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The Influence of Central Government Transfers and Local Own-Source Revenue on Capital Expenditure in Regional Governments

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Abstract: This study aims to examine the effect of central government transfers and local own-source revenue on capital expenditure in 27 regencies and municipalities in West Java Province over the 2019–2023 period. The research employed a quantitative approach using multiple linear regression analysis, supported by statistical testing through t-test and F-test. The study used secondary data obtained from regional budget realization reports and the official website of the Directorate General of Regional Fiscal Balance, Ministry of Finance of the Republic of Indonesia. The findings indicate that both central government transfers and local own-source revenue have a positive and significant effect on capital expenditure. The adjusted R-squared value of 0.742 reveals that 74.2% of the variation in capital expenditure is explained by the two independent variables. These results suggest that increased local revenue enhances fiscal capacity, enabling local governments to finance long-term development projects without relying entirely on central transfers. Furthermore, the higher coefficient of local revenue compared to that of central transfers indicates that the flypaper effect did not occur during the study period. Overall, the findings affirm that the implementation of fiscal decentralization has begun to strengthen the fiscal independence of subnational governments, particularly in making more autonomous and productive capital expenditure decisions.

Keywords: Central Government Transfers, local own-source revenue, capital expenditure, Fiscal Federalism, Flypaper Effect.

INTRODUCTION

Indonesia's reform era marked the beginning of decentralization and regional autonomy, initiated through the enactment of Law No. 22 of 1999 on Regional Government and Law No. 25 of 1999 on Fiscal Balance between the Central and Regional Governments. These laws established the framework for the division of authority and fiscal responsibilities between levels of government. Regional autonomy serves as a strategic approach by the government to grant greater discretion to local administrations, particularly in fiscal matters. Through this mechanism, regional governments are expected to independently finance their own

expenditures and reduce reliance on the central government's budget (Hendaris, et al., 2021). This policy adopted the principle of money follows function, meaning that the delegation of authority must be accompanied by the allocation of funding sources (Fiawati, 2023). Fiscal decentralization is widely believed to enhance efficiency, accountability, and community empowerment through the delegation of fiscal authority to regional governments (Legler, 2020).

The policy has continued to evolve, most notably with the enactment of Law No. 1 of 2022 on the Financial Relationship between the Central Government and Regional Governments. This law grants greater authority to local governments in collecting taxes and user charges, emphasizes performance-based transfers, and regulates regional spending. Nevertheless, after more than two decades of implementation, substantial disparities in fiscal capacity remain among regions. According to Minister of Finance Regulation (PMK) No. 127 of 2024, only 10 out of 27 regencies/municipalities in West Java have high or very high fiscal capacity indices, while the remaining are categorized as moderate to very low, indicating significant fiscal inequality.

This disparity is evident in the low proportion of Own-Source Revenue (PAD) in many regions, which leads to high dependency on central government transfers. For instance, the City of Depok has a PAD ratio of 46.2%, whereas the Regency of Ciamis records only 10.52%. The low ratio of local own-source revenue (PAD) may occur due to the heavy reliance of most district and municipal governments on property tax collection as the primary source of funding for urban infrastructure and operations. This financial shortfall adversely affects growth and development, while also diminishing the economic potential of the districts and municipalities (Hartikayanti, et al., 2022). This dependence affects expenditure structure, where capital expenditures remain low and fiscal space is limited. In 2023, capital expenditure among regencies/municipalities in West Java amounted to only 12.11% of total regional spending, which falls below the national average of 17.31% (BPS, 2024).

This phenomenon is suspected to be caused by the flypaper effect, a situation in which local government expenditures respond more significantly to intergovernmental transfers than to internally generated revenue (Nurrahman et al., 2024). The flypaper effect arises when the coefficient of transfer funds (e.g., Special Allocation Fund/DAK) on capital expenditure exceeds that of PAD (Sania et al., 2024). Similarly, although both PAD and the General Allocation Fund (DAU) influence capital expenditure, DAU has a much stronger effect, indicating a higher dependence on central government transfers (Purnawati & Making, 2021).

The theory of fiscal federalism explains how the allocation of functions and financial resources across levels of government impacts efficiency, effectiveness, equity, and macroeconomic stability (Agrawal, 2024). In Indonesia, this theory is reflected in central government transfers to local governments such as DAU, DAK, and Revenue Sharing Funds (DBH) which aim to reduce vertical and horizontal fiscal imbalances and support public service delivery. However, in practice, the flypaper effect presents a challenge, as many local governments remain reliant on central funds rather than optimizing their own fiscal capacity.

Based on this context, this study aims to examine the existence of the flypaper effect in 27 regencies/municipalities in West Java Province during the 2019–2023 period, by analyzing the influence of Central Government Transfers and Local Own-Source Revenue (PAD) on Regional Capital Expenditure.

METHOD

This study adopts a quantitative research approach and was conducted across all administrative regions in West Java Province, encompassing a total of 27 regencies/municipalities. The sampling technique employed is non-probability sampling, specifically using a saturated sampling approach, in which the entire population was included

as the sample, resulting in 135 observational units. The research was carried out over a period extending from the proposal development phase in October 2024 to the completion of the final report in July 2025.

The data utilized in this study are secondary data on a ratio scale, collected through literature review and internet-based research. The dataset comprises budget information, budget realization, and the percentage of realization of the Regional Revenue and Expenditure Budget (APBD) over the period 2019–2023. All data were obtained from the official website of the Directorate General of Regional Fiscal Balance (DJPK), Ministry of Finance of the Republic of Indonesia, and from the financial reports of the 27 local governments in West Java Province.

The independent variables in this study consist of Central Government Transfers and Local Own-Source Revenue (PAD), while the dependent variable is Capital Expenditure. The analysis was conducted using multiple linear regression to predict how changes in the independent variables influence the dependent variable. Additionally, the coefficient of determination (R^2) was used to measure the extent to which the model explains variations in capital expenditure. Hypothesis testing included the use of the t-test for partial significance and the F-test for simultaneous significance. All statistical analyses were performed using IBM SPSS Statistics version 29.

To assess the presence of the flypaper effect, the study compares the regression coefficients of PAD and central government transfers. The flypaper effect is considered to occur when the coefficient of PAD is smaller than that of central government transfers. Conversely, if the PAD coefficient is larger, the phenomenon is deemed not to occur (Mendra et al., 2024).

RESULTS AND DISCUSSION

Descriptive Statistics

Table 1. Descriptive Statistical Value of Research Variables

Variables	N	Minimum	Maximum	Mean	Standard Deviation
Central Government Transfers (X1)	135	531 B	4.5 T	2.05 T	904 B
Local Own-Source Revenue (PAD) (X2)	135	101 B	3.96 T	911 B	867 B
Capital Expenditure (X3)	135	57 B	1.7 T	519 B	335 B

Source: Data Processed (2025)

Based on the results of descriptive statistical analysis presented in Table 1, which includes 135 observations from 27 regencies and municipalities in West Java Province, the data exhibit substantial variation across three key fiscal variables: Central Government Transfers, Locally-Generated Revenue (PAD), and Capital Expenditure. The average value of central government transfers was recorded at Rp2.015 trillion, with a minimum of Rp530.739 billion and a maximum of Rp4.501 trillion, accompanied by a standard deviation of Rp904.212 billion. The high standard deviation indicates a significant disparity in distribution across regions, likely influenced by fiscal needs, population size, and the presence of national strategic projects. The PAD variable shows an average of Rp911.746 billion, ranging from Rp100.745 billion to Rp3.968 trillion, with a standard deviation of Rp867.883 billion. This dispersion suggests substantial inequality in local fiscal capacity, shaped by regional economic structures, institutional capacity, and the breadth of the local tax and levy base. Certain regions, such as Bogor Regency, exhibit high PAD figures due to their strategic position as a metropolitan buffer zone and a strong economic base, whereas regions like Banjar City demonstrate lower

PAD performance due to limited area and population size (BPS, 2024). Meanwhile, capital expenditure averages Rp519.686 billion, with a minimum of Rp57.422 billion and a maximum of Rp1.701 trillion, and a standard deviation of Rp335.263 billion. This variability underscores the extent to which capital expenditure depends on the fiscal capacity of each region, whether sourced from PAD or central government transfers, ultimately contributing to disparities in infrastructure development across regions.

Multiple Linear Regression

Before proceeding with the multiple linear regression analysis, a series of classical assumption tests were carried out to ensure the validity and reliability of the regression model. These included the normality test, multicollinearity test, autocorrelation test, and heteroscedasticity test. The results of these diagnostic evaluations confirmed that the dataset satisfied all required assumptions, indicating that the data were suitable for further analysis using multiple linear regression techniques.

Based on the results of the multiple linear regression analysis, the following equation was obtained.

$$Y = 55.023.551.956 + 0,110X1 + 0,267X2$$

This equation can be interpreted as follows:

1. The constant value of Rp55,023,551,956 indicates that if both Central Government Transfers (X1) and Local Own-Source Revenue (LOSR/PAD/X2) are equal to zero, the predicted capital expenditure (Y) would amount to Rp55,023,551,956.
2. The regression coefficient for Central Government Transfers (X1) is 0.110, meaning that for every additional Rp1 in central transfers, capital expenditure is expected to increase by Rp0.11, holding other variables constant. The positive sign of the coefficient reflects a direct relationship, suggesting that higher fiscal support from the central government contributes to increased capital investment at the local level.
3. The regression coefficient for Local Own-Source Revenue (LOSR/PAD/X2) is 0.267, indicating that an increase of Rp1 in LOSR would lead to an increase of approximately Rp0.267 in capital expenditure, assuming all else remains constant. This positive relationship implies that stronger local revenue capacity enhances regional governments' ability to fund capital development independently.

The Coefficient of Determination

Based on the data processing results using IBM SPSS 29, the adjusted R-squared value is 0.742, indicating that approximately 74.2% of the variation in capital expenditure (Y) can be explained by the independent variables: central government transfers and local own-source revenue. This suggests that the regression model has strong explanatory power. The remaining 25.8% of the variation is attributed to other variables or external factors not included in the model, such as political priorities, institutional capacity, or region-specific development needs.

Hypothesis Test

Table 2. t-Test Results

Variables	t-statistic	Sig.
Central Government Transfers (X1)	6.055	<0,001
Local Own-Source Revenue (PAD) (X2)	14.168	<0,001

Source: Data Processed (2025)

Based on the results of hypothesis testing, the t-statistic for Central Government Transfers was found to be 6.055, which exceeds the critical t-table value of 1.656. Since the calculated t-value is greater than the critical value, it can be concluded that H_{01} is rejected and H_{a1} is accepted, indicating a statistically significant effect. Therefore, the first alternative hypothesis, which states that "Central Government Transfers have a significant positive effect on capital expenditure," is accepted.

These findings are consistent with previous studies, which indicate that the General Allocation Fund (DAU) and Special Allocation Fund (DAK) contribute significantly to financing physical development in regional areas (Purnawati & Making, 2021). Furthermore, in line with fiscal policy provisions, the schedule for transfer disbursements regulated under Minister of Finance Regulation No. 16 of 2024 provides certainty regarding the amount and timing of fund distribution. This enables local governments to design capital expenditures with more systematic and measurable fiscal planning. In addition, transfers from the central government serve as a fiscal equalization instrument, particularly for regions that have not yet achieved sufficient fiscal autonomy. Local governments with low fiscal capacity (especially those located outside metropolitan areas) remain highly dependent on intergovernmental transfers as their primary source of development financing (Fausi et al., 2021). The findings of this study are supported by previous research conducted by Purnawati & Making (2021), Angellia (2022), and Fikri et al. (2020), which also emphasize the critical role of fiscal transfers in strengthening local development capacity.

Furthermore, the t-statistic for Local Own-Source Revenue was recorded at 14.168, which also exceeds the critical t-table value of 1.656. As the t-statistic is greater than the critical value, it can be concluded that H_{02} is rejected and H_{a2} is accepted. Thus, the second alternative hypothesis, which states that "Local Own-Source Revenue has a significant positive effect on capital expenditure," is accepted. The findings of this study are supported by previous research conducted by Sania (2024), Angellia (2022), Sema & Riduwan (2021), and Purwanto, et. al. (2022).

The increase in Local Own-Source Revenue (LOSR) contributes to the expansion of local governments' fiscal capacity, thereby providing greater flexibility in designing and implementing productive development programs (Alfasyah et al., 2024). In addition, the substantial role of LOSR in financing capital expenditure reflects the degree of fiscal autonomy at the regional level, which serves as one of the key indicators in evaluating the effectiveness of fiscal decentralization policy implementation in Indonesia.

LOSR influences capital expenditure allocation through at least two important dimensions. First, in relation to fiscal capacity, higher LOSR enables broader fiscal space that can be allocated by local governments for various types of investment spending (particularly in fixed assets) without having to rely on transfers from the central government (Hidayati & Bawono, 2020). Second, in terms of public accountability, funds collected directly from local constituents exert greater pressure on local governments to allocate budgets toward development programs with tangible outcomes. One notable example is public infrastructure projects, which are often perceived as image-building initiatives by local governments (Hutagalung et al., 2022). Moreover, since bureaucratic accountability in the implementation of public interest programs is a non-negotiable obligation, it must be fulfilled to the public as the primary target group. The public consistently demands transparency and accountability throughout the budgeting process, given their direct stake in the outcomes of such programs (Hendaris & Siraz, 2020).

Moreover, based on the results of the F-test, the calculated F-statistic was 193.192, with a significance value of $p < 0.001$. This result was compared to the critical F-table value of 3.06. Since the calculated F-value is substantially greater than the critical value, it can be concluded that the null hypothesis (H_0) is rejected and the alternative hypothesis (H_a) is accepted,

indicating a statistically significant effect. Therefore, the alternative hypothesis stating that “Central Government Transfers have a significant positive effect on capital expenditure” is accepted.

The increase in fund allocations received from the central government through instruments such as the General Allocation Fund (DAU), Special Allocation Fund (DAK), Regional Incentive Fund (DID), and others along with the growth of Local Own-Source Revenue (LOSR) derived from regional taxes, service charges, and the management of regional assets, has encouraged local governments to expand spending in the areas of fixed asset procurement and long-term development projects. This response reflects behavioral patterns aligned with fiscal federalism theory, wherein each level of government mobilizes financial resources in accordance with its respective authority, thereby encouraging capital expenditure through both intergovernmental transfers and locally generated revenues.

The findings of this study indicate that both LOSR and central government transfers have a statistically significant effect on capital expenditure. This demonstrates that local governments are not solely dependent on fiscal transfers from the central government but are also progressively pursuing fiscal independence by optimizing local resource potential. This suggests that the principles of fiscal decentralization have been implemented consistently, whereby subnational governments are granted the autonomy to manage their revenues and expenditures based on region-specific development needs and priorities. The findings of this study are supported by previous research conducted by Sania (2024), Purnawati & Making (2021), and Sema & Riduwan (2021).

Ultimately, based on the research conducted on 27 regencies and municipalities in West Java Province for the period 2019–2023, the results indicate that the coefficient for Central Government Transfers is 0.110, while the coefficient for Local Own-Source Revenue (LOSR) is 0.267. This suggests that local governments are more responsive to increases in LOSR than to increases in central government transfers in terms of influencing the allocation of capital expenditure. These findings imply that, in general, the Flypaper Effect did not occur across the 27 local governments in West Java during the study period. The findings of this study are supported by previous research conducted by Junaedi & Masdjojo (2022), Ningsih, et. al. (2021), and Sema & Riduwan (2021).

Although the coefficient for LOSR is higher (indicating that locally generated revenue has a stronger influence on capital expenditure) the statistically significant coefficient for central government transfers remains noteworthy. It highlights the need for local governments to remain vigilant against over-reliance on intergovernmental transfers, particularly in regions with low fiscal capacity, where such dependency is more likely to occur (Septianingrum et al., 2025). This calls for sustained efforts to enhance local fiscal autonomy and strengthen the capacity of subnational governments to mobilize and manage their own revenue sources effectively.

CONCLUSION

The results of this study indicate that there are considerable disparities in the distribution of central government transfers, local own-source revenue (LOSR/PAD), and capital expenditure across the 27 regencies and municipalities in West Java Province. This is evidenced by the relatively high standard deviations observed in each variable, suggesting fiscal inequality among regions. Furthermore, both central government transfers and PAD were found to have a positive and statistically significant effect on capital expenditure, both individually and simultaneously. These findings imply that fiscal capacity at the local level plays a critical role in determining capital investment decisions.

The findings of this study imply the critical importance for local government to prioritize strategies aimed at enhancing the fiscal capacity of local governments in order to strengthen

financial autonomy. Strategic efforts such as optimizing local tax collection systems, diversifying sources of Local Own-Source Revenue (LOSR/PAD), and improving financial governance practices with a focus on transparency and accountability are essential measures to reduce dependence on central government transfers.

In addition, the regression analysis revealed that the coefficient of PAD is higher than that of central government transfers, indicating that local governments are more responsive in increasing capital expenditure when locally generated revenue rises. This pattern suggests that local governments in West Java are not overly reliant on central transfers for capital expenditure, thus confirming the absence of the flypaper effect across the 27 regencies and municipalities. These results underline the importance of strengthening local revenue generation to support sustainable fiscal independence and more effective capital spending.

Future research may further explore the allocation of capital expenditure through a qualitative approach, thereby providing a clearer and more specific depiction of expenditure patterns in relation to improvements in public service quality.

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