



# Fiscal Decentralization and Regional Economic Growth: Evidence from the Riau Islands Province, Indonesia (2017–2024)

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**Abstract:** This study analyzes the effect of fiscal decentralization on economic growth in the Riau Islands Province for the period 2017–2024. Using panel data from seven districts/cities and a Fixed Effects Model (FEM), the variables tested include Regional Original Revenue (PAD), Revenue Sharing Fund (DBH), General Allocation Fund (DAU), and Special Allocation Fund (DAK) on Regional Gross Regional Domestic Product (GRDP). The results show that fiscal instruments simultaneously have a significant effect on GRDP, with a model clarity of 99.88%. Partially, Regional Original Revenue (PAD) and General Allocation Fund (DAU) have a positive and significant effect, with DAU being the most dominant driving factor. Conversely, Regional Revenue (DBH) has no significant effect, while Special Allocation Fund (DAK) has a negative effect due to its allocation focus on long-term physical development. These findings emphasize the importance of fiscal independence and optimization of central transfer funds to stimulate economic growth in the archipelago.

**Keywords:** Fiscal Decentralization, Regional Original Revenue (PAD), Revenue Sharing Fund (DBH), General Allocation Fund (DAU), Gross Regional Domestic Product (GRDP)

## Introduction

Fiscal decentralisation has become one of the principal agendas of public sector reform in many developing countries in an effort to enhance governmental efficiency, strengthen regional fiscal capacity, and promote more inclusive economic growth. From the perspective of *fiscal federalism* theory, the delegation of fiscal authority to local governments is believed to improve the efficiency of resource allocation because local authorities possess better information regarding the needs and preferences of their communities than the central government (OECD, 2021). Wallace E. Oates recent studies further argue that fiscal decentralisation can improve economic efficiency and public service delivery when supported by adequate institutional capacity and governance quality (Martinez-Vazquez et al., 2017). Nevertheless, the implementation of fiscal decentralisation continues to face major challenges, including disparities in fiscal capacity among regions, weak governance systems, and a high dependence on central government transfers, particularly in developing countries characterised by heterogeneous regional conditions (Cirolia et al., 2022).

In the context of regional development, fiscal decentralisation is regarded as an important instrument for achieving more equitable and sustainable economic growth. Regional fiscal instruments such as Local Own-Source Revenue, General Allocation Funds,

Special Allocation Funds, and Revenue Sharing Funds function not only as sources of development financing but also as mechanisms of fiscal redistribution aimed at reducing interregional disparities ([Hoi & Van Tan, 2024](#)). According to ([Priyono et al., 2025](#)), these fiscal balancing components are closely associated with indicators of social welfare and regional economic growth. However, the effectiveness of fiscal decentralisation in promoting economic growth remains an empirical debate because previous studies have produced inconsistent findings across regions and research periods ([Bahl & Bird, 2018](#)).

In Indonesia, the implementation of fiscal decentralisation was reinforced through Law Number 23 of 2014 concerning Regional Government, which granted broader authority to local governments in managing public finance and regional economic development. This policy aims to reduce development disparities through the redistribution of fiscal resources from the central government to regional administrations. Since the implementation of regional autonomy, the contribution of fiscal transfers to Regional Government Budgets has continued to increase, particularly in regions with relatively low PAD capacity ([Sahrudin et al., 2026](#)). Nevertheless, substantial fiscal transfers have not always been accompanied by equitable improvements in regional economic productivity. This condition indicates that greater fiscal capacity does not necessarily correlate directly with higher-quality economic growth when fiscal management remains suboptimal and insufficiently directed towards productive sectors ([Shotton, 2022](#)).

Normatively, the principle of fiscal decentralisation is also aligned with the concept of distributive justice in Islam, as reflected in Surah Al-Hashr verse 7, which emphasises that wealth should not circulate solely among certain groups. This principle is relevant to the objectives of fiscal decentralisation, which seek to achieve equitable development and fairer distribution of resources across regions. From the perspective of modern public governance, the value of distributive justice constitutes an important foundation for promoting inclusive and sustainable economic development, particularly for regions with limited fiscal capacity and geographical constraints ([Kapesa & Mugano, 2025](#)). Therefore, the implementation of fiscal policy encompasses not only administrative and economic dimensions but also social and ethical dimensions aimed at achieving equitable public welfare.

Various empirical studies have demonstrated mixed results regarding the impact of fiscal decentralisation on regional economic growth. ([Melisa & Maulia, 2023](#)) found that PAD, DAK, and DBH significantly influence Gross Regional Domestic Product (GRDP), indicating that regional fiscal instruments are capable of stimulating regional economic activity. Another study by ([Umi & Kundhani, 2023](#)) revealed that PAD, DAU, and DAK have a positive and significant effect on economic growth in East Java Province. In contrast, ([Pohan & Yuliana, 2021](#)) found that DBH and DAU did not significantly affect economic growth in North Sumatra. Similarly, ([Hendana et al., 2025](#)) emphasised that evidence-based fiscal policy recommendations are necessary to improve the effectiveness of regional fiscal resource allocation. These inconsistent findings suggest that the effectiveness of fiscal decentralisation is highly dependent on regional economic characteristics, institutional capacity, and geographical conditions ([Subroto & Sakti, 2025](#)). Consequently, the relationship between fiscal decentralisation and economic growth still requires further

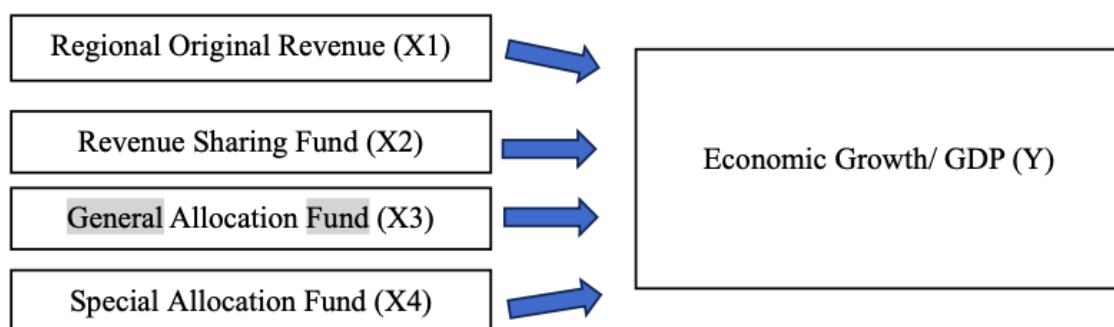
empirical investigation, particularly in regions with unique characteristics such as archipelagic areas.

The Riau Islands Province represents one of Indonesia’s strategic regions with distinctive geographical and economic characteristics. As an archipelagic province located along international trade routes, the Riau Islands possess substantial economic potential in trade, industry, tourism, and oil and gas sectors. However, the dispersed nature of the region, consisting of numerous islands, results in high infrastructure development costs, limited interregional connectivity, and economic disparities among regencies and municipalities. Furthermore, the regional economic structure remains heavily dependent on several dominant sectors, rendering fiscal stability vulnerable to global economic fluctuations ([Badan Pusat Statistik Kepulauan Riau, 2024](#)). These conditions make the implementation of fiscal decentralisation in the Riau Islands considerably more complex compared with mainland regions.

Although numerous studies on fiscal decentralisation have been conducted in Indonesia, research specifically examining the impact of fiscal decentralisation on economic growth in archipelagic regions remains relatively limited. Most previous studies have focused on provinces characterised by more stable economic structures and better-integrated infrastructure systems. Moreover, earlier studies generally emphasised the direct relationship between fiscal variables and economic growth without considering the geographical complexities of archipelagic regions that may influence the effectiveness of fiscal distribution and regional development implementation. These limitations indicate the existence of an important *research gap*, particularly in understanding the effectiveness of fiscal decentralisation in island regions with relatively high dependence on central government transfers.

Based on the foregoing discussion, this study aims to analyse the effect of fiscal decentralisation on economic growth in the Riau Islands Province during the period 2017–2024. This research is expected to contribute theoretically by enriching the literature on fiscal decentralisation in archipelagic regions and practically by providing evidence-based policy recommendations for both regional and central governments. Furthermore, this study is expected to explain the extent to which regional fiscal instruments such as PAD, DAU, DAK, and DBH effectively promote regional economic growth and strengthen sustainable regional fiscal independence.

**Methodology**



**Figure 1.** Research Equation/Model

This study employed a quantitative research approach using secondary panel data to empirically examine the effect of fiscal decentralisation on economic growth in the Riau Islands Province, Indonesia. A quantitative approach was selected because the study aims to analyse causal relationships among fiscal variables through measurable economic indicators and statistical estimation techniques. The use of secondary data is considered appropriate for macroeconomic and regional fiscal studies as it enables objective measurement and longitudinal analysis of fiscal performance and economic growth over time.

The data utilised in this study were obtained from official government institutions with recognised credibility and consistency in data publication, namely the Statistics Indonesia (*Badan Pusat Statistik—BPS*) and the Directorate General of Fiscal Balance (*Direktorat Jenderal Perimbangan Keuangan—DJPK*), Ministry of Finance of the Republic of Indonesia. The dataset consists of annual observations covering the period 2017–2024. The selected period reflects recent fiscal decentralisation dynamics and corresponds to the availability of complete regional fiscal and economic data following the implementation of regional autonomy policies in Indonesia.

This study employed balanced panel data, combining cross-sectional and time-series dimensions simultaneously. The cross-sectional units comprise seven regencies and municipalities in the Riau Islands Province, namely Bintan Regency, Karimun Regency, Anambas Islands Regency, Lingga Regency, Natuna Regency, Batam City, and Tanjungpinang City. The balanced panel structure ensures that each observational unit contains complete information for all variables across the entire study period, thereby increasing estimation efficiency and reducing potential bias caused by missing observations. The panel data approach is particularly advantageous because it enables the analysis of regional heterogeneity and temporal dynamics concurrently, which cannot be adequately captured using pure cross-sectional or time-series approaches alone.

The dependent variable in this study is Gross Regional Domestic Product (GRDP), which serves as a proxy for regional economic growth. Meanwhile, the independent variables representing fiscal decentralisation consist of Local Own-Source Revenue, Revenue Sharing Funds, General Allocation Funds, and Special Allocation Funds. These variables were selected because they represent the principal components of regional fiscal capacity and intergovernmental fiscal transfers in Indonesia's decentralisation framework.

To analyse the relationship between fiscal decentralisation and economic growth, this study employed panel data regression analysis. The econometric model is formulated as follows:

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \beta_4 X_{4it} + e$$

Where:

- $Y_{it}$  = Gross Regional Domestic Product (GRDP)
- $\alpha$  = Constant term
- $\beta_1, \beta_2, \beta_3, \beta_4$  = Regression coefficients
- $X_{1it}$  = Local Own-Source Revenue (PAD)
- $X_{2it}$  = Revenue Sharing Funds (DBH)
- $X_{3it}$  = General Allocation Funds (DAU)
- $X_{4it}$  = Special Allocation Funds (DAK)

- $\epsilon_{it}$  = Error term
- $i$  = Cross-sectional unit (regencies/municipalities)
- $t$  = Time period (2017–2024)

The data processing and statistical analysis were conducted using Microsoft Excel and EViews software. Microsoft Excel was utilised for preliminary data organisation and tabulation, while EViews was employed for econometric estimation and panel regression analysis. The estimation procedure involved several stages, including descriptive statistical analysis, panel data model selection, and hypothesis testing. To determine the most appropriate panel regression model, the study conducted the Chow test, Hausman test, and Lagrange Multiplier (LM) test to select among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM).

Furthermore, classical assumption tests were conducted to ensure the robustness and validity of the regression model, including multicollinearity, heteroscedasticity, and autocorrelation tests. Hypothesis testing was performed using the *t*-test to examine the partial effect of each independent variable on GRDP and the *F*-test to assess the simultaneous effect of fiscal decentralisation variables on regional economic growth. The coefficient of determination ( $R^2$ ) was also employed to evaluate the explanatory power of the regression model in explaining variations in regional economic growth in the Riau Islands Province.

Through this methodological approach, the study is expected to provide comprehensive empirical evidence regarding the extent to which fiscal decentralisation instruments influence regional economic growth in archipelagic regions, particularly in the Riau Islands Province.

## Result and Discussion

### Panel Data Model Selection

This study employed panel data regression analysis to examine the effect of fiscal decentralisation on regional economic growth in the Riau Islands Province during the period 2017–2024. The panel dataset combines cross-sectional data from seven regencies/cities and annual time-series observations, enabling the analysis of both regional heterogeneity and temporal dynamics simultaneously. Three estimation approaches were evaluated, namely the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM), in order to identify the most appropriate econometric specification.

**Table 2.**

here: Estimation Results of Common Effect, Fixed Effect, and Random Effect Models

Dependent Variable (GRDP) Gross Regional Domestic Product (Y)	Common Model	Effect Model	Fixed Model	Effect Model	Random Model	Effect Model
Constant Coefficient (C)	-35.383		13.064		11.713	
Standard Error	12.780		2.546		3.067	
Probability	0.007		0.000		0.000	
t-Statistic	-2.769		5.131		3.819	
LOG(PAD) Local Own-Source Revenue (X1)	0.428		0.091		0.109	
Standard Error	0.089		0.030		0.033	
Probability	0.000		0.004		0.002	
t-Statistic	4.804		3.043		3.345	

Dependent Variable (GRDP) Gross Regional Domestic Product (Y)	Common Model	Effect	Fixed Model	Effect	Random Model	Effect
LOG(DBH) Revenue Sharing Fund (X2)	0.960		0.001		0.016	
Standard Error	0.154		0.021		0.025	
Probability	0.000		0.966		0.533	
t-Statistic	0.154		0.043		0.628	
LOG(DAU) General Allocation Fund (X3)	1.811		0.489		0.518	
Standard Error	0.629		0.123		0.150	
Probability	0.006		0.000		0.001	
t-Statistic	2.883		3.988		3.454	
LOG(DAK) Special Allocation Fund (X4)	-0.204		-0.064		-0.056	
Standard Error	0.165		0.017		0.020	
Probability	0.223		0.000		0.006	
t-Statistic	-1.235		-3.849		-2.849	
F-Statistic	37.502		3758.567		9.876	
Prob (F-Statistic)	0.000		0.000		0.000	
Durbin-Watson Statistic	0.730		0.897		0.593	

Table 2 presents the estimation results for the three panel regression approaches. The findings indicate that the coefficients of PAD and DAU consistently show positive relationships with Gross Regional Domestic Product (GRDP) across the three models, whereas DAK demonstrates a negative coefficient. Meanwhile, DBH exhibits inconsistent statistical significance across estimation approaches. However, the determination of the most appropriate model requires formal specification testing through the Chow test and Hausman test.

### Model Specification Testing

To determine the most suitable panel regression model, this study conducted a series of specification tests consisting of the Chow test and Hausman test. The Chow test was first performed to compare the Common Effect Model and Fixed Effect Model.

**Table 3.**  
here: Chow Test Results

<i>Effect Test</i>	<i>Statistic</i>	<i>d.f</i>	<i>Prob.</i>
<i>Cross-section F</i>	925,058	(6,45)	0.0000

Source : Processing results of EViews 10

The Chow test results reveal a probability value of 0.0000, which is lower than the significance level of 0.05. Therefore, the null hypothesis favouring the Common Effect Model is rejected, indicating that the Fixed Effect Model is more appropriate for the dataset. This finding suggests the presence of individual heterogeneity across regencies and municipalities in the Riau Islands Province that must be controlled through fixed effects estimation.

Subsequently, the Hausman test was conducted to determine whether the Fixed Effect Model or Random Effect Model was more suitable.

**Table 4.**  
here: Hausman Test Results

<i>Effect Test</i>	<i>Statistic</i>	<i>d.f</i>	<i>Prob.</i>
<i>Cross-section F</i>	17.300	4	0.0017

Source : Processing results of EViews 10

The Hausman test produced a probability value of 0.0017, which is below the 5% significance level. Consequently, the null hypothesis favouring the Random Effect Model is rejected, confirming that the Fixed Effect Model represents the most appropriate estimation method for this study. The selection of the Fixed Effect Model indicates that unobserved regional characteristics are correlated with the explanatory variables and therefore must be controlled explicitly within the regression framework.

**Fixed Effect Model Estimation Results**

Based on the specification tests, the Fixed Effect Model was selected as the final econometric model. The model estimation results are presented below.

**Table 5.**  
here: Fixed Effect Model Estimation Results

<b>Variabel</b> <b>Dependen: (PDRB)</b> <b>Produk Domestik</b> <b>Regional Bruto (Y)</b>	<b>Koefisien</b>	<b>Standar Error</b>	<b>t-Statistic</b>	<b>Probabilitas</b>
<b>Konstanta (C)</b>	13.064	2.546	5.131	0.000
<b>LOG PAD (X1)</b>	0.091	0.030	3.043	0.004
<b>LOG DBH (X2)</b>	0.001	0.021	0.043	0.966
<b>LOG DAU (X3)</b>	0.489	0.123	3.988	0.000
<b>LOG DAK (X4)</b>	-0.064	0.017	-3.849	0.000

The regression results demonstrate that PAD and DAU exert positive and statistically significant effects on GRDP, while DAK exhibits a negative and significant relationship with regional economic growth. Conversely, DBH does not show a statistically significant effect on GRDP. The overall model is statistically significant, indicating that the fiscal decentralisation variables jointly influence regional economic performance in the Riau Islands Province.

The estimated regression equation can be expressed as follows:

$$\log(PDRB)_it = 13.064 + 0.091 \log(PAD)_it + 0.001 \log(DBH)_it + 0.489 \log(DAU)_it - 0.064 \log(DAK)_it + \epsilon_{it}$$

$$\log(PDRB)_{it} = 13.064 + 0.091 \log(PAD)_{it} + 0.001 \log(DBH)_{it} + 0.489 \log(DAU)_{it} - 0.064 \log(DAK)_{it} + \epsilon_{it}$$

The coefficient interpretation indicates that a 1% increase in PAD contributes to a 0.091% increase in GRDP, while a 1% increase in DAU increases GRDP by approximately 0.489%,

assuming other variables remain constant. By contrast, a 1% increase in DAK is associated with a 0.064% decline in GRDP.

### Statistical Evaluation of the Model

The statistical validity of the regression model was evaluated using the coefficient of determination ( $R^2$ ), F-statistic, and t-statistic tests.

**Table 6.**

here: Goodness-of-Fit and Statistical Test Results

R-squared	0,999	Mean dependent var	27,188
Adjusted R-squared	0,999	S.D. dependent var	9.567,362
S.E. of regression	0,056	Sum squared resid	0,140
F-statistic	3.758,567	Durbin-Watson stat	0,897
Prob(F-statistic)	0,000		

The model produced an  $R^2$  value of 0.999, indicating that approximately 99.9% of the variation in GRDP can be explained by PAD, DBH, DAU, and DAK. This result demonstrates a very high explanatory power of the model. Furthermore, the F-statistic probability value of 0.000 confirms that the independent variables jointly exert a statistically significant effect on regional economic growth.

The t-statistic results reveal that PAD, DAU, and DAK are statistically significant at the 5% significance level, whereas DBH is not statistically significant. These findings suggest that not all fiscal decentralisation instruments contribute equally to economic growth in the Riau Islands Province.

**Table 7.**

here: Partial t-Test Results

Variabel	Koefisien	t-Statistic	Probabilitas	Signifikan
LOG PAD (X1)	0,091	3,043	0,004	Signifikan
LOG DBH(X2)	0,001	0,043	0,966	Insignifikan
LOG DAU(X3)	0,489	3,988	0,000	Signifikan
LOG DAK (X4)	-0,064	-3,848	0,000	Signifikan

### Diagnostic and Classical Assumption Tests

Prior to interpreting the regression results, several diagnostic tests were conducted to ensure the validity and robustness of the econometric model. These tests included normality, heteroscedasticity, and multicollinearity assessments (Wooldridge, 2020).

#### Normality Test

The normality test was conducted using the Jarque–Bera statistic and residual histogram analysis.

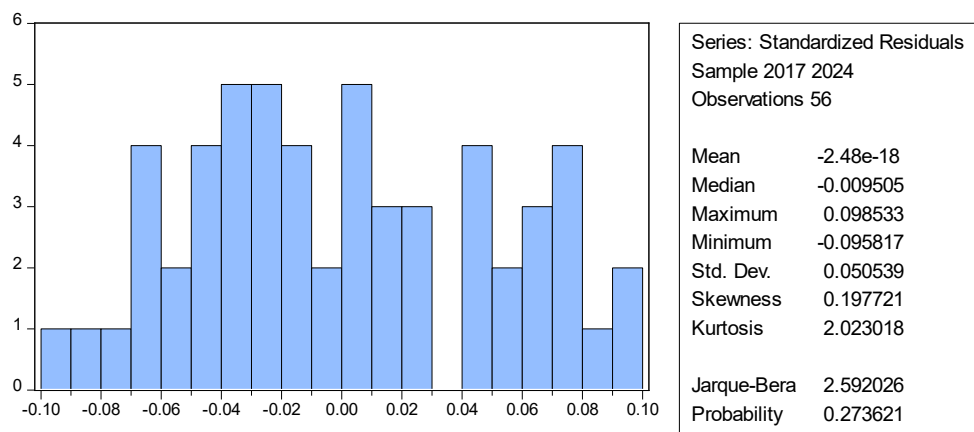


Figure 2. here: Histogram and Jarque-Bera Normality Test

The Jarque-Bera probability value of 0.274 exceeds the 0.05 significance threshold, indicating that the residuals are normally distributed. Additionally, the histogram pattern appears relatively symmetrical and approximates a bell-shaped distribution. Therefore, the normality assumption required for regression analysis is fulfilled (Hair et al., 2021).

**Heteroscedasticity Test**

The heteroscedasticity test was conducted using the absolute residual approach to examine whether the variance of the error term remained constant across observations.

Table 8.

here: Heteroscedasticity Test Results

Variabel	Probabilitas
C	0,787
LOG(PAD)	0,662
LOG(DBH)	0,722
LOG(DAU)	0,719
LOG(DAK)	0,703

The results indicate that all independent variables possess probability values greater than 0.05, suggesting the absence of heteroscedasticity problems in the regression model. Accordingly, the variance of the residuals can be considered homoscedastic, implying that the estimation results are statistically reliable.

**Multicollinearity Test**

The multicollinearity test was performed using the correlation matrix among independent variables.

Table 9.

here: Multicollinearity Test Results

	LOG(PDRB)	LOG(PAD)	LOG(DBH)	LOG(DAU)	LOG(DAK)
LOG(PDRB)	1,000	0,377	-0,012	0,347	0,267
LOG(PAD)	0,377	1,000	0,022	0,890	0,037
LOG(DBH)	-0,012	0,022	1,000	-0,155	0,297
LOG(DAU)	0,347	0,890	-0,155	1,000	-0,060
LOG(DAK)	0,267	0,037	0,297	-0,060	1,000

The correlation coefficients among independent variables are all below the critical threshold of 0.90. Therefore, no serious multicollinearity problem exists within the model. This finding confirms that each explanatory variable contributes distinct and relevant information in explaining variations in GRDP.

Discussion

### **The Effect of Local Own-Source Revenue (PAD) on GRDP**

The empirical findings reveal that PAD exerts a positive and statistically significant effect on GRDP in the Riau Islands Province. This result indicates that increased regional fiscal independence contributes positively to regional economic growth. The positive relationship suggests that locally generated revenues enable regional governments to finance infrastructure development, public services, and productive economic programmes more effectively. This finding is consistent with fiscal decentralisation theory, which argues that greater local fiscal autonomy enhances allocative efficiency and regional productivity ([Park, 2022](#)). The result also supports previous studies by ([Guo et al., 2025](#)), who found that PAD significantly stimulates regional economic performance. Furthermore, studies by (Bahl & Bird, 2018) emphasise that stronger local revenue capacity tends to improve the efficiency of regional development expenditure and economic competitiveness.

### **The Effect of Revenue Sharing Funds (DBH) on GRDP**

The results indicate that DBH has a positive but statistically insignificant effect on GRDP. This finding implies that fluctuations in DBH allocation do not directly influence regional economic growth in the Riau Islands Province. One possible explanation is that DBH allocations are predominantly utilised for routine expenditure and administrative spending rather than productive investment activities capable of generating strong economic multiplier effects. Furthermore, dependence on natural resource-based revenue sharing may create fiscal vulnerability due to commodity price fluctuations. Similar findings were reported by ([Pohan & Yuliana, 2021](#)), who found that DBH did not significantly affect regional economic growth in North Sumatra.

### **The Effect of General Allocation Funds (DAU) on GRDP**

DAU demonstrates a positive and statistically significant relationship with GRDP and represents the most dominant fiscal variable in the model. This result suggests that DAU plays a crucial role in supporting regional economic activities, particularly in regions with relatively limited fiscal capacity. The significant contribution of DAU reflects the importance of intergovernmental transfers in financing infrastructure provision, public services, and regional development programmes ([OECD, 2021](#)). In the context of archipelagic regions such as the Riau Islands, DAU appears essential for reducing regional disparities and maintaining economic stability across geographically dispersed areas. This finding is in line with the argument of ([Martinez-Vazquez et al., 2017](#)), who state that unconditional transfers can strengthen regional fiscal equalisation and stimulate economic activity when allocated effectively.

## The Effect of Special Allocation Funds (DAK) on GRDP

Interestingly, DAK exhibits a negative and statistically significant effect on GRDP. This finding suggests that increases in DAK allocation are associated with lower regional economic growth during the study period. One possible explanation is that DAK is primarily allocated to specific sectors such as education, health, and infrastructure projects with long-term developmental impacts that are not immediately reflected in short-term economic growth indicators. Additionally, inefficiencies in project implementation and delays in budget absorption may reduce the short term effectiveness of DAK in stimulating regional economic activity ([Apriliani & Khoirunurrofik, 2020](#)). This finding also supports the argument by ([Onatunji, 2025](#)), who highlight that fiscal transfers do not automatically generate economic growth unless accompanied by strong institutional quality and efficient public expenditure management.

Overall, the findings demonstrate that fiscal decentralisation exerts a substantial influence on regional economic growth in the Riau Islands Province, although the effectiveness of each fiscal instrument varies considerably. The results highlight the importance of improving the quality of fiscal management, strengthening regional fiscal independence, and ensuring that intergovernmental transfers are allocated towards productive sectors capable of generating sustainable economic growth in archipelagic regions. Moreover, the findings reinforce the broader argument that the success of fiscal decentralisation depends not only on the magnitude of fiscal transfers but also on institutional effectiveness, governance quality, and regional development capacity.

## Conclusion

This study analysed the effect of fiscal decentralisation on regional economic growth in the Riau Islands Province during the period 2017–2024 using panel data regression analysis. The findings indicate that fiscal decentralisation variables simultaneously exert a significant influence on Gross Regional Domestic Product (GRDP). Partially, Local Own-Source Revenue (PAD) and General Allocation Funds (DAU) were found to have positive and statistically significant effects on regional economic growth, indicating that stronger fiscal capacity and intergovernmental transfers contribute positively to economic activity and regional development. Among the examined variables, DAU emerged as the most dominant factor influencing GRDP, reflecting the crucial role of unconditional fiscal transfers in supporting development financing in archipelagic regions. In contrast, Revenue Sharing Funds (DBH) did not show a significant effect on economic growth, while Special Allocation Funds (DAK) exhibited a negative and significant relationship with GRDP, suggesting that sector-specific fiscal allocations may require a longer period to generate measurable economic impacts.

Although the regression model demonstrated very high explanatory power, this study remains limited by its focus on a single province and the exclusion of broader macroeconomic and institutional variables that may also influence regional economic performance. Therefore, regional governments are encouraged to strengthen fiscal independence through the optimisation of PAD, improve the productive allocation of DBH, and enhance the effectiveness of DAU and DAK utilisation to support sustainable regional

development. Future studies are recommended to incorporate additional macroeconomic indicators, extend the observation period, and conduct comparative analyses across multiple provinces in order to provide a more comprehensive understanding of the long-term effectiveness of fiscal decentralisation policies in Indonesia.

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