedu, 2002). In the island context, this effect is amplified (Hill & Tandon, 2021). FDI tends to cluster in areas with minimal frictions, exacerbating intra-regional inequality and limiting the aggregate growth impact (Firdaus & Kurnia, 2022). Exports and Employment: The ELG hypothesis may hold stronger in resource-rich islands, but high trade costs can erode export competitiveness (Awokuse, 2003). Similarly, job creation from FDI may be limited if investments are capital-intensive due to infrastructure constraints rather than labor-intensive.

Foundations in research related to Foreign Direct Investment (FDI), exports, and economic growth: Neoclassical Growth Theory: The theory of exogenous economic growth, as developed by Solow (1956), explains that economic growth is determined by the accumulation of capital, labor, and technological advances that are assumed to be exogenous. In the context of FDI, this theory states that FDI can increase capital stock in recipient countries, accelerate economic growth through technology transfer, and increase labor productivity (Borensztein, De Gregorio, & Lee, 1998). According to the Cobb-Douglas production function, FDI contributes directly to economic growth by increasing the efficiency of domestic investment and introducing new technologies into the production processes of the recipient countries (Solow, 1956). Endogenous Growth Theory. This theory, as developed by Romer (1986) and Lucas (1988), states that economic growth is influenced by internal factors such as human capital accumulation, technological innovation, and spending on research and development (R&D). In the context of FDI, this theory emphasizes that FDI brings not only physical capital but also knowledge capital (technology and skills), which can create spillover effects in the domestic sector (Blomström & Kokko, 1998). Thus, FDI contributes to long-term growth through increased labor productivity and technological innovation in the recipient countries (Romer, 1986).

This hypothesis states that exports are the main drivers of economic growth. According to Balassa (1978), increased exports allow for more efficient resource allocation, increased economic scale, and greater competitiveness in the global market. Exports also encourage industrialization and create jobs in developing countries (Awokuse, 2003). In this context, exports are considered one of the main factors driving a country's GDP growth. In addition, exports have a close relationship with FDI because multinational companies often use the

receiving country as a production base for exports to the global market (Dunning, 1988). This literature review provides a strong theoretical basis for understanding how FDI can drive economic growth through increased exports and job creation in Maluku Province. Considering local challenges, such as infrastructure and investment policies that have not yet been optimal, this study aims to provide evidence-based strategic recommendations to maximize the benefits of FDI in the region (Hill & Tandon, 2021; Iamsiraroj & Doucouliagos, 2015).

The Causal Relationship between Exports and Economic Growth. According to the theory of Export-Led Growth (ELG), exports encourage economic growth by increasing total production and optimizing the use of resources (Awokuse, 2003). On the other hand, the Growth-Led Export theory states that economic growth can encourage an increase in domestic production capacity, thereby spurring exports (Balassa, 1978). Empirical research shows that the relationship between exports and growth is bidirectional, depending on the level of economic development of a country (Awokuse, 2003)

Direct Investment (FDI) plays an important role in driving regional economic growth through capital transfers, technology, and managerial expertise (Dunning, 1988; Borensztein, De Gregorio, & Lee, 1998). Maluku Province, with its wealth of natural resources in the marine and fisheries sectors, which has a potential of 1,618,500 tons/year, has significant potential to utilize FDI as a catalyst to increase exports and create job opportunities (BPS Maluku, 2024).

However, as an archipelago, Maluku faces unique characteristics and different development challenges compared to the mainland, such as limited inter-island connectivity, high logistics costs (estimated to be 2-3 times higher than those in the Java region), and inadequate infrastructure (only 60% of roads are in good condition) (BPS Maluku, 2024; Hill & Tandon, 2021). These factors are suspected to hinder the effectiveness of FDI in driving economic growth (Kummanont, 2014; Asiedu, 2002). Although Maluku's economy is projected to grow at 5.34 percent in 2024, global uncertainty and economic pressures demand a careful and evidence-based strategy (World Bank, 2023). Previous research by Leasiwal (2022) examined the relationship between economic growth and FDI to labor in Maluku (2000-2020) and found that FDI has a positive but not significant effect. Maluku Province ranks fourth among the regions with the most underprivileged population in Indonesia. Economic growth in Maluku is volatile. Although Maluku's economy closed 2024 with a growth of 5.34 percent, which is better than previous years, global uncertainty and economic pressures in 2025 demand a careful strategy to maintain sustainable growth. Maluku's economic growth in the fourth quarter of 2024 was recorded at 2.37 percent (q-to-q), lower than the previous quarter. In addition, year-on-year inflation in Maluku Province was driven by the highest price increase in the food, beverages, and tobacco sectors, which reached 4.12% (y-on-y) in January 2024 (BPS Maluku, 2024).

The performance of the APBD in Maluku Province in early 2024 shows a positive trend, with an increase in the realization of state budget revenue reaching IDR 180.04 billion, an increase of 42.28% compared to the same period in 2023. The realization of spending also increased, especially in terms of social assistance spending and goods shopping. However, investment and economic growth in Maluku are still uneven; Ambon and Tual cities show higher growth than other districts in Maluku. This gap is influenced by various factors, including inadequate infrastructure, limited accessibility and suboptimal investment policies

(Firdaus & Kurnia, 2022; Hill & Tandon, 2021). Data from the Maluku Provincial Public Works Office show that the length of roads in good condition is only approximately 60% of the total length of roads in the province (BPS Maluku, 2024).

This study aims to provide an up-to-date analysis of the relationship between Foreign Direct Investment (FDI), exports, and employment opportunities in Maluku Province until 2024. Wijaya (2021) identified key factors that influence foreign investors' decisions in Indonesia, including market size, labor force, infrastructure, and economic growth. This study shows that economic and infrastructure development significantly positively influences FDI (Kummanont, 2014). In contrast, inflation and interest rates negatively impact FDI inflows (Wijaya, 2021; Cheng & Kwan, 2000).

The novelty lies in the archipelago's approach, which specifically highlights Maluku's unique characteristics, such as the challenges of equitable development between islands and effective management of public finances. Additionally, it provides a multidimensional analysis by integrating three key elements FDI, exports, and employment opportunities into a comprehensive analytical framework that highlights the complex interactions between them (Dunning, 1988; Balassa, 1978). In addition, this study adopts an approach specific to the archipelagic region, emphasizing the unique challenges faced by Maluku Province, such as the limitations of port infrastructure and high logistics costs (Hill & Tandon, 2021). Logistics costs in Maluku are estimated to be to 2-3 times higher than those in Java (BPS Maluku, 2024).

This study aims to fill this gap by providing a multidimensional analysis of how FDI, exports, and employment collectively influence economic growth in Maluku, explicitly accounting for the intervening role of geographic frictions. Our research offers three key novelties: (1) It integrates three critical growth drivers into a single analytical model tailored for an archipelagic economy; (2) It employs a robust ARDL bounds testing approach to capture both short- and long-run dynamics in a small sample setting; and (3) It moves beyond merely documenting FDI's insignificance by empirically linking it to the high transaction costs predicted by New Economic Geography (Krugman, 1991), thereby contributing to a more nuanced theoretical understanding of regional growth constraints.

## Theoretical Framework and Hypothesis

Previous research offers mixed evidence. Sari & Baskara (2018) found a positive FDI-growth nexus in Indonesia at the national level, while Leasiwal (2022) found a positive but insignificant effect of FDI on labor absorption in Maluku. Zhang (2005) and Busse & Hefeker (2007) highlight the roles of export linkage and institutional quality, respectively. Nguyen Thanh Phong (2023) recently showed that the FDI-growth relationship in ASEAN is heterogeneous and depends on local infrastructure and policies.

The synthesis of these studies reveals a clear gap: while the individual variables are well-studied, there is a lack of integrated empirical analysis for archipelagic economies that simultaneously tests the effects of FDI, exports, and employment while formally accounting for the constraining mechanism of geographic frictions. Most studies either focus on mainland regions or treat geography as a background note rather than a core analytical element. This

study aims to bridge this gap by hypothesizing those geographic frictions significantly moderate, particularly weakening, the influence of FDI on economic growth in Maluku.

M. Iskandar Firdaus et al. (2021) show that ASEAN economic integration does not necessarily increase FDI, and national economic stability is an important factor. International studies are also relevant to this topic. Zhang (2005) found that FDI has a positive relationship with export performance in developing countries, especially in the manufacturing sector. Busse and Hefeker (2007) highlight the importance of political stability and institutional quality in attracting FDI in emerging markets. Furthermore, Asiedu (2006) emphasizes that trade openness and sound institutions have a positive impact on FDI inflows. Nguyen Thanh Phong (2023) found that. Nguyen Thanh Phong (2023) found that the relationship between FDI and economic growth varies between ASEAN countries, depending on infrastructure and pro-investment policies.

Based on theoretical and empirical studies, the following hypotheses were formulated: **H1**: Foreign Direct Investment (FDI) has a positive and significant influence on economic growth in Maluku Province. **H2**: Exports have a positive and significant influence on economic growth in Maluku Province. **H3**: Job opportunities positively and significantly influence economic growth in Maluku Province.

## Research Methods

### Types and Data Sources

This study utilized annual quantitative secondary time series data for the period 2000–2024 (n = 25). The dataset includes Economic Growth (Y), measured as the GDP growth rate at constant prices (Source: BPS Maluku); Foreign Direct Investment (FDI, X1), represented by the value of FDI realization in billion rupiah (Source: BKPM); Exports (X2), captured by the value of goods and services exported in billion rupiah (Source: BPS Maluku); and Employment Opportunities (X3), measured as the labor absorption rate in thousands of people (Source: BPS Maluku).

### Research Variable

The dependent variable in this study is Economic Growth, measured by the growth rate of the Gross Regional Domestic Product (GDP) at constant prices in Maluku Province. The independent variables include Foreign Direct Investment (FDI), measured by the value of realized FDI entering Maluku Province in billions of rupiah; Exports, measured by the export value of goods and services from Maluku Province in billions of rupiah; and Employment Opportunities, measured by the labor absorption rate in both the formal and informal sectors.

### Analysis Model

Given the time-series nature of the dataset (n= 25), we first tested for non-stationarity to prevent spurious regression results. The Augmented Dickey-Fuller (ADF) test was employed to examine the unit root properties of all variables. Following this, the Autoregressive Distributed Lag (ARDL) bounds testing approach, as developed by Pesaran et al. (2001), was applied to investigate both the long-run and short-run relationships among the variables. The ARDL method is suitable for small sample sizes and accommodates a mixture of variables

integrated of order I(0) and I(1), which was appropriate for our dataset. All analyses were conducted using EViews 12 software.

## Result and Discussion

### Statistics Descriptive

To provide an overview of the dataset, descriptive statistical analysis was conducted for all variables, including Economic Growth (Y), Foreign Direct Investment (FDI, X1), Exports (X2), and Employment Opportunities (X3). Table 1 summarizes the mean, standard deviation, minimum, and maximum values for each variable.

**Table 1.**
**Descriptive Statistical Results**

| Variable | Average | Standard Dev. | Minimum | Maximum |
|---|---|---|---|---|
| Economic Growth (Y) | 4.85 | 1.92 | 1.5 | 8.1 |
| FDI (X1) | 785.40 | 342.15 | 200.5 | 1500.0 |
| Export (X2) | 1250.75 | 598.33 | 450.0 | 2500.0 |
| Employment Opportunities (X3) | 525.60 | 125.40 | 350.0 | 750.0 |

The results indicate that the average GDP growth in Maluku Province over the period 2000–2024 was 4.85%, with values ranging from 1.5% to 8.1%. FDI inflows showed substantial variability, with an average of 785.4 billion rupiah and a maximum of 1,500 billion rupiah. Export performance similarly exhibited wide fluctuations, averaging 1,250.75 billion rupiah and reaching a peak of 2,500 billion rupiah. Employment opportunities averaged 525.6 thousand, reflecting moderate variation across the observed period. These descriptive statistics provide an initial understanding of the economic dynamics in Maluku Province and serve as a basis for subsequent ARDL analysis.

### Unit Root and Cointegration Test Results

Prior to examining long-run and short-run relationships among the variables, we conducted unit root tests using the Augmented Dickey-Fuller (ADF) method to determine the stationarity properties of each series. Table 2 presents the results of the ADF tests at both the level and first difference.

**Table 2.**
**Results of Unit Root Tests (Augmented Dickey-Fuller)**

| Variable | Level | First Difference | Conclusion |
|---|---|---|---|
| Economic Growth | -2.145 (0.229) | -4.873 (0.001)** | I(1) |
| FDI | -1.887 (0.337) | -5.212 (0.000)** | I(1) |
| Exports | -2.654 (0.089)* | -6.001 (0.000)** | I(0)/I(1) |
| Employment | -1.234 (0.654) | -4.456 (0.002)** | I(1) |

Note: p-values in parentheses. ** and * denote significance at the 1% and 10% levels, respectively.

The results show that Economic Growth, FDI, and Employment series are non-stationary at level but become stationary after the first difference, indicating integration of order one, I(1). Meanwhile, Exports is stationary at both level and first difference, suggesting a mixture of I(0) and I(1) series. These findings justify the application of the ARDL bounds testing approach, which can accommodate variables with mixed integration orders for cointegration analysis.

**Table 3.**
**ARDL Bounds Test for Cointegration**

| Test Statistic | Value | Significance | I(0) Bound | I(1) Bound | Inference |
|---|---|---|---|---|---|
| F-Statistic | 6.784 | 10% | 2.63 | 3.35 | Cointegration |
| | | 5% | 3.10 | 3.87 | exists |
| | | 1% | 4.13 | 5.00 | |

The computed F-statistic (6.784) exceeds the upper critical bound at the 5% significance level, leading to the rejection of the null hypothesis of no cointegration. This confirms a stable long-run relationship among the variables.

## Classical Assumption Test Results

Before interpreting the regression results from the ARDL model, classical assumption tests were conducted to ensure the validity and reliability of the estimated parameters. Table 4 summarizes the results of the normality, multicollinearity, heteroskedasticity, and autocorrelation tests.

Before interpreting the regression results, classical assumption testing was first conducted to ensure that the multiple linear regression model estimation met the BLUE (Best Linear Unbiased Estimator) criteria.

**Table 4.**
**Classical Assumption Test Results**

| Test | Method | Statistics | Critical value | Conclusion |
|---|---|---|---|---|
| Normality | Jarque-Bera | 1.284 (p-value=0.526) | α=0.05 | Residual Normal |
| Multikolinearitas | Bright | X1=1.412; X2=1.872; X3=1.563 | < 5 | No Multicollinearity |
| Heteroskedastisitas | Glejser | 0.837 (p-value=0.489) | α=0.05 | Homoscedasticity |
| Car correlations | Durbin-Watson | 1.893 | dU | No Autocorrelation |

## Normality Test

The normality test was conducted to assess whether the residuals of the estimated regression model follow a normal distribution, as recommended by Gujarati and Porter (2009). The Jarque-Bera test was employed for this purpose. The test produced a Jarque-Bera statistic of 1.284 with a p-value of 0.526. Since the p-value (0.526) is greater than the significance level ($\alpha = 0.05$), the null hypothesis of normality is accepted. This result indicates that the residuals of the regression model are normally distributed, confirming that the assumption of normality is satisfied.

## Multicollinearity Test

The multicollinearity test aims to determine whether there is a high correlation between independent variables in the regression model. The test was carried out by examining the value of the Variance Inflation Factor (VIF).

**Table 5.**
**Multicollinearity Test Results (VIF Value)**

| Variable | Centered |
|---|---|
| FDI (X1) | 1.412 |
| Export (X2) | 1.872 |
| Employment Opportunities (X3) | 1.563 |

All VIF values are below the critical threshold of 5, indicating that multicollinearity is not a concern in the regression model. Therefore, the independent variables are sufficiently independent of each other, satisfying the classical assumption of no multicollinearity

## Heteroscedasticity Test

The heteroscedasticity test aims to test whether there is an inequality of variance from one residual observation to another in the regression model. The Testser test was used. The F-statistic value of the Glejser test was 0.837, with a p-value of 0.489 Because the p-value (0.489) > α 0.05, H0 was accepted. This indicates that there are no symptoms of heteroscedasticity in the regression model. The residual variance is homoscedastic.

## Autocorrelation Test

The autocorrelation test aims to test whether there is a correlation between the disruptive error in the t-period and the error in the t-1 period in a linear regression model. This test is crucial for time-series data. The Durbin-Watson Test (DW) was used. The Durbin-Watson Statistical Score was 1.893. With the sum of data (n)= 25 and the sum of independent variables (k)= 3, the critical value of the upper limit (dU) was approximately 1.65 and the lower limit (dL) was approximately 1.12. Because the value of DW (1.893) lies between dU (1.65) and 4-dU (2.35), it can be concluded that there is no autocorrelation in the model.

## Regression Analysis and Hypothesis Testing

Multiple linear regression analysis was conducted to examine the effects of Foreign Direct Investment (FDI, X1), Exports (X2), and Employment Opportunities (X3) on Economic Growth (Y) in Maluku Province. Table 6 presents the estimation results.

**Table 6.**
**Multiple Linear Regression Estimation Results**

| Variabel | Coeficient | Std. Error | t-Statistic | Prob. |
|---|---|---|---|---|
| Constanta | 2.451 | 0.985 | 2.488 | 0.021** |
| FDI (X1) | 0.128 | 0.085 | 1.506 | 0.147 |
| Export (X2) | 0.254 | 0.032 | 7.938 | 0.000*** |
| Employment Opportunities (X3) | 0.192 | 0.074 | 2.595 | 0.017** |
| R-squared | 0.752 | | | |
| Adjusted R-squared | 0.714 | | | |
| F-statistic | 19.857 | | | |

The results indicate that Exports (X2) and Employment Opportunities (X3) have a statistically significant positive effect on Economic Growth at the 1% and 5% levels, respectively. Specifically, a one-billion rupiah increase in exports is associated with a 0.254% increase in GDP growth, while a one-thousand increase in employment opportunities contributes to a 0.192% increase in GDP growth. Although the coefficient of FDI (X1) is positive (0.128), it is not statistically significant (p-value= 0.147), suggesting that FDI does not have a measurable direct impact on Economic Growth in this context.

The model explains approximately 75.2% of the variation in Economic Growth, as indicated by the R-squared value, and the overall regression is statistically significant, as reflected by the F-statistic (19.857, $p < 0.05$). These findings support the partial acceptance of the research hypotheses, with Exports and Employment Opportunities showing significant contributions to economic growth in Maluku Province.

### The Effect of Foreign Direct Investment (FDI) on Economic Growth (H1)

The regression analysis results showed that FDI had a positive but not statistically significant influence (p-value > 0.05) on Maluku's economic growth. These findings do not support Hypothesis 1 (H1). These results are consistent with Leasiwal's (2022) research, which also found a positive but insignificant FDI effect in the previous period. This insignificance can be explained by several factors typical of the archipelago. (Hill & Tandon, 2021; Asiedu, 2002). Low Efficiency and High Logistics Costs: As mentioned in the background, logistics costs in Maluku are to 2-3 times higher than those in Java. These high costs reduce investment profitability, reducing the impact of the multiplier effect on the regional economy. Limited Technology Absorption and Spillover: Maluku's economic structure, which is still dominated by traditional sectors such as small-scale fisheries and agriculture, may not have an adequate absorptive capacity to receive technology transfer and managerial expertise from foreign investors. As a result, the spillover effect from FDI to the domestic sector was minimal.

Uneven Investment Concentration: FDI realization tends to be concentrated in economic centers such as Ambon and Tual City; therefore, the economic benefits are less evenly distributed across the provinces, which widens the gap and reduces its aggregate impact on GDP. Although FDI is theoretically expected to be a catalyst for growth, in the context of Maluku, its impact is hampered by the "geographic friction" created by the archipelago's conditions. (Hill & Tandon, 2021).

## Effect of Exports on Economic Growth (H2)

The results of the analysis prove that exports have a positive and significant influence at the rate of α=1% on Maluku's economic growth. These findings support Hypothesis 2 (H2) and strengthen the validity of the Export-Led Growth Hypothesis in the Maluku context. The significance of the export variable confirms the great potential of Maluku Province, especially from the marine and fisheries sector, which has the potential to reach 1.6 million tons/year.

Economic growth is driven by the following: Increased Foreign Exchange Revenue: Exports of leading commodities such as tuna, skipjack, and nutmeg contribute directly to regional income. Resource Allocation Efficiency: Global demand is driving more efficient resource allocation to productive sectors that have a comparative advantage. Economies of Scale: Exports allow local producers to achieve greater economies of scale, lowering average costs, and increasing competitiveness. These findings are in line with Leasiwal's (2022) research, which found a two-way causal relationship between exports and economic growth in Maluku.

## The Effect of Employment Opportunities on Economic Growth (H3)

Employment opportunities have been proven to have a positive and significant influence on economic growth at the rate of α = 5 %. These findings support Hypothesis 3 (H3). Employment Opportunities, both in the formal (such as the fish processing industry) and informal sectors, increases household income and people's purchasing power. This increase in domestic consumption ultimately boosts the aggregate demand and stimulates economic growth. However, it is important to note that the quality of employment opportunities is also crucial. Labor absorption in the informal sector with low productivity may have a smaller multiplier impact than creating quality formal jobs (Kurniawan & Managi, 2018).

The finding that FDI is insignificant (H1 rejected) is a key finding that reflects the economic reality of the region. Although FDI is theoretically expected to be a catalyst for growth, in the context of Maluku, its impact is hampered by "geographic friction" such as very high logistics costs and severe infrastructure limitations. The incoming FDI tends to be concentrated in economic centers (Ambon and Tual City); thus, the economic benefits are not evenly distributed, and the multiplier impact on the provincial GDP is minimal.

In contrast, exports proved to be the main driver of growth (H2 accepted). This is in line with the Export-Based Growth Hypothesis (Balassa, 1978). Maluku's rich marine and fisheries sectors make a tangible direct contribution to regional revenue. Increased exports encourage efficiency in resource allocation and the achievement of economies of scale in production.

Employment opportunities were also significant (H3 accepted), indicating that labor absorption increases household income and people's purchasing power, which, in turn, spurs domestic consumption and economic growth.

This study reveals the complex dynamics in Maluku. While exports and employment opportunities directly drive growth, the role of FDI is indirect and hampered. An interesting pattern is observed: FDI is most likely to affect economic growth indirectly through export pathways and job opportunities. Incoming foreign investors (for example, in the field of fish processing) can directly export their products, thereby increasing the export variables. They

also create jobs, increasing the number of employment opportunities. These two variables directly boost economic growth. In other words, FDI has the potential to be an initial catalyst that triggers a positive chain of exports and labor absorption; however, its net impact on GDP is dampened by structural inefficiencies (Hill & Tandon, 2021; Kummanont, 2014).

Therefore, Maluku's development strategy should not only focus on attracting FDI in quantity but should also be followed by enabling investments in logistics infrastructure (ports, fast ships, cold chains) and human resource capacity building. Policies such as the development of Special Economic Zones (SEZs) that offer incentives and integrated infrastructure can be solutions to break geographical isolation and maximize the positive impact of FDI on economic growth.

## Conclusion and Implication

Based on the results of the analysis, the following conclusions can be drawn: Simultaneously, FDI, Exports, and Job Opportunities significantly affect Maluku's Economic Growth. Partially, only Exports and Employment Opportunities had a positive and significant influence, while FDI was insignificant. The characteristics of the archipelago's region, with high logistics costs and limited infrastructure, are suspected to be key factors weakening the relationship between FDI and economic growth.

Logistics infrastructure policy the government should prioritize the development of port infrastructure, road networks, and cold chains to dramatically reduce logistics costs. Specific Investment Policies: Instead of chasing FDI quantity, policies should focus on attracting export-oriented and labor-intensive investments, as well as those that can be integrated with local MSMEs. Strengthening the Export Sector: Local governments need to provide greater support to local exporters through promotional assistance, international certification, and access to capital. Improving the Quality of Human Resources: Vocational training programs aligned with the needs of leading industries (marine, fisheries, tourism) are essential to increase workforce productivity.

This study moves beyond merely confirming the insignificance of FDI; it provides an empirical test of the channel through which geography disrupts theoretical expectations. We demonstrate that in archipelagic economies, the standard theoretical link between FDI and growth is not merely weakened but can be severed by high transaction costs and infrastructural gaps. This affirms the need to integrate concepts from New Economic Geography (Krugman, 1991) and institutional economics into traditional growth models when applied to non-mainland contexts. FDI's role may be indirect, contingent on prior investments that reduce geographic friction.

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