

Are Government Transfers Sticky? Tracing The Flypaper Effect Across Indonesian Provinces

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ABSTRACT

Purpose: By examining the impact of general allocation funds (DAU), special allocation funds (DAK), revenue-sharing funds (DBH), and Locally-generated revenue (PAD) on regional expenditure from 2021 to 2025, this study aims to re-examine the phenomenon of the flypaper effect on Indonesian local governments.

Research Method: Panel data regression analysis is the tool of choice for this quantitative investigation. This study's population comprises Indonesian provinces, and the sample comprises 165 panel observation points, collected through purposive sampling over a 5-year observation period. The EVIEWS 14 program is used to process the data.

Results and Discussion: Both the general allocation fund (DAU) and the revenue-sharing fund (DBH) positively affect regional expenditure. However, the effects are not statistically significant, according to the study's findings. However, locally generated revenue (PAD) and the Special Allocation Fund (DAK) have a significant positive effect on regional expenditure. These results demonstrate that reliance on federal transfer money has less impact on regional expenditure than the capacity of local governments to generate locally generated revenue. There is substantial evidence that DAK affects regional spending, although this impact is much lower than PAD's. This proves that the flypaper impact on regional expenditure is nonexistent.

Implications: According to these results, local governments must continue working toward greater financial independence by making the most of PAD sources such as regional taxes, levies, and asset management. Meanwhile, it is the central government's responsibility to ensure that regional development is still supported through funding transfers.

Originality: The results of this research disprove the hypothesis that regional expenditure by Indonesian provinces is subject to the flypaper effect.

Keywords: flypaper effect; regional expenditure; transfer funds; regional revenue.

1. Introduction

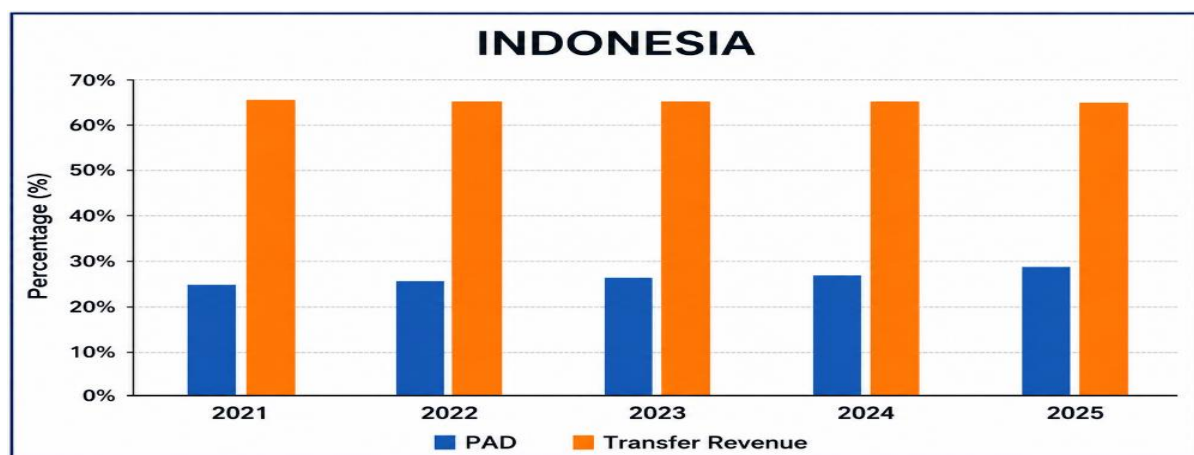
Local governments rely on regional expenditure as a primary tool to fulfill their responsibilities for public service provision, economic growth promotion, and community welfare enhancement. In accordance with Law No. 33 of 2004, which regulates the Financial Balance between the Central Government and the Regional Government, regional expenditures are all regional-level responsibilities that result in a diminished net worth for the designated fiscal year. Infrastructure, education, healthcare, and other development projects that strive to enhance the community's quality of life are funded by the government via regional expenditure. Therefore, the effectiveness of regional spending management is



a critical indicator of the success of fiscal decentralization and regional autonomy in Indonesia. Optimal allocation of regional funds gives local governments a better chance of attaining development that is both sustainable and equitable.

Local government spending in Indonesia still faces several challenges despite its critical role. Rather than generating their own income, many local governments rely heavily on federal transfer payments. The Directorate General of Treasury found that, relative to regional expenditures, transfer revenue amounted to 80.52%. In 2024, according to statistics from the national Ministry of Finance, PAD will account for only around 28.7% of regional income, with 65.7% still coming from central government payments. Regional fiscal autonomy becomes less independent in this scenario, and the amount of transfer funds frequently has a greater impact on spending allocation than the region's own fiscal capacity. This phenomenon indicates that the goal of fiscal decentralization to increase regional independence has not been fully achieved.

Figure 1. PAD and Transfer Income



Source: DJPK (Data Processed), 2026

Regional funds may come from a variety of sources, including local original income, transfer revenue, and other lawful regional funds, according to Law 23 of 2014, which concerns local governments. When looking at regional expenditures through the lens of public finance, it is important to note the diversity of local government income streams, including both transfers from the central government and revenue earned by the regions themselves (Buchanan, 1960).

The Locally-generated revenue (PAD), the General Allocation Fund (DAU), the Special Allocation Fund (DAK), and the Revenue Sharing Fund (DBH) are the principal regional income streams that finance government and development. The DAU, DAK, and DBH are state budget funds distributed to the regions. These regions are responsible for managing these funds to finance the execution of government affairs within their jurisdiction, as stated in Law Number 1 of 2022 concerning Financial Relations between the central government and regional governments. DAU is a federally provided balancing fund that seeks to equalize regional financial capacities (Tandipuang *et al.*, 2025). As a tool for fair allocation of financial capacity across regions, DAU allows local governments to support regional expenditures to a greater extent as DAU receipts increase. To address infrastructure and basic community service needs, as well as to fund unique initiatives aligned with national priorities and government responsibilities, local governments use the DAK (Rizki *et al.*, 2024). According to Astutik and Kuntara (2017) in Haq *et al.*, (2025), the majority of DAK's regional expenditure goes toward

development investments. These include buying, maintaining, and restoring physical assets and infrastructure that have long-term economic value. Each area receives a certain amount of DBH, a fund distributed among them in accordance with legal and regulatory requirements. The more DBH a region receives, the more money it has to cover its varied spending demands. According to Azis *et al.*, (2026), PAD is a component of local government income that indicates how effectively it can meet its own needs and commitments. Success in collecting PAD enhances local governments' capacity to cover regional expenses independently of central government transfer payments. The dependence of local governments on transfer income is the root cause of the flypaper effect. When federal money is more easily transferred to state and local governments, rather than spent directly, a phenomenon known as the "flypaper effect" develops.

The flypaper effect results from local governments' reliance on transfer income. When federal money is more easily transferred to state and local governments, rather than spent directly, a phenomenon known as the "flypaper effect" develops. When regional spending on transfer income is more elastic than regional spending on regional revenue, a phenomenon known as the Flypaper Effect occurs (Fisher, 1982, cited in Septianingrum *et al.*, 2025). A flypaper effect on Ghanaian local governments has been identified in prior research (Dick-sagoe *et al.*, 2025), whereby central government payments have a larger impact on regional spending than on local income. According to research by Koethenbuerger and Loumeau (2023), local governments in Switzerland are influenced by a flypaper effect. This impact is evident in the fact that local governments choose to utilize additional transfer funds to boost regional expenditure rather than cut tax rates. According to Cruz and Mereb's (2020) research, local government education expenditure in Brazil was affected by the flypaper effect, but only on FUNDEB transfers. On the other hand, FNDE transfers responded similarly to local income. According to research by Yuksel (2021), local government expenditure in Turkey was affected by the flypaper effect, with grant income exceeding tax receipts.

Previous research has shown that local governments in countries like Ghana, Switzerland, Brazil, and Turkey experience the flypaper effect. However, these findings cannot be applied to the Indonesian context due to differences in fiscal decentralization, transfer fund structures, and regional fiscal capacity characteristics. In addition, most previous research focused on transfer funds or specific types of transfers, and all used observation periods that ended before 2021. Hence, this research re-examined the flypaper effect in Indonesian local governments by analyzing the effects of DAU, DAK, DBH, and PAD on regional expenditure from 2021 to 2025. The goal is to determine how much money Indonesian regional governments still receive from the central government, as opposed to how much they can raise themselves to fund local projects. We expect the study to shed light on how regional expenditure responds to the General Allocation Fund (DAU), Special Allocation Fund (DAK), Revenue Sharing Fund (DBH), and Locally-generated revenue (PAD), which will help both the federal and state governments create better policies for managing regional finances, boost regional fiscal capacity, and make the most of PAD as a source of funding for sustainable development.

The remainder of this paper is organized as follows. Section 2 provides a literature review and hypothesis development. Section 3 presents the research method and design. Section 4 provides the results and discussion. Section 5 presents Concluding Remarks and Recommendations.

2. Literature Review and Hypothesis Development

2.1 Literature Review

2.1.1 Flypaper Effect Theory

James Henderson and Edward Gramlich first proposed the Flypaper Effect in 1960 to investigate whether there was a connection between a region's economic and demographic circumstances and the government's budgetary practices. Henderson and Gramlich believe that local government expenditure patterns should be influenced by regional factors and central government transfers (Dick-sagoe *et al.*, 2025). The "flypaper effect" occurs when federal funds "attach" to state and local governments. According to Cruz and Mereb (2020), the Flypaper Effect refers to the unexpectedly high absorption of intergovernmental transfers. According to Oates (1996), as cited in Nurosidah *et al.*, (2025), the Flypaper Effect is more strongly at work for federal transfer payments than for regional income in increasing local government expenditure. The Flypaper Effect, as previously described by Fisher (1982) and in a study by Septianingrum *et al.*, (2025), occurs when the elasticity of regional spending on transfer income exceeds that of regional expenditure on local original revenue.

2.1.2 Fiscal Decentralization

The goal of fiscal decentralization, as stated by Oates (1999), is to assign governmental tasks and fiscal tools to the level of government that is best suited to handle them. Devolving control over public expenditure and the regulation of Locally Generated revenue (PAD) from the central government to state and regional levels is known as fiscal decentralization. Financial resource distribution, fund transfers, and regional spending management are the three key components of this approach. Financial Relations between the Central Government and Regional Governments (HKPD Law), Law Number 1 of 2022, governs the most recent implementation in Indonesia.

2.2 Hypothesis Development

2.2.1 The Effect of General Allocation Funds on Regional Expenditure

The central government primarily uses the DAU to bolster regional budgets (Bahtiar, 2024). To ensure that all regions have access to the resources they need to implement decentralization initiatives, Law No. 33 of 2004 established the Decentralization Assistance Unit (DAU) as a state-budget-financed fund. A region's fiscal capacity to realize development plans and activities is closely correlated with the size of the DAU it receives, meaning that the DAU directly influences growth in regional expenditure. According to studies done by (Fikri *et al.*, 2020; Tandipuang *et al.*, 2025; Widyawati *et al.*, (2023), DAU significantly influences Regional Expenditure.

H1: General Allocation Fund affects Regional Expenditure

2.2.2 The Effect of Special Allocation Funds on Regional Expenditure

According to Anggoro (2017), the Special Allocation Fund (DAK) is a way for the State Budget to generate regional revenue. Its purpose is to fund specific regional initiatives that align with regional authority and national priorities (Arniaty, 2023). A significant amount of DAK has been allocated to sectors such as education, health, and infrastructure (Nugroho *et al.*, 2021). Because it will enhance the Regional Government's fixed assets and potentially improve the quality of public services, the General

Allocation Fund is expected to affect regional expenditures. According to studies done by (Farica & Wijaya, 2023; Fitriani & Hendaris, 2023; Wira & Dewi, 2023), DAK significantly affects regional expenditure.

H2: Special Allocation Funds Affect Regional Expenditure

2.2.3 The Effect of Revenue Sharing Funds on Regional Expenditure

To help cover regional requirements as part of establishing regional autonomy, a portion of the State Budget is allocated to local governments through the Revenue Sharing Fund (DBH) (Haq *et al.*, 2025). According to Azis *et al.*, (2026), DBH is a fund that local governments receive in accordance with proportions established by legislation, derived from the proceeds of central taxes and natural resource earnings. The impact of DBH on Regional Expenditure has been shown in studies by (Aliu *et al.*, 2021; Citra & Jatmiko, 2018; Pradipta & Jatmiko, 2018).

H3: Revenue Sharing Funds Affect Regional Expenditure

2.2.4 The Effect of Locally-Generated Revenue on Regional Expenditure

One of the primary ways in which a region finances its expenditures is through locally generated revenue (PAD) (Zulafah, 2023; Haq *et al.*, 2025). According to Putri *et al.*, (2025) and Zainuddin & Furqan, (2026), the PAD indicates that the area is financially independent and can meet its development needs without relying heavily on federal transfer funds. According to Buntulabi *et al.*, (2026), when an area has a higher level of fiscal independence, its local governments have greater leeway to prioritize development and allocate funds according to regional needs. Article 157 of Law No. 32 of 2004 on Regional Governance states that, to achieve the community's well-being in a just and equitable way, local governments need a sufficient revenue stream to fund the implementation of governance and development. Locally earned funds, including those from taxes and levies as well as those from segregated wealth management, make up these parts (Rahman, 2022). Several studies have shown that PAD significantly affects regional expenditure; for example, (Fikri *et al.*, 2020; Wulandari *et al.*, 2025; Sofiyani & Subadriyah, 2020).

H4: Regional Revenue Affects Regional Expenditure

3. Research Method

3.1 Data

This study employs a quantitative approach using panel data regression analysis. The population comprises Indonesian provincial governments observed during the 2021–2025 period. The sample was determined based on predefined data availability criteria. A province was included in the sample if it had complete and consistently reported data on Regional Expenditure (BD), General Allocation Fund (DAU), Special Allocation Fund (DAK), Revenue Sharing Fund (DBH), and Locally-generated revenue (PAD) for each year of the observation period. Provinces that did not provide complete and consistent data for all variables throughout the observation period were excluded from the analysis.

Based on these criteria, 33 provinces met the inclusion requirements, resulting in 165 province-year observations (33 provinces × 5 years). The study therefore uses all provinces that satisfied the specified data requirements rather than selecting observations based on the magnitude or characteristics of their fiscal variables. The use of complete province-year observations is intended to maintain consistency across the panel and reduce the potential for missing-data bias. The data used in

this study are secondary data obtained from the Regional Revenue and Expenditure Budget (APBD) realization reports published by the Directorate General of Fiscal Balance (DJPK) of the Ministry of Finance of the Republic of Indonesia. The dataset includes information on DAU, DAK, DBH, PAD, and Regional Expenditure for each province during the observation period.

3.2 Empirical Models and Variable Operationalization

Regional Expenditure (BD) is the dependent variable in this study, with the General Allocation Fund (DAU), Special Allocation Fund (DAK), Revenue-Sharing Fund (DBH), and Locally-generated Revenue (PAD) as the independent variables. To standardize data scales that differ across provinces, all variables are expressed in millions and then converted to natural logarithms (Ln). This study's panel data regression equation is derived from the following:

$$\ln BD_{it} = \beta_0 + \beta_1 \ln DAU_{it} + \beta_2 \ln DAK_{it} + \beta_3 \ln DBH_{it} + \beta_4 \ln PAD_{it} + \epsilon_{it} \quad (1)$$

Description	:	
$\ln BD_{it}$	:	The natural logarithmic value of the realization of provincial government Regional Expenditure in 2021–2025.
$\ln DAU_{it}$	:	The natural logarithmic value of the realization of the provincial government's General Allocation Fund in 2021–2025.
$\ln DAK_{it}$	:	The natural logarithmic value of the realization of the provincial government's Special Allocation Fund in 2021–2025.
$\ln DBH_{it}$	:	The natural logarithmic value of the realization of the provincial government's Revenue Sharing Fund in 2021–2025.
$\ln PAD_{it}$	:	The natural logarithmic value of the realization of the Provincial Government's Original Regional Revenue in 2021–2025.
β_0	:	Constant
$\beta_1 - \beta_4$	:	The regression coefficient of each independent variable
ϵ_{it}	:	Error components

Several steps are involved in processing data in EViews 14. To get a feel for the range of values for each variable, as well as their standard deviations, minimums, and maximums, descriptive statistics are the first step. The second step is to choose the best panel data estimation model from the three available options: random effects (REM), fixed effects (FEM), and common effects (CEM). A battery of tests, including the Chow, Hausman, and, if required, Lagrange Multiplier tests, are used to choose models.

In addition, a multicollinearity test was used to assess whether the independent variables in the regression model were highly correlated, and a heteroscedasticity test was used to assess whether residual variance differed significantly across observations. A model feasibility test was also conducted, which included a t-test to assess the partial influence of each independent variable, an F-test to assess the combined influence of all independent variables on regional spending, and a determination coefficient (R^2 and Adjusted R^2) to measure the extent to which the independent variables explained the variation of the dependent variables.

To identify the flypaper effect, this study does not rely solely on comparing the magnitudes and individual statistical significances of the regression coefficients for DAU, DAK, DBH, and PAD. Although coefficient magnitudes provide an initial indication, the statistical significance of individual coefficients does not establish whether two coefficients differ statistically. Therefore, a formal coefficient comparison test is employed to examine whether the effect of each government transfer variable on Regional

Expenditure is statistically greater than the effect of PAD. Specifically, the coefficient restrictions $\beta_{DAU} > \beta_{PAD}$, $\beta_{DAK} > \beta_{PAD}$, and $\beta_{DBH} > \beta_{PAD}$ are tested. The flypaper effect is considered to exist when the coefficient of a government transfer variable is statistically greater than that of PAD in a formal coefficient comparison test. Conversely, if the transfer coefficient is not statistically greater than the PAD coefficient, the results do not provide statistical evidence of a flypaper effect for that transfer variable.

4. Results and Discussion

4.1 Analysis Results

4.1.1 Descriptive Statistics

Table 1. Statistical description test results of variables

Description	lnBD	lnDAU	lnDAK	lnDBH	lnPAD
Mean	29.450	28.052	27.516	26.809	28.492
Maximum	31.255	29.093	30.019	29.826	30.862
Minimum	28.126	26.885	22.862	23.602	25.867
Std. Dev.	0.748	0.417	0.923	1.376	1.067
Observations	165	165	165	165	165

Source: EViews 14 Output, 2026

All research variables, including BD, DAU, DAK, DBH, and PAD, appear to have smaller standard deviations than their mean values, according to the statistical description in **Table 1**. In this scenario, data features across provinces tend to be uniform, with no dramatic variation, indicating that data dissemination is relatively modest. The greatest variation in data among all variables is observed in the income DBH, indicating substantial disparities in DBH income across provinces. The DAU, in contrast, has the lowest data fluctuation, leading to a more equitable distribution of DAU throughout the provinces. Consequently, the data used in this study are sufficiently high-quality and representative to warrant additional analysis using panel data regression.

4.1.2 Panel Data Regression Model Selection

The three primary methods for panel data regression are the CEM, the FEM, and the REM. To find the optimal model, we run a battery of tests, including the Chow Test, the Hausman Test, and, if necessary, the Lagrange Multiplier Test.

4.1.2.1 Test Chow

To compare the CEM with the FEM, researchers employ the Chow test. According to Basuki (2021), the Chow test uses a cross-sectional F-value greater than 0.05 as a decision criterion, whereas a value less than 0.05 is used to choose FEM models.

Table 2. Chow Test Results

Effects Test	Statistic	D.f.	Prob.
Cross-section F	21.904	(32.128)	0.000

Source: EViews 14 Output, 2026

The F-cross-sectional probability value was determined to be 0.000 based on the data in **Table 2**. This investigation rejects H_0 and accepts H_1 because the cross-sectional F probability value is less

than 0.05. The FEM was therefore selected as the optimal model. The Hausman Test is conducted because the chosen model is an FEM.

4.1.2.2 Hausman Test

According to Basuki (2021), the REM model is chosen for the Hausman test if the p-value is greater than 0.05, and the FEM model if it is less than 0.05.

Table 3. Hausman test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. D.F.	Prob.
Cross-section random	11.612	4	0.021

Source: EViews 14 Output, 2026

The probability value for the cross-sectional random model was 0.021, according to the Hausman Test results in **Table 3**. Hypothesis 0 is rejected, and Hypothesis 1 is accepted because the probability value is less than 0.05. Accordingly, the Fixed Effect Model is the superior choice. Since the FEM has been repeatedly shown to be the best model by the Chow and Hausman tests, we can conclude that the LM test is unnecessary. The LM test is used only to choose between the CEM and the REM; neither is the chosen model. Consequently, the panel data regression model used for further analysis in this work was the FEM.

4.1.3 Panel Data Regression Analysis with Fixed Effect Model Estimation

In this research, the results of the panel data regression utilizing the fixed-effects model are shown in **Table 4**.

Table 4. Panel data regression analysis with FEM estimates

Variable	Coefficient	Std. Error	T-Statistic	Prob.
C	3.624	1.749	2.072	0.040
InDAU	0.135	0.074	1.820	0.071
InDAK	0.117	0.020	5.873	0.000
InDBH	0.049	0.025	1.940	0.055
InPAD	0.615	0.036	17.194	0.000

Source: EViews 14 Output, 2026

It is possible to construct the following equation model using the coefficients obtained from panel data regression analysis using FEM estimation:

$$BD = 3.624 + 0.135 \cdot DAU + 0.117 \cdot DAK + 0.049 \cdot DBH + 0.615 \cdot PAD + \epsilon_{it}$$

The regression model estimate yielded a constant of 3.624, indicating that Regional Expenditure equals 3.624 when the DAU, DAK, DBH, and PAD variables are treated as constant or set to zero. Additionally, with all other variables held constant, a DAU regression coefficient of 0.135 shows that Regional Expenditure will rise by 0.135% for every 1% increase in DAU. Also, if DAK is already 0.117, a 1% increase in DAK will result in a 0.117% increase in Regional Expenditure. With a DBH coefficient of 0.049, for every 1% increase in DBH, Regional Expenditure increases by 0.049%. At the same time, PAD has a coefficient of 0.615, which indicates that, all else equal, Regional Expenditure will rise by 0.615% for every 1% increase in PAD.

4.1.4 Classic Assumption Test

Because panel data may take the form of both cross-sectional and time-series data, autocorrelation testing is not always necessary when doing regression analysis on panel data. Additionally, Yuliana *et al.*, (2026) note that the normality test is not essential. It was determined that the Fixed Effect Model was the most appropriate one for this research. According to Napitupulu *et al.*, (2021), the classical assumption test involves examining the presence of heteroscedasticity and multicollinearity.

4.1.4.1 Multicollinearity Test

In studies with several independent variables, this test is performed. One goal of this test is to find out how the variables are related to one another. According to Basuki (2021), multicollinearity does not exist when the correlation value is less than 0.85. There is no multicollinearity problem, as shown by the multicollinearity test in **Table 5**, which yields a correlation value of less than 0.85.

Table 5. Multicollinearity Test Results with FEM Estimation

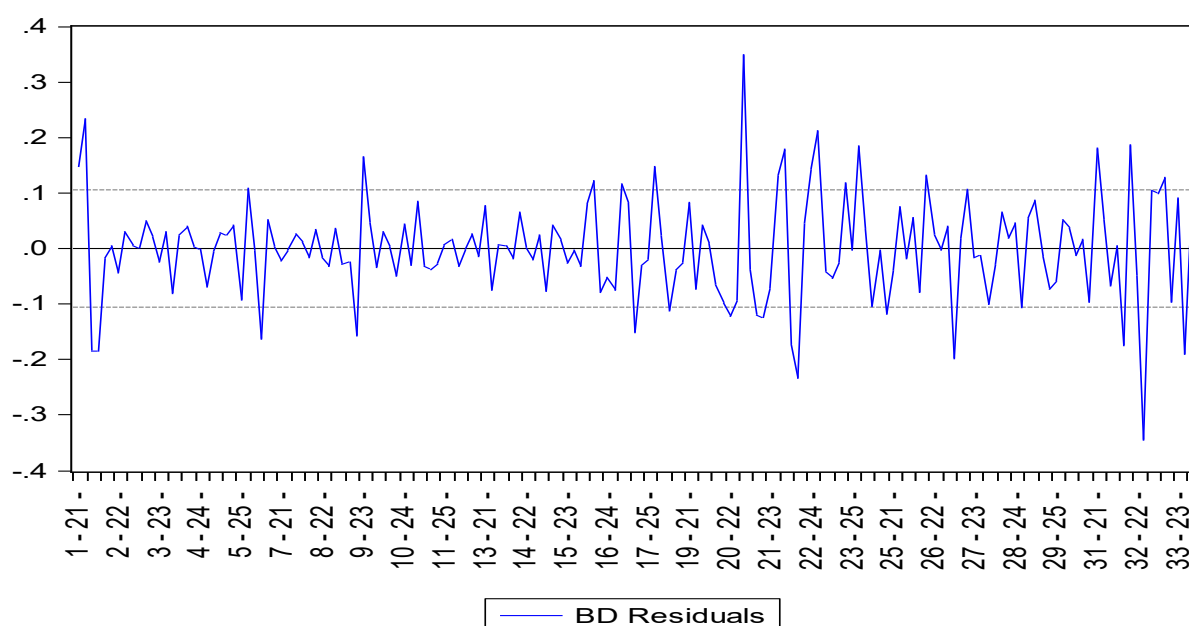
Variable	DAU	ROOF	DBH	PAD
DAU	1.000			
DAK	0.803	1.000		
DBH	0.222	0.339	1.000	
PAD	0.652	0.750	0.611	1.000

Source: EViews 14 Output, 2026

4.1.4.2 Heteroscedasticity Test

This test aims to determine how the residual variance varies across the regression model's data. The residual graph approach is one tool for detecting heteroscedasticity. The absence of heteroscedasticity is determined when the blue residual graph does not go beyond the 500 and -500 boundaries (Napitupulu *et al.*, 2021).

Figure 2. Heteroscedasticity test results with FEM estimation



Source: EViews 14 Output, 2026

No heteroscedasticity is present, as shown by the test results in Figure 2, which indicate that the residual graph does not exceed the limits (-500 and 500).

4.1.5 Hypothesis Test

Using a panel data regression method with a FEM approach, this study tested the hypothesis that Regional Expenditure in Indonesian Provincial Governments was affected by all variables over a 5-year (2021-2025) observation period.

Table 6. Results of Hypothesis Test with Fixed Effect Model

Variable	Coefficient	T-Statistic	Prob.
C	3.624	2.072	0.040
lnDAU	0.135	1.820	0.071
lnDAK	0.117	5.873	0.000*
lnDBH	0.049	1.940	0.055
lnPAD	0.615	17.194	0.000*
Adjusted R-squared	0.980		
F-statistic	227.949		
Prob(F-statistic)	0.000		

a. Dependent variable: Regional Expenditure

* Significant with $\alpha = 5\%$

Source: EViews 14 Output, 2026

The regression results in **Table 6** show that the model is jointly statistically significant, as indicated by an F-statistic of 227.949 with a probability value of 0.000. This indicates that DAU, DAK, DBH, and PAD are jointly associated with Regional Expenditure within the estimated Fixed Effect Model. The adjusted R-squared value of 0.980 indicates that the overall model has a very high explanatory capacity for Regional Expenditure in the observed panel data. However, this value should not be interpreted as meaning that 98% of the variation in Regional Expenditure is explained solely by DAU, DAK, DBH, and PAD. Because the model employs a Fixed Effects Model, the specification also includes province-specific fixed effects that capture time-invariant characteristics of each province. Therefore, the adjusted R-squared of 0.980 should be understood as the explanatory power of the overall FEM specification, rather than as the independent contribution of the four fiscal variables. The remaining unexplained variation is attributable to factors not captured by the model, including time-varying factors and the error component.

Table 7. Summary of Hypothesis Testing Process

Hypothesis	Testing Overview		Regression Coefficients		Conclusion
	Process	Remarks	Value	Directions	
H1 (DAU)	Prob (t-statistic) = 0.071 > $\alpha = 5\%$	Insignificant	0.135	Positive	Rejected
H2 (DAK)	Prob (t-statistic) = 0.000 < $\alpha = 5\%$	Significant	0.117	Positive	Accepted
H3 (DBH)	Prob (t-statistic) = 0.055 > $\alpha = 5\%$	Insignificant	0.049	Positive	Rejected
H4 (PAD)	Prob (t-statistic) = 0.000 < $\alpha = 5\%$	Significant	0.615	Positive	Accepted

a. dependent variable: Regional Expenditure (BD)

4.2 Discussion

While there is a positive correlation between the General Allocation Fund (DAU) and Regional Expenditure, the initial results indicate that this impact is not statistically significant. This indicates that although there is a correlation between DAU and Regional Spending, the correlation is not statistically significant. The direction of the weak link with regional expenditure is shown by the coefficient value of 0.135, which is clear. Additionally, the t-test results show that the DAU variable has no significant impact on the Regional Expenditure of the Provincial Government ($0.071 > 0.05$), supporting this conclusion. Based on these findings, it seems that the distribution of DAU to the provincial government does not always increase Regional Expenditure. The reason for this is that DAU is mostly used to cover operational expenses, such as those related to employees, products and services, flowers, and expenditures. As a result, a substantial rise in overall regional spending may not always be evident. Fikri *et al.*, (2020), Tandipuang *et al.*, (2025), and Widyawati *et al.*, (2023) all found that DAU has a significant positive effect on regional expenditure, contrary to these results. Nevertheless, DAU does not significantly impact Regional Expenditure (Fitriani & Hendaris, 2023; Pradipta & Jatmiko, 2018; Sofiyani & Subadriyah, 2020).

The second result demonstrates a favorable, statistically significant relationship between regional expenditure and the Special Allocation Fund (DAK). It is evident from the t-statistic results that the regression coefficient is 0.117 with a probability of 0.000, which is less than 0.05. This demonstrates that DAK is a funding source that local governments use to finance priorities on their top lists. Regional Expenditure, particularly for investments in healthcare, education, and infrastructure, is directly proportional to the size of the DAK that a certain local government receives. Previous studies by Farica & Wijaya (2023), Fitriani & Hendaris (2023), and Wira & Dewi (2023) have shown that DAK significantly affects Regional Expenditure, and our results consistently corroborate that. Nonetheless, this contradicts the findings of (Zulkarnain, 2023; Ginting *et al.*, 2025), which demonstrate that DAK does not significantly impact Regional Expenditure.

The third discovery demonstrates that Regional Expenditure is unaffected by the Revenue Sharing Fund (DBH). Probability findings using t-statistics indicate this is true ($0.055 > 0.05$). The regression coefficient of 0.049 indicates a positive association, suggesting that a rise in DBH tends to increase regional expenditure, although the effect is relatively small. This link is not statistically significant, however. Evidently, DBH has not been the primary factor in establishing the amount of Regional Expenditure, as this condition demonstrates. This is because regions are unable to consistently plan their expenditures based on DBH, since the amount of DBH differs among regions and its realization tends to vary, depending on state earnings from particular sectors (such as taxes and natural resources). Previous studies by (Aliu *et al.*, 2021; Citra & Jatmiko, 2018; Pradipta & Jatmiko, 2018) demonstrate a positive and substantial link to Regional Expenditure, which contradicts these results. The results are consistent with those of (Citra & Jatmiko, 2017; Farica & Wijaya, 2023), which found no significant influence of DBH on Regional Expenditure.

The fourth discovery indicates that Locally Generated revenue has a notable and favorable impact. The t-statistic ($p = 0.000 < 0.05$) and coefficient (0.615) corroborate this, indicating that the direction is both positive and significant. Research shows that, among all factors affecting regional spending, PAD has the greatest impact. The capacity of local governments to fund regional expenditures is directly proportional to their ability to collect regional taxes and levies, the fruits of segregated regional wealth management, and other lawful local income. This is a result of the region's growing financial autonomy, which gives local governments more leeway to choose expenditure based on

community needs. Locally-generated revenue significantly affects Regional Expenditure, according to this finding, which is consistent with studies by (Fikri *et al.*, 2020; Wulandari *et al.*, 2025; Sofiyani & Subadriyah, 2020). In contrast (Amalia *et al.*, 2015; Safaah *et al.*, 2022) found the opposite.

The four empirical results provide no evidence of a flypaper effect under the specification and observation period of this study. The comparison shows that PAD has the largest and statistically significant coefficient (0.615; $p = 0.000$), whereas DAK also has a positive and significant coefficient (0.117; $p = 0.000$), while DAU and DBH are statistically insignificant at the 5% level. These results indicate that PAD has the strongest statistical association with Regional Expenditure among the fiscal revenue variables included in the model. Overall, the results indicate that PAD has the strongest statistical association with Regional Expenditure among the fiscal revenue variables examined. However, this finding should not be interpreted as evidence of provincial fiscal independence, as the regression does not directly measure fiscal autonomy. Instead, the results indicate that PAD is more strongly associated with Regional Expenditure than with DAU, DAK, or DBH in the estimated model. Therefore, the absence of a flypaper effect should be interpreted as an empirical finding based on the relative coefficients, rather than as evidence that provincial governments are no longer dependent on central government transfers.

5. Concluding Remarks and Recommendation

Through an examination of the impact of DAU, DAK, DBH, and PAD on Regional Expenditure, this study seeks to determine whether the Flypaper Effect occurs on Indonesian Provincial Governments from 2021 to 2025. One or more inferences were drawn from the panel data regression findings. To start, Regional Expenditure is marginally and positively affected by the General Allocation Fund (DAU). Secondly, Regional Expenditure is positively and significantly impacted by the Special Allocation Fund (DAK). Thirdly, Regional Expenditure is positively impacted by the Revenue Sharing Fund (DBH), but this effect is not statistically significant. The fourth and most important factor is regional expenditure, which is positively and significantly influenced by Locally-generated revenue (PAD). This analysis finds no Flypaper Effect on Indonesian Provincial Governments from 2021 to 2025, based on a comparison of the regression coefficients between PAD and central government transfer payments (DAU, DAK, DBH). Regional Expenditure is primarily affected by the capacity of local governments to generate own-source revenue rather than by reliance on central government transfers. This is shown by the fact that PAD has a larger effect than other components of transfer funds. This research found that Locally Generated revenue (PAD) collection had a greater impact on regional expenditure in Indonesian provincial governments than central government transfers. These results highlight the significance of ongoing local government initiatives to maximize PAD sources, including regional taxes, levies, and asset management, to enhance fiscal independence further. In contrast, it is the responsibility of the central government to ensure that regional development continues to receive adequate funding through transfer programs. Consequently, better, more autonomous, and long-term regional financial management is anticipated to be achieved by the complementary efforts of enhancing regional fiscal capability and efficiently allocating transfer funds.

To properly understand the study's findings, one must take into account its many limitations. First, the study cannot be applied to district or municipal governments or to other time periods, as it focuses solely on the Indonesian Provincial Government and covers the 2021–2025 period. Second,

other factors, such as population, economic growth, poverty rate, and HDI, may also affect Regional Expenditure; however, this study considers only the impact of DAU, DAK, DBH, and PAD on Regional Expenditure. Thirdly, the characteristics of each region that may affect the management pattern of Regional Expenditure and the phenomenon of the Flypaper Effect cannot be fully described in this study, as it employs a panel data regression approach that emphasizes the quantitative relationships between variables.

Statement of Use of Generative AI

During the preparation of this work, the author used generative artificial intelligence tools to support the scientific writing process. Grammarly was used to check grammar, refine writing style, and improve clarity in scientific writing. All interpretations, analyses, and conclusions presented in this study are the sole responsibility of the author.

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