International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The Effect Of Pad, Transfer Funds And Poverty Level On Regional Expenditure In Regency/City Of Kalimantan Island

Retno Wahyuni[1*], Ariefanda Iqbal Perdhana[2], Juanda Astarani[3]

[123] Tanjungpura University, Pontianak, Indonesia

Abstract

This study aims to examine the influence of Locally Generated Revenue (PAD), Transfer Funds, and Poverty Levels on Regional Expenditures in regencies/cities on Kalimantan Island during the 2022–2024 period. The study used a quantitative approach with panel data regression analysis on 56 regencies/cities, resulting in 168 observational data. The research data were sourced from the Directorate General of Fiscal Balance (DJPK) and the Central Statistics Agency (BPS). Based on the model testing results, the Random Effect Model (REM) was selected as the best estimation model. The results showed that PAD and Transfer Funds had a positive and significant effect on Regional Expenditures, while the Poverty Level did not show a significant effect. Transfer Funds were the variable with the most dominant influence on Regional Expenditures, reflecting the still high regional fiscal dependence on the central government and indications of a flypaper effect. Collectively, all independent variables had a significant effect on Regional Expenditures.

Keywords:PAD, Transfer Funds, Poverty Rate, Regional Expenditure, Flypaper Effect

INTRODUCTION

Kalimantan harbors a striking fiscal irony in Indonesia's regional financial structure. On the one hand, this region is known as one of the nation's largest producers of natural resources, particularly through the dominance of the mining sector in East Kalimantan, which contributes significantly to the regional GRDP (BPS, 2023). However, on the other hand, most district/city governments on the island of Kalimantan still demonstrate low levels of fiscal independence because their revenues are heavily dependent on transfers from the central government. Data from the Directorate General of Treasury, Ministry of Finance, shows that transfer funds contributed approximately 86.37 percent of total

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

district/city revenue in West Kalimantan throughout 2023, while the contribution of PAD was only 13.49 percent. A similar situation also occurs in East Kalimantan, where transfers from the central government reached 98.12 percent of total regional revenue. This disparity between the vast potential of natural resources and the weak fiscal independence is a crucial issue that deserves further study, particularly from the perspective of regional financial governance.

Poverty dynamics on the island of Kalimantan also indicate significant socioeconomic disparities between regions. The percentage of the population categorized as poor on this island fluctuated between 2019 and 2024, starting from 6.30 percent in 2019 and decreasing slightly to 6.00 percent in 2022. At the district/city level, poverty disparities on this island are more visible, with Penajam Paser Utara Regency in East Kalimantan having the highest poverty percentage at 11.55 percent, far above Mahakam Hulu Regency at only 2.45 percent (BPS, 2022). Conversely, the poverty rate in Central Kalimantan reached 5.17 percent in 2024, up from 5.11 percent the previous year, making it one of the regions experiencing an increase in extreme poverty in 2021-2022 (BPS Central Kalimantan, 2024). Although total poverty in Kalimantan is relatively better than the national average, differences in poverty levels at the district/city level will still have significant implications for the direction of regional government policies and spending allocations.

In the context of the regional financial system regulated by Law Number 23 of 2014 concerning Regional Government and Law Number 1 of 2022 concerning Financial Relations between the Central and Regional Governments, regional expenditure is a tool used by regional governments in carrying out development functions and providing services to the public. Regional fiscal independence in meeting its spending needs consists of two components: Regional Original Revenue (PAD), which reflects regional fiscal independence, and various transfer fund components such as General Allocation Funds (DAU), Special Allocation Funds (DAK), and Regional Revenue Sharing Funds (DBH) received from the central government. Furthermore, the socioeconomic situation of the community, particularly the poverty rate, will also influence the demand pressure for public spending in various basic service sectors (Dahliah, 2022; Pasa et al., 2023). These three aspects are of concern in this study, because the dynamics of the interaction between PAD, transfer funds, and poverty across Kalimantan Island still provide ample room for more in-depth empirical exploration.

Previous empirical research examining the relationship between PAD and transfer funds on regional expenditures remains inconsistent. Roskaputri et al. (2024) and Tifanny

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

(2025) showed that PAD had a significant positive effect on regional expenditures in West Kalimantan; furthermore, these studies also indicated a flypaper effect because the coefficient of balancing funds (2.453) significantly exceeded the PAD coefficient (1.051). In contrast, Rusmita (2016) showed that PAD and DAU separately did not significantly impact regional expenditures in West Kalimantan, although both variables did when tested together. In a more comprehensive study, Paraswati et al. (2024) showed that DAU and DBH had a positive and significant contribution to regional expenditures at the national level, while Haq et al. (2025) revealed that DAU, DAK, and DBH collectively had a positive impact on expenditures. The variation in the results of this study shows that the impact of PAD and transfer funds on regional spending is very much determined by the context and characteristics of each region, so that studies involving the entire island of Kalimantan remain highly urgent.

The importance of poverty levels as an explanatory variable for regional spending has not yet received sufficient direct research, although its relevance cannot be underestimated. Anggun and Sari (2024) showed that regional spending had a significant negative impact on poverty rates in the border region of West Kalimantan, demonstrating the importance of quality and targeted spending in poverty alleviation. Conversely, Magdalena et al. (2022) showed that the General Allocation Fund (DAU) and Special Allocation Fund (DAK) actually trended in the same direction as poverty in Central Java, indicating that the effectiveness of transfer funds in poverty alleviation still needs to be improved. Previous research in Kalimantan has generally been limited to a single province and has not included poverty levels as an explanatory variable for regional spending (Kurniadi, 2023; Ginting & Maksum, 2024). Previous research has generally only been conducted in one province in Kalimantan and has not simultaneously included poverty levels as a determinant of regional spending. This study integrates fiscal and social aspects across all regencies/cities in Kalimantan, providing a more comprehensive picture of the factors influencing regional spending. Based on this gap, this study offers three key innovations. First, from a geographic perspective, this is one of the first studies to comprehensively examine all 56 regencies/cities on the island of Kalimantan, encompassing five provinces: West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, and North Kalimantan, thus encompassing a much more representative sample of 168 observation units. Second, from a temporal perspective, the 2022–2024 period captures two important fiscal phenomena simultaneously: the economic recovery after COVID-19 and the commencement of construction of the Indonesian Capital City (IKN) in East Kalimantan, which has structurally impacted fiscal transfer patterns across

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Kalimantan. Third, from a methodological perspective, the use of panel data regression, which simultaneously encompasses both spatial (cross-section) and time-series variations through rigorous model specification testing, can produce efficient, consistent, and unbiased estimates of regional spending parameters in the face of heterogeneous characteristics between regions. These three novel aspects enable this study to comprehensively fill the literature gap and are expected to serve as a guide for policymakers in formulating fairer fiscal strategies that significantly impact public welfare, particularly amidst the accelerated development of the IKN, which has the potential to widen fiscal inequality between regions in Kalimantan.

LITERATURE REVIEW

Fiscal Decentralization Theory

Fiscal decentralization essentially refers to the transfer of financial management authority from the central government to regional governments, aimed at increasing efficiency and effectiveness in the utilization of public resources (Musgrave, 1959; Oates, 1972). Regional governments are believed to better understand the preferences and needs of their local communities, enabling them to allocate resources more effectively. In Indonesia, the fiscal decentralization mechanism is realized through regional authority to optimize the collection of Regional Original Revenue (PAD) while utilizing transfer funds from the central government as a source of funding for regional operational activities and development (Yuliana and Asmara, 2024). This theory is relevant to explaining the relationship between PAD and transfer funds on regional spending, while also underpinning the possibility of a flypaper effect resulting from excessive dependence on transfer funds.

Government Expenditure Theory

Wagner's Law states that government spending grows faster than economic growth as public demand for public services increases (Kurniadi, 2023). Peacock-Wiseman's theory complements this by explaining that government spending generally increases during times of crisis and does not return to its original level after the crisis has passed (Malau et al., 2023). This theory of government spending is closely related to the level of poverty in a region; the higher the burden of socioeconomic poverty in a community, the greater the pressure on local governments to explore the allocation of capital and social spending in the education, health, social assistance, and basic infrastructure sectors to meet these public demands.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Agency theory

Agency theory examines the relationship between the principal as the mandate giver and the agent as the implementer of resource management. In regional finance, the local government acts as an agent responsible for managing funds from the community and the central government to finance regional expenditures (Roskaputri et al., 2024). Jensen and Meckling (1976) emphasized that agents are required to manage resources effectively, efficiently, and responsibly. This agency relationship is highly relevant as a basis for the asymmetric behavior of regional policymakers (agents), who psychologically or politically tend to be more aggressive in spending funds sent from the center (transfer funds) rather than striving to maximize tax collection efforts from their local constituents (PAD), thus giving rise to a tendency for the flypaper effect phenomenon (Sembiring et al., 2025).

Regional Original Income (PAD)

Regional Original Revenue (PAD) is revenue derived from economic potential within a region's boundaries and collected based on regional regulations in accordance with applicable laws and regulations. PAD components consist of regional taxes, regional levies, proceeds from the management of separate regional assets, and other legitimate PAD revenues (Dahliah, 2022). The amount of PAD collected by a region reflects its degree of fiscal independence, which directly determines the region's latitude and flexibility in setting priorities and the amount of public spending (Fernandes and Fauzia, 2022).

Fund Transfer

Transfer funds are allocated from the State Budget (APBN) to regional governments to support the comprehensive implementation of fiscal decentralization. Transfer funds consist of three main components: the General Allocation Fund (DAU), the Special Allocation Fund (DAK), and the Revenue Sharing Fund (DBH) (Haq et al., 2025). The DAU functions as an instrument for equalizing financial capacity between regions, the DAK is directed towards financing activities aligned with specific national development priorities, while the DBH represents regional rights to state revenues derived from the exploitation of resources within the region (Paraswati et al., 2024). The high proportion of transfer funds in the regional revenue structure has the potential to create a flypaper effect, a condition in which the response of regional spending to an increase in

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

transfer funds is greater than the response to an increase in Regional Original Revenue (PAD) (Tifanny, 2025).

Poverty Level and Regional Spending

Poverty essentially reflects a condition in which individuals or groups lack the capacity to meet their basic needs, whether material needs or limited access to various public services. Poverty in a region is a crucial variable influencing the direction and composition of local government spending policies (Pasa et al., 2023). Regions with high poverty rates generally require larger budget allocations to social sectors to narrow inequality and improve the standard of living of their citizens. Muliati et al. (2019) found that targeted public budget allocations were correlated with poverty reduction in Kalimantan.

Conceptual Framework

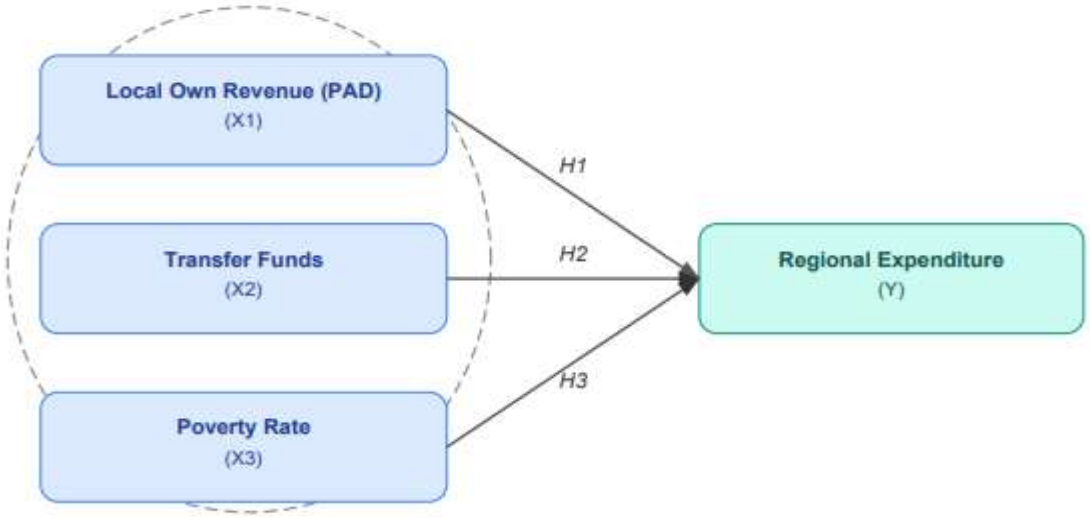


Figure 1. Conceptual Framework
Source: Research Data, 2026

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Relationship between variables and research hypotheses

The Influence of Regional Original Income (PAD) on Regional Expenditure

Locally-Generated Revenue (PAD) is a revenue component derived from a region's local economic capacity and serves as the primary benchmark for fiscal independence in supporting governance and regional development. Based on the theory of fiscal decentralization, increasing PAD will expand the capacity of local governments to allocate spending to meet public service and development needs. Several previous studies, including those by Roskaputri et al. (2024), Fernandes and Fauzia (2022), and Azis et al. (2026), consistently demonstrate that PAD has a positive and significant impact on regional spending. Based on these theoretical and empirical foundations, the research hypothesis is formulated as follows:

H1: Regional Original Income (PAD) has a positive effect on Regional Expenditure.

The Impact of Transfer Funds on Regional Spending

Transfer funds are a source of funding disbursed from the state budget (APBN) to regional governments to support the implementation of fiscal decentralization while simultaneously promoting balance in financial capacity between regions. In line with fiscal decentralization theory, increasing the transfer funds received by a region will increase its ability to finance its public expenditures. However, excessive reliance on transfer funds risks creating a flypaper effect. Previous studies such as those by Haq et al. (2025), Paraswati et al. (2024), and Yuliana and Asmara (2024) consistently found that transfer funds have a positive and significant impact on regional spending. Based on this foundation, the research hypothesis is formulated as follows:

H2: Transfer Funds have a positive effect on Regional Expenditure.

The Influence of Poverty Levels on Regional Spending

The poverty rate reflects the proportion of citizens who lack the means to meet their basic needs. The higher the poverty rate, the greater the pressure on local governments to increase spending on education, health, social assistance, and basic infrastructure to improve welfare. From the perspective of government expenditure theory, increasing demand for public services will logically drive expansion in local government spending. Similarly, Anggun and Sari (2024) found a link between poverty levels and regional spending patterns in efforts to improve people's living standards. Based on this, the research hypothesis is formulated as follows:

H3: Poverty level has an impact on regional spending.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

METHOD

This research is structured as a quantitative study with a causal approach that aims to analyze the extent to which Regional Original Income (PAD), transfer funds, and poverty levels affect regional spending in all districts/cities on the island of Kalimantan during the period 2022–2024. The quantitative approach was chosen because this research focuses on statistically testing the relationship between variables through measuring data in the form of numbers (Sugiyono, 2022). The data in this study are secondary data obtained from the Directorate General of Fiscal Balance (DJPK) of the Ministry of Finance of the Republic of Indonesia and the Central Statistics Agency (BPS). The data obtained include the realization of PAD, realization of allocation funds, percentage of poor people, and realization of regional spending from all districts/cities on the island of Kalimantan which include the provinces of West Kalimantan, Central Kalimantan, South Kalimantan, East Kalimantan, and North Kalimantan throughout the research period.

The units of analysis in this study were all district and city governments on the island of Kalimantan, with a total of 56 units. The sampling technique applied was the saturated sampling method (full sampling), namely the entire population was simultaneously used as the research sample (Rusmita, 2016). With a three-year observation period (time series dimension) and a total of 56 districts/cities (cross-section dimension), the total data collected amounted to 168 observations.

The analytical tool applied is panel data regression, chosen because the characteristics of the research data are a combination of time series and cross-section dimensions (Gujarati & Porter, 2009). The choice of this method is also in line with the approach applied by Rusmita (2016) and several similar studies that evaluate regional financial panel data in Indonesia. The dependent variable in this study is Regional Expenditure (BD), which is measured by the total realization of regional expenditure. The independent variables consist of three elements: Regional Original Income (PAD), which is measured based on the total realization of PAD, Transfer Funds, which are measured from the total realization of transfers including DAU, DAK, and DBH, and Poverty Level, which is measured by the percentage of poor people in each district/city. The variables of Regional Expenditure, PAD, and Transfer Funds are transformed into natural logarithmic (ln) form. The use of natural logarithmic transformation is done to reduce the potential for heteroscedasticity, stabilize data variance, and produce coefficient interpretation in the form of elasticity so that the relationship between variables becomes easier to analyze.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

The specifications of the regression model for panel data applied in this study are as follows:

$$BDit = \beta 0 + \beta 1PADit + \beta 2DTit + \beta 3TKit + \varepsilon it$$

Information:

- BD : Regional Shopping
- PAD: Regional Original Income
- DT : Transfer Funds
- TK: Poverty Level
- β_0: Constant
- β_1,β2,β3 : Regression coefficient of independent variables
- ε : Error term
- i : Cross section unit (district/city on Kalimantan Island)
- t : Time period (time series 2022–2024)

Before determining the appropriate estimation model, three model selection tests were conducted: the Chow Test to decide between the Common Effect Model (CEM) and the Fixed Effect Model (FEM), the Hausman Test to decide between the FEM and the Random Effect Model (REM), and the Lagrange Multiplier Test to choose between the CEM and the REM (Sembiring et al., 2025). Because the REM uses Generalized Least Square (GLS) estimation, the assumptions of heteroscedasticity and autocorrelation have been accommodated in the estimation process, so that the classical assumption tests for heteroscedasticity and autocorrelation are not required separately (Baltagi, 2005; Gujarati & Porter, 2009). To ensure the robustness of the estimation, White cross-section standard errors were used, which produce robust coefficients. Hypothesis testing was conducted using the t-test (partial), F-test (simultaneous), and coefficient of determination (R^2) at a significance level of 5% (α = 0.05).

Results and Discussion

Descriptive Statistics

Prior to panel data regression estimation, the Regional Expenditure, Locally-Owned Revenue (PAD), and Transfer Fund variables were transformed into natural logarithms (ln) to reduce differences in data scale between regions and improve the stability of the estimation model. Descriptive statistics are presented to provide an initial overview of the research data profile, which includes the minimum, maximum, average (mean), and standard deviation values of each studied variable. The variables included in this analysis include Regional Expenditure (LNY), Locally-Owned Revenue (LNX1),

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Transfer Fund (LNX2), and Poverty Level (X3) from 56 districts/cities in Kalimantan Island during the 2022–2024 period, with a total of 168 observation units.

Table 1. Descriptive Statistics of Research Variables

Variables	N	Min	Max	Mean	Std. Dev.
LNY (Regional Shopping)	168	25,6441	29,8060	27,6342	0.7512
LNX1 (PAD)	168	22,0766	28,5419	24,8967	1,1603
LNX2(Fund Transfer)	168	25,5424	28,9424	27,2847	0.5988
X3(Poverty Level)	168	1,0600	37,1800	7,5988	5,6983

Note: LNY = Natural Logarithm of Regional Expenditures; LNX1 = Natural Logarithm of PAD; LNX2 = Natural Logarithm of Transfer Funds; X3 = Poverty Level (%).

Referring to Table 1, the average LNY (Regional Expenditure) value is 27.6342 with a standard deviation of 0.7512, indicating relatively controlled variation between one district/city and another. The LNX1 (PAD) variable has a standard deviation of 1.1603, reflecting a fairly wide gap in fiscal capacity among regions in Kalimantan. In contrast, LNX2 (Transfer Funds) has a smaller standard deviation of 0.5988, indicating that the distribution of funds from the central government is relatively more evenly distributed between regions. Meanwhile, X3 (Poverty Level) recorded the highest standard deviation of 5.6983, indicating a very large disparity in socio-economic conditions between regions on the island of Kalimantan.

Panel Data Estimation Model Selection

The selection of the appropriate estimation model for panel data is carried out through three stages of testing, namely the Chow Test, the Hausman Test, and the Lagrange Multiplier (LM) Test.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Table 2. Results of Panel Data Estimation Model Selection Test

Test	Statistics	Mark	Prob.	Decision
Chow	Cross-section F	2,0014	0.0011	FEM > CEM
	Cross-section Chi-square	117,2772	0.0000	FEM > CEM
Hausman	Chi-Square	7,5006	0.0575	REM > FEM
Lagrange Multiplier	Cross-section (Breusch-Pagan)	-	0.0086	REM > CEM

Based on Table 2, the results of the Chow Test show a Cross-section F probability value of 0.0011 and a Cross-section Chi-square of 0.0000, both of which are lower than α = 0.05, so the Fixed Effect Model (FEM) is more appropriate than the Common Effect Model (CEM). Furthermore, the results of the Hausman Test show a Chi-Square probability value of 0.0575 which exceeds α = 0.05, so the Random Effect Model (REM) is more appropriate than the FEM. The results of the Lagrange Multiplier Test show that REM is more appropriate than the CEM with a Cross-section probability of 0.0086 <0.05. Therefore, the estimation model applied in this study is the Random Effect Model (REM).

Model Diagnostic Test

In the Random Effect Model (REM), the heteroscedasticity test procedure cannot be applied directly as in Ordinary Least Square (OLS) estimation, considering that REM relies on the Generalized Least Square (GLS) method which inherently takes into account and accommodates the potential for heteroscedasticity and autocorrelation in the estimation process. Gujarati and Porter (2012) emphasized that the GLS estimator tends to produce more efficient estimates due to its ability to correct violations of classical assumptions, especially those related to heteroscedasticity and autocorrelation. Similarly, Baltagi (2005) explained that in the Random Effect model, the variance component of the error term has been integrated into the model structure. To mitigate potential residual heteroscedasticity, the estimation in this study was conducted by applying White cross-section standard errors to produce robust coefficients.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Normality Test

Normality was tested using the Jarque-Bera statistic. The test results showed a Jarque-Bera value of 2.2864 with a probability value of 0.3188. Since the probability value of 0.3188 > 0.05, then H_0accepted, which indicates that the residuals are normally distributed so that the normality assumption is met.

Multicollinearity Test

Multicollinearity testing was performed by analyzing the correlation matrix between independent variables. The results of the test are presented in Table 3.

Table 3. Correlation Matrix Between Independent Variables

Variables	LNX1 (PAD)	LNX2 (Fund Transfer)	X3 (Poverty Level)
LNX1 (PAD)	1,0000	0.4916	-0.2138
LNX2 (Fund Transfer)	0.4916	1,0000	0.1764
X3 (Poverty Level)	-0.2138	0.1764	1,0000

Based on Table 3, all correlation values between independent variables are below the threshold of 0.80, namely LNX1–LNX2 (0.4916), LNX1–X3 (-0.2138), and LNX2–X3 (0.1764). Thus, there is no multicollinearity problem in this research model.

Random Effect Model (REM) Estimation Results

Based on the Random Effect Model (REM) estimation with White cross-section, the panel data regression results are obtained as presented in Table 4 below.

Table 4. Random Effect Model (REM) Estimation Results

Variables	Coefficient	t-Statistic	Prob.	Information
Constant (C)	0.6100	-	-	-
LNX1 (PAD)	0.1814	12,6926	0.0000	Significant

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

LNX2 (Fund Transfer)	0.8114	32,2773	0.0000	Significant
X3 (Poverty Level)	0.0145	0.5255	0.5999	Not Significant
R-squared	0.9537			
Adjusted R-squared	0.9528			
F-statistic	1125,219		0.0000	Significant
Durbin-Watson	2,0131			

Source: EViews Data Processing Results 12, 2026

Based on Table 4, the panel data regression equation formed is as follows:

LNY = 0.6100 + 0.1814 LNX1 + 0.8114 LNX2 + 0.0145 X3 + ε

Hypothesis Testing

1. **Partial Test (t-Test)**

H1: The Influence of PAD on Regional Expenditure. The results of the t-test for the PAD variable (LNX1) show a t-statistic value of 12.6926 with a probability of 0.0000 < 0.05, so that H_0rejected and H1 accepted. In other words, PAD has a positive and significant impact on regional spending in regencies/cities on Kalimantan Island during the 2022–2024 period. Every 1% increase in PAD will result in a 0.18% increase in regional spending, assuming other variables remain constant (ceteris paribus). This finding is in line with the theory of fiscal decentralization, which states that the higher a region's ability to generate its own revenue, the greater its capacity to finance public spending (Oates, 1972; Musgrave, 1959). Within the real-world framework on Kalimantan Island, PAD contributions are dominated by Regional Tax and Regional Retribution revenues in large cities that are centers of regional economic growth, such as Balikpapan, Samarinda, Banjarmasin, and Pontianak. These service and trade centers have a more mature economic structure, enabling them to collect hotel, restaurant, entertainment, and BPHTB taxes massively to fund the flexibility of expanding their regional spending. In contrast, in remote districts or border areas in West and North Kalimantan, the real contribution of local revenue (PAD) is very low due to the limited industrial base and

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

limited local commercial activity. This creates a wide disparity in fiscal capacity between regions in determining the independence of their spending allocations. These results align with research by Roskaputri et al. (2024), which shows a significant positive effect of PAD on regional spending in West Kalimantan, and Azis et al. (2026), which proves the positive contribution of PAD to regional spending in general. This consistent positive impact confirms that regions with a strong PAD base have greater fiscal discretion to fund priority public spending programs (Halim, 2016; Pratama & Setiawan, 2023). Fernandes and Fauzia (2022) also agree, emphasizing that regions with greater PAD capacity have greater flexibility in designing spending priorities according to local needs. Although the PAD coefficient (0.1814) is smaller than the transfer fund coefficient (0.8114), the PAD contribution remains statistically significant and reflects the existence of independent fiscal incentives in some regencies/cities in Kalimantan. This also indicates that efforts to intensify and expand regional levies—particularly through the optimization of regional taxes and levies as stipulated in Law Number 1 of 2022—need to be continuously encouraged to increase PAD's contribution to regional spending over time.

H2: The Effect of Transfer Funds on Regional Spending. The results of the t-test for the Transfer Fund variable (LNX2) show a t-statistic value of 32.2773 with a probability of 0.0000 < 0.05, so that H_0 rejected and H2 accepted. In other words, transfer funds have a positive and significant impact on regional spending. The regression coefficient of 0.8114 indicates that for every 1% increase in transfer funds, regional spending increases by 0.81%. Transfer funds have the most significant influence compared to other variables in this model. Furthermore, the comparison between the transfer fund coefficient (0.8114) which is much higher than the PAD coefficient (0.1814) indicates the presence of a flypaper effect, where the reaction of regional spending to the increase in transfer funds is much more significant than the reaction to the increase in PAD itself. The indication of the flypaper effect in this study is determined based on the Transfer Fund coefficient being greater than the PAD coefficient and both being significant at the 5 percent significance level (α = 0.05). This criterion is in line with the approach used in the study by Armawaddin et al. (2017), which identified the flypaper effect through the dominant influence of transfer funds on regional spending compared to the influence of PAD. Quantitatively, the flypaper effect magnification ratio in this study is 0.8114/0.1814 = 4.47, indicating that each additional rupiah of transfer funds triggers an increase in regional spending almost 4.5 times compared to each additional rupiah of PAD. This ratio indicates a very high level of fiscal dependence and suggests that local governments in Kalimantan tend to be inactive

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

in optimizing their own revenue potential, and rely more on funding flows from the central government as the main factor in their spending capacity. Within the framework of agency theory (Jensen & Meckling, 1976), this situation can be understood as an example of moral hazard, where the agent (local government) has minimal incentive to increase independent fiscal efforts as long as the principal (central government) continues to provide significant transfer funds. This result also has important relevance in the context of the development of the Indonesian Capital City (IKN): increasing transfer funds to East Kalimantan can strengthen the flypaper effect in the region, thereby creating a risk of structural dependence that could potentially conflict with the goal of sustainable fiscal independence. This phenomenon is consistent with the results of research by Paraswati et al. (2024) and Armawaddin et al. (2017) who demonstrated the flypaper effect in Kalimantan, and Haq et al. (2025) who confirmed the significant positive influence of DAU, DAK, and DBH on regional capital expenditure at the national level. From a regulatory perspective, the dominance of these transfer funds is relevant to understand in the context of Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments (HKPD Law), which explicitly mandates reducing regional dependence on central transfers by strengthening local fiscal capacity. However,The findings of this study actually indicate that this mandate has not been fully realized in Kalimantan, where the flypaper effect still operates at a high intensity. This condition is also exacerbated by the structure of the General Allocation Fund (DAU), which is calculated based on the regional fiscal gap: the lower a region's PAD, the greater the DAU it receives, thus indirectly creating a disincentive for local governments to increase their own revenue. Consequently, the central government needs to review the transfer fund formula and develop a PAD-based performance scheme, for example through a reward-penalty mechanism that links the transfer amount to the achievement of an increase in the regional fiscal independence ratio, to encourage regions in Kalimantan to break away from fiscal dependence and move towards sustainable budget independence.

H3: The Effect of Poverty Level on Regional Spending. The results of the t-test on the Poverty Level variable (X3) show a t-statistic value of 0.5255 with a probability of 0.5999 > 0.05, so that H_0accepted and H3 rejected. In other words, the poverty rate does not significantly influence regional spending in districts/cities on Kalimantan Island for the 2022–2024 period. Although the coefficient is positive (0.0145), the impact is very small and not statistically significant. This indicates that regional spending allocation in

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Kalimantan is not fully responsive to regional poverty conditions. The finding that the poverty rate does not significantly influence regional spending indicates budget rigidity, where regional spending allocations are dominated by employee operational expenses and mandatory routine spending rather than direct poverty alleviation program spending. This condition aligns with a study by Wandira & Siregar (2022) which states that regional budget interventions are often not instantly responsive to fluctuations in poverty rates due to high fiscal dependence on central transfer funds. Furthermore, public sector budget allocations in developing countries often face effectiveness challenges due to the suboptimal integration between budgeting aspects and strategic target achievement in the field (Bahl & Bird, 2018; Prasetyo, 2020). This contrasts with the research of Pasa et al. (2023) found a significant relationship between poverty and regional spending policies. However, this finding is consistent with the findings of Magdalena et al. (2022) who showed that the effectiveness of transfer funds in responding to poverty is not optimal in several provinces in Indonesia. Several theoretical and empirical explanations can explain this finding. First, the high dependence on transfer funds causes regional spending priorities to be determined more by central government directives (particularly through earmarked Special Allocation Funds) rather than by local poverty conditions, which should be a primary consideration in regional spending planning. Second, the very high disparity in poverty levels between districts/cities in Kalimantan, as reflected in the standard deviation of X3 reaching 5.6983, causes the aggregate relationship between poverty and regional spending to be statistically undetectable. Third, regional spending in Kalimantan is dominated by personnel and operational spending, which are inelastic to changes in poverty conditions, so that responses to poverty pressures are not reflected in total spending. From a legal perspective, Law Number 23 of 2014 concerning Regional Government actually mandates that regional spending must be oriented towards improving community welfare and poverty alleviation. However, the findings of this study indicate that the implementation of this mandate still requires strengthening, especially through a more accountable and measurable poverty data-based budget planning mechanism.Local governments need to explicitly set minimum social spending thresholds linked to local poverty indicators, so that spending allocations can be more responsive to the needs of the most vulnerable communities.

2. **Simultaneous Test (F Test)**

The results of the F test show an F-statistic value of 1,125.219 with a probability of 0.0000 < 0.05, so $H_0$is rejected and H4 is accepted. This means that simultaneously,

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

the variables PAD (LNX1), Transfer Funds (LNX2), and Poverty Level (X3) have a significant effect on Regional Expenditure (LNY) in districts/cities on Kalimantan Island in the 2022–2024 period. This very high F-statistic value indicates that the three independent variables collectively act as strong predictors of regional expenditure variations in Kalimantan.

3. **Coefficient of Determination (R^2)**

The R-squared value of 0.9537 indicates that the PAD (LNX1), Transfer Funds (LNX2), and Poverty Level (X3) variables are able to explain 95.37% of the variation in Regional Expenditure (LNY), while the remaining 4.63% is explained by other variables outside the model. The Adjusted R-squared value of 0.9528 (95.28%) confirms that the model has very high explanatory power, after adjustments for the number of independent variables. This high R^2 value indicates that PAD and transfer funds are the main determinants that dominate the formation of regional expenditure on the island of Kalimantan. The high R^2 value can also be influenced by the use of natural logarithmic transformation which helps stabilize the relationship between variables.

CONCLUSION

Based on panel data regression analysis using the Random Effects Model (REM) method, the following conclusions were obtained. First, PAD has a positive and significant impact on regional spending in regencies/cities on the island of Kalimantan during the 2022–2024 period. Every 1% increase in PAD triggers a 0.18% increase in regional spending, indicating that regional fiscal independence significantly contributes to local government spending capacity.

Second, Transfer Funds have a positive and significant impact on regional spending, with the highest coefficient (0.8114). These results also indicate a flypaper effect in Kalimantan, where the reaction of regional spending to transfer funds is much greater than the reaction to PAD, so that regional fiscal dependence on the central government remains high. Third, the poverty rate did not have a significant impact on regional spending in Kalimantan Island in the 2022–2024 period. This indicates that regional spending planning and allocation have not fully focused on poverty reduction as a priority in regional fiscal policy.

Overall, the model created can describe 95.37% of the variation in regional spending in Kalimantan, which shows that PAD and Transfer Funds are the main factors in the formation of regional spending in the region.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

REFERENCES

Anggun, N., & Sari, D. (2024). The Effect of Regional Spending on Poverty Levels in the Border Regions of West Kalimantan. Journal of Development Economics, 9(2), 120–132.

Anjelika, R., et al. (2026). Fiscal Decentralization and Regional Financial Independence in Indonesia. Journal of Economics and Public Policy, 12(1), 45–58.

Armawaddin, M., Rumbia, WA, & Afiat, MN (2017). Analysis of the Flypaper Effect of Regional Spending in Districts/Cities in Sulawesi. Indonesian Journal of Economics and Development, 18(1), 5.

Azis, MI, Padliansyah, R., Gulabdin, SB, Phin, NY, & Fook, LM (2026). The Influence of Regional Income and Revenue Sharing Funds on Regional Expenditures. Journal of Business Management, 13 (1), 370-384.

Central Statistics Agency (BPS). (2022). Poverty data for districts/cities in Kalimantan. BPS.

Central Statistics Agency (BPS). (2023). Gross Regional Domestic Product of East Kalimantan. BPS.

Bahl, R., & Bird, R. (2018). Fiscal Decentralization and Local Finance in Developing Countries. Edward Elgar Publishing.

Baltagi, B. H. (2005). Econometric Analysis of Panel Data (3rd ed.). England: John Wiley & Sons.

Baltagi, B. H. (2021). Econometric Analysis of Panel Data (6th ed.). Springer.

Central Kalimantan Statistics Agency (BPS). (2024). Central Kalimantan poverty data 2024. Central Kalimantan Statistics Agency (BPS).

Dahliah. (2022). Regional Original Income and Its Influence on Regional Expenditure. Journal of Regional Finance, 7(1), 55–67.

Fernandes, R., & Fauzia, I. (2022). The Influence of PAD on Regional Expenditure in Regency/City Governments in Indonesia. Journal of Public Accounting, 10(3), 88–99.

Gujarati, D. N., & Porter, D. C. (2009). Basic Econometrics (5th ed.). New York: McGraw-Hill.

Gujarati, DN, & Porter, DC (2012). Fundamentals of Econometrics (5th ed.). Jakarta: Salemba Empat.

Halim, A. (2016). Regional Financial Management (4th Edition). UPP STIM YKPN.

Haq, AI, Masdar, R., Ikbal, M., & Betty. (2025). The Effect of Locally-Generated Revenue, General Allocation Fund, Special Allocation Fund, and Revenue Sharing Fund on

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Capital Expenditure of Regencies and Municipalities in Indonesia. Journal of Accounting and Regional Finance, 8(2), 210–225.

Jensen, M. C., & Meckling, W. H. (1976). Theory of the Firm: Managerial Behavior, Agency Costs and Ownership Structure. Journal of Financial Economics, 3(4), 305–360.

Kurniadi, A. (2023). Analysis of the Influence of Government Expenditure on Regional Spending in Indonesia. Journal of Economics and Development, 14(2), 77–90.

Malau, R., et al. (2023). Analysis of Peacock-Wiseman Theory in Local Government Expenditure. Journal of Fiscal Policy, 11(1), 50–63.

Musgrave, R. A. (1959). The Theory of Public Finance: A Study in Public Economy. New York: McGraw-Hill.

Nany, M., Pratama, DB, Prasetyaningrum, M., & Kusumaningsih, AU (2022). The Effect of Pad, Dbh, Dau, Dak and Regional Spending on Poverty in Central Java. Journal of Economics and Entrepreneurship, 22(03).

Oates, W.E. (1972). Fiscal Federalism. New York: Harcourt Brace Jovanovich.

Paraswati, N., et al. (2024). The Effect of Transfer Funds on Regional Spending in Indonesia. Journal of Accounting and Public Finance, 13(1), 65–79.

Pasa, A., et al. (2023). Poverty Levels and Regional Expenditure Policies in Indonesia. Journal of Regional Economics, 6(2), 101–115.

Prasetyo, PE (2020). The Role of Public Expenditure on Poverty Alleviation. International Journal of Scientific & Technological Research, 9(3), 3422–3428.

Pratama, AY, & Setiawan, H. (2023). Analysis of the Impact of Regional Original Revenue and General Allocation Funds on Regional Government Capital Expenditure Allocation in Indonesia. Journal of Economics and Public Finance, 10(1), 45–62.

Republic of Indonesia. (2014) Law Number 23 of 2014 concerning Regional Government. State Secretariat.

Republic of Indonesia. (2022) Law Number 1 of 2022 concerning Financial Relations between the Central Government and Regional Governments. State Secretariat.

Roskaputri, F., et al. (2024). The Influence of Regional Original Income and Transfer Funds on Regional Expenditure in West Kalimantan. Journal of Accounting and Regional Government, 9(1), 15–28.

Rusmita, S. (2016). The Influence of Regional Original Income, General Allocation Fund, and Special Allocation Fund on Regional Expenditure of Districts/Cities in West Kalimantan. Journal of Regional Economics, 5(2), 44–56.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Sembiring, R., et al. (2025). Agency Theory in Regional Government Financial Management. Journal of Public Administration, 10(1), 91–105.

Sugiyono. (2022). Quantitative Research Methods. Bandung: Alfabeta.

Tifanny, L. (2025). Analysis of the Flypaper Effect on Regional Expenditure in Districts/Cities in West Kalimantan. Journal of Accounting and Regional Finance, 11(1), 70–84.

Wandira, R., & Siregar, H. (2022). Local Government Expenditure, Economic Growth, and Its Implications for Poverty Levels. Journal of Development Economics, 23(1), 89–104.

Wooldridge, J. M. (2020). Introductory Econometrics: A Modern Approach (7th ed.). Cengage Learning.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.