

THE EFFECT OF REGIONAL REVENUE, BALANCING FUNDS, AND OTHER REVENUES ON THE FINANCIAL INDEPENDENCE OF PROVINCIAL GOVERNMENTS IN EASTERN INDONESIA

Saoda Tharob^{1*}, Muttaqien², Wardhiah³, Zulfan⁴

^{1,2,3,4}Department of Management, Faculty of Economics and Business, Universitas Malikussaleh
Corresponding Author: muttaqien@unimal.ac.id^{2*}

Received: 01/08/2026 | Revised: 10/08/2026 | Accepted: 26/08/2026 | Published: 11/09/2026

Abstract

This study aims to determine the influence of Regional Revenue, Balancing Funds, and Other Revenues on Regional Financial Independence in the Eastern Region of Indonesia for the 2021–2025 period. This study uses a quantitative method with secondary data obtained from the Directorate General of Fiscal Balance of the Ministry of Finance. The population consisted of the 12 provincial governments of Eastern Indonesia, producing 60 panel data observations (12 provinces × 5 years) selected through purposive sampling. Data analysis was carried out using panel data regression with the Random Effect Model (REM), which was selected based on the Chow, Hausman, and Lagrange Multiplier tests. The results of the study show that Regional Revenue and Balancing Funds do not have a significant effect on Regional Financial Independence, while Other Revenues have a positive and significant effect on Regional Financial Independence. This research shows that the optimization of regional revenue sources, particularly other legitimate revenues, needs to be improved to strengthen regional financial independence in the Eastern Region of Indonesia.

Keywords: Regional Revenue, Balancing Funds, Other Revenue, Regional Financial Independence, Panel Data Regression.

INTRODUCTION

Indonesia applies a decentralization system that delegates authority to regional governments to manage governmental affairs within their own territories, aiming for more effective governance and encouraging regional independence the capacity to manage resources, design policies, and implement development programs autonomously and responsibly without excessive reliance on the central government. Eastern Indonesia, covering Sulawesi, Maluku, Papua, and Nusa Tenggara, is rich in natural resources yet still faces complex development challenges, including limited infrastructure, restricted accessibility, and uneven human resource quality, which affect the level of regional independence, particularly in financial management, as regional governments' capacity to finance development autonomously remains suboptimal.

Despite abundant natural-resource potential, most provinces in Eastern Indonesia have not maximized Locally Generated Revenue (PAD) as their primary income source, so that central-government transfer funds continue to dominate the structure of regional receipts and regional fiscal independence remains weak. Balancing Funds, sourced from the State Budget (APBN) and allocated to support the implementation of regional autonomy, are oriented toward narrowing the fiscal gap between central and regional governments; however, excessive reliance on this fund can reduce fiscal independence, whereas productive use for example to strengthen the PAD base and local economic capacity can generate a positive effect. Other Revenues, comprising grants, emergency funds, financial assistance, and other legitimate receipts, are not a primary source but still help strengthen regional fiscal capacity during budget deficits, although their contribution tends to be smaller and less regular than that of PAD and Balancing Funds.

Directorate General of Fiscal Balance (DJPK) data show that average regional revenue in Eastern Indonesia fluctuated across 2021–2025 rising from IDR 17,895.56 billion in 2021 to IDR 18,171.23 billion in 2022, falling sharply to IDR 14,027.35 billion in 2023, recovering to IDR 16,294.26 billion in 2024, and declining again to IDR 11,385.67 billion in 2025 while Other Revenues fell persistently from IDR 1,234.71 billion in 2021 to only IDR

430.92 billion in 2025, indicating that regional governments' capacity to optimize their revenue sources still needs improvement. Prior studies also report inconsistent findings: Patria (2025) found PAD alone to have a positive and significant effect on regional financial independence; Novianti (2022) found a positive PAD effect but a significant negative effect of Balancing Funds; and Indriawati and Hasmarini (2025) found other legitimate revenue to have a negative and significant effect, suggesting that dependence can strengthen when not accompanied by higher PAD. Given these inconsistent findings and the limited scope of prior research relative to the distinct fiscal characteristics of Eastern Indonesia, this study re-examines the effects of Regional Revenue, Balancing Funds, and Other Revenues on Regional Financial Independence in the provinces of Eastern Indonesia during 2021–2025, with the aim of enriching the empirical literature on regional fiscal independence and providing recommendations for regional governments to reduce dependence on the central government.

LITERATURE REVIEW

This study is grounded in the theory of fiscal decentralization as mandated by Law No. 23 of 2014 on Regional Government and Law No. 33 of 2004 on Fiscal Balance between the Central Government and Regional Governments. Fiscal decentralization delegates authority to regional governments to manage their own revenue and expenditure, with the underlying premise that regions with a larger share of self-generated revenue in their budget structure exhibit a higher degree of fiscal autonomy and independence, while heavy reliance on central-government transfers reflects continuing fiscal dependence.

Regional Revenue (PD) refers to all receipts that are the right of a regional government and recognized as an addition to regional net worth within one fiscal year, comprising Locally Generated Revenue (PAD), Balancing Funds, and other legitimate regional revenue (Law No. 33/2004; Novianti, 2022).

Balancing Funds (DP) are funds sourced from the State Budget and allocated to regional governments to support the implementation of regional autonomy, consisting of Revenue Sharing Funds (DBH), General Allocation Funds (DAU), and Special Allocation Funds (DAK), intended to narrow the fiscal gap between regions and to guarantee minimum public-service standards.

Other Revenues (PL) consist of grants, emergency funds, financial assistance from other levels of government, and other legitimate receipts outside PAD and Balancing Funds; while relatively small and irregular, they help regions cover financing gaps, particularly during budget shortfalls.

Regional Financial Independence (KD) reflects a region's capacity to finance governmental affairs, development, and public services from its own revenue sources, and is commonly measured through the ratio of self-generated revenue to central transfer funds; the higher this ratio, the lower a region's dependence on the central government.

Regional Revenue and Regional Financial Independence. PAD reflects a region's ability to finance its own needs without relying on the central government. A larger PAD share directly increases the ratio of regional financial independence, since revenue generated internally becomes more dominant relative to external funds (Bella et al., 2022).

Balancing Funds and Regional Financial Independence. Regions whose revenue is dominated by Balancing Funds tend to display low fiscal independence (Kristina et al., 2021). In the short run, Balancing Funds help finance governance and development, particularly for regions with limited PAD capacity; in the long run, however, an overly dominant share of Balancing Funds may reduce the incentive for regional governments to optimally explore their own revenue potential.

Other Revenues and Regional Financial Independence. Although its contribution is relatively small compared with the primary revenue sources, Other Revenue still supports regional fiscal capacity, particularly under budget constraints. In regions with low fiscal capacity, such as Eastern Indonesia, Other Revenue can help sustain development financing when PAD remains limited (Bella et al., 2022), though because of its irregular nature it cannot become a sustainable primary pillar of fiscal independence.

Research Hypotheses

H1: Regional Revenue has a positive and significant effect on Regional Financial Independence.

H2: Balancing Funds have a negative and significant effect on Regional Financial Independence.

H3: Other Revenues have a positive and significant effect on Regional Financial Independence.

METHOD

Research Design, Population, and Sample

This study employs a quantitative approach with a causal-associative design. The population consists of all 12 provincial governments of Eastern Indonesia — South Sulawesi, Southeast Sulawesi, Central Sulawesi, North Sulawesi, West Sulawesi, Gorontalo, West Nusa Tenggara, East Nusa Tenggara, Maluku, North Maluku, Papua, and West Papua — observed over the 2021–2025 period. Newly formed provinces in the Papua region were excluded because complete data were not available for the entire observation period. Sampling was conducted using a purposive sampling technique based on the completeness of Regional Revenue, Balancing Fund, and Other Revenue data throughout the observation period, resulting in a final sample of 12 provinces and 60 panel-data observations (12 provinces × 5 years).

Data Type and Sources

This study uses secondary data of a panel nature (a combination of time-series and cross-sectional data), obtained from the official publications of the Directorate General of Fiscal Balance (DJP), Ministry of Finance of the Republic of Indonesia, and the Central Statistics Agency (BPS), covering Regional Revenue, Balancing Funds, and Other Revenue data for provinces in Eastern Indonesia over the 2021–2025 period. Data were collected through documentation of the Regional Government Budget Realization Reports (APBD), supplemented by a review of textbooks, scientific journals, research reports, and relevant regulations.

Operational Definition of Variables

Table 1. Operational Definition of Variables

Variable	Indicator	Scale
Regional Revenue (X1)	PAD = Regional Tax + Regional Levies + Return on Separated Regional Asset Management + Other Legitimate PAD	Ratio
Balancing Funds (X2)	Balancing Funds = DAU + DAK + DBH	Ratio
Other Revenues (X3)	Other Revenue = Grant Revenue + Emergency Funds + Other Revenue	Ratio
Regional Financial Independence (Y)	Independence Ratio = PAD / Transfer Funds × 100%	Ratio (%)

Data Analysis Technique

Data were analyzed using panel data regression, combining cross-sectional data from 12 provinces with time-series data covering the 2021–2025 period, following the model: $Y_{it} = \alpha + \beta_1 X1_{it} + \beta_2 X2_{it} + \beta_3 X3_{it} + \varepsilon_{it}$, where Y is Regional Financial Independence, X1 is Regional Revenue, X2 is Balancing Funds, and X3 is Other Revenue.

The most appropriate estimation model among the Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) was determined through the Chow test (CEM vs. FEM), the Hausman test (FEM vs. REM), and, where necessary, the Lagrange Multiplier test (CEM vs. REM). Hypothesis testing was then conducted using the partial t-test for individual effects, the simultaneous F-test for joint effects, and the coefficient of determination (R^2) to assess the model's explanatory power.

RESULTS AND DISCUSSION

Model Selection

Chow Test. The Chow test produced a Cross-section F probability and a Cross-section Chi-square probability of 0.0000, both below the 0.05 significance level, so H_0 is rejected in favor of the Fixed Effect Model (FEM) over the Common Effect Model (CEM), indicating the presence of individual effects across provinces. **Hausman Test.** The Hausman test yielded a Cross-section random probability of 0.5796, which exceeds 0.05, so H_0 is accepted and the Random Effect Model (REM) is concluded to be more appropriate than the Fixed Effect Model.

Because the Hausman test selected REM, which is estimated using Generalized Least Squares (GLS) and is regarded as already accommodating the classical assumptions (Wasiaturrahma & Chairunissa, 2022), the Random Effect Model was adopted as the final estimation model, and separate classical assumption tests (multicollinearity, heteroskedasticity, autocorrelation) were not required.

Panel Data Regression Results (Random Effect Model)

Table 2. Random Effect Model (REM) Regression Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Constant (C)	6.330454	4.945338	1.280085	0.2058
Regional Revenue (LOG(PD))	-0.290227	0.313024	-0.927171	0.3578
Balancing Funds (DP)	0.0127	0.0218	0.584801	0.5610
Other Revenues (PL)	0.0641	0.0307	2.088461	0.0413

The estimated Random Effect Model equation is $KD = 6.330454 - 0.290227 \text{ LOG(PD)} + 0.0127 \text{ DP} + 0.0641 \text{ PL}$. The constant of 6.330454 indicates that, if Regional Revenue, Balancing Funds, and Other Revenue are held constant, Regional Financial Independence would be valued at 6.330454. Regional Revenue shows a negative coefficient (-0.290227), while Balancing Funds and Other Revenue show positive coefficients, indicating a direct relationship with Regional Financial Independence.

Hypothesis Testing

Effect of Regional Revenue on Regional Financial Independence. The t-statistic for LOG(PD) is -0.927171 with a probability of 0.3578 (> 0.05); H1 is therefore rejected, indicating that Regional Revenue has no significant effect on Regional Financial Independence. This suggests that increases in Regional Revenue have not yet been strong enough to reduce regional dependence on central-government transfers, contrary to the findings of Yahya and Rosma (2022), who reported that higher PAD strengthens regional financial independence. Effect of Balancing Funds on Regional Financial Independence. The t-statistic for DP is 0.584801 with a probability of 0.5610 (> 0.05); H2 is therefore rejected, indicating that Balancing Funds have no significant effect on Regional Financial Independence. Because Balancing Funds originate from the central government, an increase in this fund does not necessarily reflect a region's own capacity to finance its needs. This finding is consistent with Bella, Sari, and Aswin (2022), who found that the General Allocation Fund (DAU), a component of Balancing Funds, has no significant effect on regional financial independence.

Effect of Other Revenues on Regional Financial Independence. The t-statistic for PL is 2.088461 with a probability of 0.0413 (< 0.05); H3 is therefore accepted, indicating that Other Revenue has a positive and significant effect on Regional Financial Independence. This result is consistent with Novianti (2022), and suggests that as regions increase their Other Revenue receipts, their capacity to finance governance and development independently correspondingly improves, positioning Other Revenue as a supporting source that can help drive greater regional independence. Simultaneous Test (F-test). The F-statistic is 1.776283 with a significance level of 0.162168, below the critical F-table value of 2.77 ($df = 3, 56$) and above the 0.05 threshold. Regional Revenue, Balancing Funds, and Other Revenue therefore do not jointly have a statistically significant effect on Regional Financial Independence, even though Other Revenue is individually significant in the partial test.

Coefficient of Determination

The Random Effect Model produced an R-squared value of 0.086890 (8.69%), indicating that Regional Revenue, Balancing Funds, and Other Revenue jointly explain approximately 8.69% of the variation in Regional Financial Independence, while the remaining 91.31% is explained by factors outside the model, such as the effectiveness of local tax collection, regional expenditure allocation, and macro-fiscal policy.

General Discussion

Overall, the findings indicate that among the three revenue components examined, only Other Revenue has a statistically significant relationship with Regional Financial Independence in Eastern Indonesia during 2021–2025. Average regional financial independence in the region rose from 16% in 2022 to 25% in 2025, but remains within the “instructive” category (0–25%), in which the central government's role remains more dominant than that of regional governments, underscoring the continued heavy reliance of most Eastern Indonesian provinces on central-government transfers. This pattern supports the view that structural constraints — limited infrastructure, uneven human-capital quality, and low investment levels — continue to restrict the capacity of Regional Revenue and Balancing Funds to translate into stronger fiscal autonomy, while smaller, more flexible sources such as Other Revenue can still provide a meaningful, if modest, contribution to financial independence.

CONCLUSION

1. Regional Revenue does not have a significant effect on Regional Financial Independence in Eastern Indonesia.
2. Balancing Funds do not have a significant effect on Regional Financial Independence in Eastern Indonesia.
3. Other Revenues have a positive and significant effect on Regional Financial Independence in Eastern Indonesia.

Recommendations

1. Regional governments in Eastern Indonesia should continue to optimize the management of their various revenue sources, particularly Other Revenue, given its proven positive and significant contribution to Regional Financial Independence.
2. Regional governments are advised to reduce dependence on Balancing Funds from the central government by optimizing their own revenue potential, so that the level of Regional Financial Independence can be progressively increased.
3. For future research, it is recommended to add other independent variables, extend the observation period, or broaden the scope of the study area to obtain a more comprehensive picture of the determinants of Regional Financial Independence.

Research Implications

The findings indicate that among the components of regional revenue, Other Revenue is the only variable that consistently and significantly strengthens Regional Financial Independence in Eastern Indonesia, while the more conventional components — Regional Revenue and Balancing Funds — have not yet translated into a statistically significant improvement in fiscal autonomy. This reinforces the argument of fiscal decentralization theory that a region's independence is determined not merely by the size of its total revenue, but by the composition and effectiveness of revenue management: an over-reliance on central-government transfers, even when nominally large, does not by itself build regional fiscal capacity. Consequently, strengthening locally generated and other legitimate revenue sources, together with more effective utilization of Balancing Funds for productive investment, emerges as a more credible pathway toward genuine regional financial independence in Eastern Indonesia.

REFERENCES

- Bella, S., Sari, F., & Aswin, U. R. (2022). Pengaruh Dana Alokasi Umum, Dana Alokasi Khusus, dan Dana Bagi Hasil terhadap Kemandirian Keuangan Daerah. *Jurnal Ekonomi dan Keuangan Daerah*, 3(5).
- Desanty, R., Putri, A., & Manajemen, M. (2025). Pengaruh Pendapatan Asli Daerah dan Dana Perimbangan terhadap Kemandirian Keuangan Daerah dengan Alokasi Belanja Modal sebagai Variabel Mediasi (Studi Kasus Pemerintah Kota Payakumbuh). *Jurnal Ilmu Manajemen*, 3, 1033–1050.
- Fadhila, L. S., & Susilowati, D. (2025). Pengaruh Pendapatan Asli Daerah dan Dana Perimbangan terhadap Kemandirian Keuangan Pemerintah Daerah (Studi Kasus pada Pemerintah Provinsi di Indonesia Tahun 2018–2021). Universitas Jenderal Soedirman.
- Indriawati, S., & Hasmarini, M. I. (2025). Fiscal Independence Analysis Based on Regional Income Structure of Regency and City of Central Java Province. *Jurnal Ekonomi Pembangunan*, 6(6), 633–641.
- Kristina, S. R., Naukoko, A. T., & Siwu, H. F. D. J. (2021). The Effect of Local Revenue (PAD) and Balancing Funds on the Regional Financial Independence of Central Halmahera District. *Jurnal EMBA*, 9(1), 453–461.
- Malau, E. I., Pratiwi, E., & Parapat, S. (2020). Pengaruh Pendapatan Asli Daerah (PAD) dan Belanja Modal. *Jurnal Ekonomi dan Bisnis*, 3, 332–337. <https://doi.org/10.37600/ekbi.v3i2.196>
- Novianti, D. (2022). Pengaruh Pendapatan Asli Daerah (PAD) terhadap Kemandirian Keuangan Daerah Pemerintah Kota Bandung. *Jurnal Ekonomi dan Keuangan*, 2(3), 244–250.
- Patria, A. (2025). Pengaruh Pendapatan Asli Daerah terhadap Kemandirian Keuangan Daerah di Kabupaten/Kota Provinsi Kalimantan Barat. *Jurnal Riset Akuntansi dan Keuangan*, 10, 97–106.
- Law of the Republic of Indonesia No. 23 of 2014 on Regional Government.
- Law of the Republic of Indonesia No. 33 of 2004 on Fiscal Balance between the Central Government and Regional Governments.
- Regulation of the Minister of Home Affairs No. 77 of 2020 on Technical Guidelines for Regional Financial Management.

THE EFFECT OF REGIONAL REVENUE, BALANCING FUNDS, AND OTHER REVENUES ON THE FINANCIAL INDEPENDENCE OF PROVINCIAL GOVERNMENTS IN EASTERN INDONESIA

Saoda Tharob **et al**

Ghozali, I. (2021). *Aplikasi Analisis Multivariate dengan Program IBM SPSS*. Badan Penerbit Universitas Diponegoro.