Analysis of the Impact of Transfer Funds and Local Revenue on Government Capital Expenditure in Regencies/Cities in West Java: Testing the Existence of the Flypaper Effect

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Abstract: *This study analyzes the impact of transfer funds (General Allocation Fund and Special Allocation Fund) and Local Revenue on Capital Expenditure in Regency / City of West Java Province during the period 2018 2022, as well as testing the existence of the flypaper effect phenomenon. Using secondary data from the Local Government Financial Statements and BPK Audit Reports of 18 Regencies and 9 Cities in West Java, this study uses panel data regression analysis with the Random Effect Model (REM). The results show that the General Allocation Fund has no significant effect on Capital Expenditure, although it has a positive effect. In contrast, the Special Allocation Fund and Regional Original Revenue both have a positive and significant effect on Capital Expenditure. Then the results of the analysis indicate that the flypaper effect occurs in the Regency / City of West Java Province. This is due to the coefficient of Special Allocation Fund, which has a significant influence and is more dominant than Local Own Revenue in influencing Capital Expenditure. These findings provide important insights for the formulation of regional fiscal policy to be more effective in promoting development and public services in West Java.*

Keywords: *General Allocation Fund, Special Allocation Fund, Local Revenue, Flypaper Effect*

Introduction

Equitable and sustainable economic development is a top priority for governments in many countries, including Indonesia. To achieve this goal, governments at various levels must play an important role in the management of financial resources and allocate them efficiently through various fiscal policy instruments. How local governments finance expenditures, especially capital expenditures, which impact the provision of infrastructure and public services in the long run, is one of the important components of local financial management. After implementing the centralization system, the central government experienced some difficulties in decision-making and was not proportionally transparent about national progress. The government tends to be authoritarian and focuses more on development in the center while ignoring progress in other regions, especially in regions far from the reach of the central government. As a result, there are gaps and inequalities between regions. Such a situation can have an impact on the country's overall economic growth and development. The shift from centralized governance in the reform era to decentralized governance in the context of regional autonomy has generated many new ideas about the legal map and regional development. Local governments can increase their role in development thanks to broad, real, and responsible authority. Local governments have the authority to determine development policy objectives in their respective regions. These objectives should be able to anticipate local problems, increase the empowerment and participation of local institutions, pay attention to the rights of local people more consistently, and accelerate general progress.

The government needs to have sufficient development funds from various sources of revenue to exercise this authority. Financing for regions does not only come from own-source revenues, but also from funds transferred by the central government in the form of Balance Funds, which consist of Special Allocation Funds, Revenue Sharing Funds, and General Allocation Funds. On the other hand, the general allocation fund is considered more flexible and is used more frequently than the other balancing funds. Therefore, the ideal DAU should support proper allocation and use. Regional autonomy results in fiscal decentralization, which is the transfer of fiscal power from the center to the regions. With this decentralization system, local governments are encouraged to discover and optimize the potential of each region. An increase in the capital expenditure budget can strengthen existing potential, so an adequate source of funds is needed. Wandira (2013) states that, in accordance with Law No. 33 of 2004 concerning Financial Balance between Central and Regional Governments, Regional Original Revenue (PAD) and Transfer Funds can be used as a source of funds for each region. In the context of regional financial management, Regional Original Revenue (PAD) and transfer funds from the central government have an important role in financing various development needs, including capital expenditures. Capital expenditures are expenditures intended to acquire fixed assets that have benefits for more than one budget period, such as infrastructure, equipment, and other public facilities. Investment through capital expenditure is expected to improve the quality of public services, encourage economic growth, and improve community welfare at the regional level.

However, the dynamics of the financial relationship between the central and local governments in the fiscal decentralization system do not always go according to theoretical expectations. One interesting phenomenon that is often the focus of regional finance studies is the flypaper effect. This effect shows that transfer funds from the central government tend to have a more significant influence on increasing local government spending compared to an increase in PAD by the same amount. This study aims to determine whether the flypaper effect phenomenon occurs in Regency / City governments in West Java Province, given the diverse fiscal characteristics and development needs in the region. Among Indonesia's provinces with the largest population and economic potential, West Java exhibits distinct fiscal dynamics. Understanding how PAD and transfer funds affect capital expenditure budget allocations in the province will provide valuable insights to formulate more efficient and effective fiscal policies and to improve the quality of development and public services at the local level. It is expected that this study will make an empirical contribution to the local finance literature in Indonesia, particularly regarding the testing of the flypaper effect in the context of capital expenditure in West Java Province.

Literature Review and Hypothesis Development

Regional Revenue

According to Law No. 33/2004 on Fiscal Balance, local revenue consists of two main sources: (1) Local Own-Source Revenue (PAD), which are funds collected by local governments in accordance with applicable laws and regulations. (2) Balancing Funds, which are part of the State Budget (APBN) allocated to meet regional needs. In addition, grants are also included as a source of regional income. Grants are non-binding assistance that can come from abroad, provided by the government to the regions through written agreements. The Balance Fund itself is divided into three types: General Allocation Fund (DAU), which aims to equalize financial capacity between regions. DAU is allocated to reduce financial disparities between regions by considering the needs and potential of each region. The total DAU is set at a minimum of 26% of the APBN Net Domestic Revenue. The amount of DAU for a region is determined by the "fiscal gap" (the difference between fiscal needs and regional fiscal capacity). Special Allocation Fund (DAK), intended to finance special activities or programs in certain regions that are national priorities, with a main focus on financing basic community service facilities and infrastructure that have not met standards or to accelerate regional development. Revenue Sharing Funds (DBH) are funds derived from APBN revenues that are distributed to regions with a certain percentage, the source of DBH comes from taxes and natural resources.

Capital Expenditure

According to Government Regulation No. 71/2010, capital expenditures are local government expenditures whose benefits last more than one fiscal year and significantly increase local assets. It is important to note that these capital expenditures may also lead to an increase in routine operational costs, for example in terms of maintenance. Through allocations in the annual APBD, local governments utilize capital expenditures to strengthen their fixed asset base. Therefore, the amount of annual capital expenditure needs to be adequate to improve the quality of public services and create long-term financial benefits. By increasing investment in capital expenditure, local governments are expected to strengthen service capabilities and encourage active community participation in local development. Increased capital expenditure also has the potential to increase community productivity and attract investment.

Flypaper Effect

The flypaper effect phenomenon was first coined by Courant, Gramlich, and Rubinfeld in 1979. The term was inspired by Arthur Okun's (1930) idea that "money sticks in place", similar to a fly caught in a paper trap. According to Oates (1999), the flypaper effect refers to a condition where local government expenditures far exceed the amount of transfer revenues and local own-source revenues. Meanwhile, Ginting (2020) defines the flypaper effect as a condition where local governments tend to be more expansive in spending, especially when using transfer funds from the central government or balancing funds, compared to utilizing Local Own Revenue (PAD), which reflects their internal financial capacity.

General Allocation Fund on Capital Expenditure

Based on Law No. 33/2004, the General Allocation Fund (DAU) is part of the State Budget (APBN) allocated to regions to support the implementation of decentralization. The minimum amount of DAU allocated must reach 26% of the APBN Net Domestic Revenue, and its distribution to each region is determined based on the calculation of basic allocations and fiscal gaps. A number of studies, including those conducted by Maimunah (2006), Kusumadewi and Rahman (2007), and Laksono and Subowo (2014), show that DAU has a positive correlation with increased regional spending. In particular, these studies found that DAU supports capital expenditure; the greater the DAU funds that local governments receive from the center, the greater their ability to allocate these funds to capital investment. The proportion of DAU sharing between provincial and district/municipal governments, as stipulated in Government Regulation No. 55/2005 on Balancing Funds, is determined through a formulation that takes into account the weight of each government's affairs. If quantitative determination of the proportion is not possible, the DAU share is set at 10% for provinces and 90% for districts/municipalities.

H_1: General Allocation Fund has a positive and significant effect on Capital Expenditure

Special Allocation Fund on Capital Expenditure

Based on Law No. 33/2004 and Government Regulation No. 55/2005, the Special Allocation Fund (DAK) is financial assistance from the State Budget (APBN) earmarked for specific regional activities, following technical guidelines and national development priorities. This regulation also requires regions receiving DAK to include counterpart funds in their Regional Budget (APBD), at least 10% of the total DAK allocation received. Regarding its impact, there are mixed findings regarding the effect of DAK on regional expenditure (BD). Some views suggest that DAK is positively correlated with BD, while Listiorini's (2012) study shows a negative relationship. On the other hand, Nurdini, Wiratno, and Farida (2014) concluded that DAK has no significant effect on BD. Nevertheless, this study hypothesizes that DAK has a positive influence on capital expenditure. The argument is that an increase in the amount of DAK received by local governments from the central government will increase the financial capacity of the regions to allocate funds to capital expenditure items. In other words, the more DAK received, the greater the opportunity for local governments to invest in infrastructure development and other long-term assets.

H_2: Special Allocation Fund has a positive and significant effect on Capital Expenditure

Local Revenue and Capital Expenditure

According to Law No. 33/2004, local own-source revenue (PAD) is a very important source of revenue for local governments. PAD comes from various components, such as local taxes, local levies, the results of the management of separated local assets, as well as other legitimate PAD sources. All of these revenues are legally recognized and regulated through applicable Regional Regulations, while still complying with existing laws and regulations in Indonesia. In the context of this research, it is hypothesized that PAD has a positive impact on Capital Expenditure. This hypothesis is supported by various previous studies, including the works of Kasumadewi and Rahman (2007), Mentayani et al. (2012), Nurdini et al. (2014), and Hediyanto and Rahayu (2016), which consistently show a positive relationship between PAD and Regional Expenditure. The basic logic is that the higher the PAD obtained by a region, the greater its financial ability to allocate funds for long-term investment, one of which is reflected in an increased allocation for Capital Expenditure. Thus, an increase in own-source revenue directly contributes to a region's capacity to finance the development of infrastructure and other important assets.

H_3: Local Revenue has a positive and significant effect on Capital Expenditure.

Flypaper Effect Phenomenon

Oates (1999) explains that the "flypaper effect" arises when local governments (LGs) show a greater expenditure response to transfers from the central government than their local revenues. This phenomenon has attracted the attention of many researchers, as shown by Kusumadewi and Rahman (2007). They found that various studies on the response of local governments to central government transfers often show behavioral differences in the management of transfer funds compared to their revenues. However, not all regions experience this effect. For example, Mentayani et al (2012) concluded that districts/cities in South Kalimantan did not show the flypaper effect. Research by Hediyanto and Rahayu (2016) in Bandung City also found similar results. They proved that the effect of the General Allocation Fund (DAU) on Regional Expenditure (BD) in Bandung City is smaller than the effect of Regional Original Revenue (PAD) on Capital Expenditure, which indicates that the flypaper effect does not occur in the region. It is important to note that the results of this study cannot be generalized to all regions of Indonesia. Each region has unique characteristics that vary in terms of economic, demographic, and geographical conditions, so the response to fund transfers may differ. Based on this background, this study specifically tests the hypothesis that the flypaper effect phenomenon occurs in district/municipal governments in West Java Province. The flypaper effect will be considered to occur if the coefficient of one or both of the transfer funds, namely the General Allocation Fund (DAU) and the Special Allocation Fund (DAK), has a greater value on Capital Expenditure than the coefficient of Regional Original Revenue (PAD).

H_4: There is a flypaper effect in the capital expenditure response of local governments in West Java.

Research Method

This research represents an extensive and comprehensive quantitative study meticulously crafted to rigorously test various hypotheses associated with fiscal dynamics within local governments. The primary objective of this study is to unravel and comprehend the intricate and multifaceted relationships that exist between the General Allocation Fund (Dana Alokasi Umum - DAU), Special Allocation Fund (Dana Alokasi Khusus - DAK), and Regional Original Revenue (Pendapatan Asli Daerah - PAD) in relation to capital expenditure undertaken by local governments. By delving deep into these fiscal interconnections, the study aims to provide a clearer understanding of how different revenue streams influence government spending on infrastructure and public development projects.

To achieve this objective, the researcher employs meticulously gathered secondary data sourced exclusively from credible and authoritative official documents. These include the Audit Report (Laporan Hasil Pemeriksaan - LHP), which provides critical evaluations of financial activities; the Local Government Financial Statements (Laporan Keuangan Pemerintah Daerah - LKPD), offering detailed records of fiscal transactions; and the Budget Realization Reports (Laporan Realisasi Anggaran - LRA), which track budget implementation and fund utilization. The data is collected from various districts and cities within the West Java Province, encompassing a diverse range of administrative settings. Covering a comprehensive five-year period from 2018 to 2022, the dataset includes financial information from a total of 27 administrative regions—comprising 18 regencies and 9 cities. This carefully chosen timeframe is intended to capture evolving trends, cyclical patterns, and fiscal behaviors over time, thereby providing robust insights into the allocation and management of financial resources within these local governments.

The core variables under investigation in this research are DAU, DAK, PAD, and Capital Expenditure. The analytical process commences with descriptive statistical techniques intended to offer a solid foundational understanding of the dataset. This involves calculating and presenting key statistical measures such as minimum and maximum values, which highlight the range of the data; mean averages, which represent central tendencies; and standard deviations, which measure the dispersion and variability within the data. These descriptive statistics help summarize the essential characteristics of the data, offering initial revelations about fiscal trends and disparities among different administrative regions.

The cornerstone of the study's methodology is the application of panel data regression analysis, a sophisticated statistical technique well-suited for analyzing data that spans both cross-sectional and time-series dimensions. Within this framework, the Random Effect Model (REM) is utilized, selected after conducting diagnostic tests such as the Hausman Test and the Lagrange Multiplier Test, which help determine the appropriateness of the REM over alternative models. This methodological approach is particularly effective in discerning the impact of independent variables—DAU, DAK, and PAD—on the dependent variable, Capital Expenditure. By employing this model, the study aims to uncover nuanced relationships and causal links between different fiscal factors.

Results

Descriptive Statistics

The descriptive statistical analysis in Table 1 provides a comprehensive overview of the central tendency, dispersion, and distribution of four essential financial variables utilized within this research, specifically the General Allocation Fund (DAU - X1), Special Allocation Fund (DAK - X2), Regional Original Revenue (PAD - X3), and Capital Expenditure (BM - Y). The analysis is based on a total of 135 observations, representing diverse regional financial conditions within the scope of this study. Such a robust sample ensures the reliability and generalizability of the statistical inferences and subsequent hypothesis testing.

The General Allocation Fund (DAU - X1), allocated by the central government, exhibits significant dispersion across the sampled regions. The recorded values span from a minimum of Rp 1,096,895,278 to an exceptionally higher maximum value of Rp 3,467,005,521,000. The calculated mean is Rp 1,115,357,355,792.85, indicative of a relatively high allocation on average, while the substantial standard deviation of Rp 497,269,312,092.03 underscores considerable variations in fund allocation among different local governments. This variability potentially reflects disparities in regional needs, fiscal capacities, and socio-economic characteristics influencing central governmental transfers.

Table 1. Descriptive Statistic

Deskripsi	General Allocation Fund (DAU) - (Rp)	Special Allocation Fund (DAK) - (Rp)	Regional Original Revenue (PAD) -(Rp)	Capital Expenditure (BM) - (Rp)
Maximum	3.467.005.521.000	1.393.164.902.265	3.761.911.243.274	1.701.254.453.289
Minimum	1.096.895.278	174.625.866	26.008.013.057	2.993.281.680
Std. Dev	497.269.312.092,03	224.234.573.025,71	810.483.150.231,41	330.526.062.507,85
Mean	1.115.357.355.792,85	406.147.698.117,17	819.619.426.694,91	517.380.199.893,156
Obs (N)	135	135	135	135

Similarly, the Special Allocation Fund (DAK - X2), intended to finance specific regional projects and priorities, demonstrates noteworthy variability across the observed administrative units. This fund's distribution varies widely, with the minimum allocation being Rp 174,625,866 and the maximum allocation significantly higher at Rp 1,393,164,902,265. The mean for this variable is Rp 406,147,698,117.17, paired with a relatively high standard deviation of Rp 224,234,573,025.71. Such significant heterogeneity underscores different regional priorities, project scales, and varying central government strategies for addressing specific development gaps and targeted local needs.

Regional Original Revenue (PAD - X3) serves as a measure of regional fiscal autonomy and economic capacity, showing extensive disparities among the sampled local governments. The lowest observed value of PAD is Rp 26,008,013,057, while the highest reaches Rp 3,761,911,243,274. The computed mean revenue stands at Rp 819,619,426,694.91, whereas the standard deviation amounts to Rp 810,483,150,231.41, signifying pronounced variation among regions. This variability likely reflects differences in economic conditions, resource endowment, local tax collection efficiency, investment attractiveness, and overall economic development across administrative regions, highlighting the varying capacities to generate autonomous fiscal resources.

Lastly, Capital Expenditure (BM - Y), as the dependent variable reflecting the extent of governmental investment in public infrastructure and regional development projects, similarly portrays considerable variation. Capital expenditures range from a minimum of Rp 2,993,281,680 to a significantly higher maximum of Rp 1,701,254,453,289. The mean capital expenditure of Rp 517,380,199,893.16 and standard deviation of Rp 330,526,062,507.85 indicate notable variability in capital investment activities across local governments. This finding may illustrate regional discrepancies in infrastructure requirements, policy priorities, budget execution efficiency, and institutional capacity to effectively channel financial resources into productive investments.

Collectively, these descriptive insights provide crucial empirical context and establish a foundation for advanced inferential analyses. They facilitate a robust understanding of fiscal dynamics by illuminating underlying disparities in financial resource allocation and spending patterns across local governments. Such information is pivotal to comprehending the subsequent impact and relationships between DAU, DAK, PAD, and local governments' capital expenditure decisions, further advancing scholarly discourse on regional public finance and fiscal decentralization.

Panel Data Regression Analysis

Table 2 presents the empirical outcomes derived from panel data regression analysis employing the Random Effect Model (REM), which was selected due to its appropriateness for accommodating individual heterogeneity across sampled local governments. This regression analysis seeks to quantify and rigorously examine the relationships among General Allocation Fund (X1), Special Allocation Fund (X2), Regional Original Revenue (X3), and their collective impact on Capital Expenditure (BM Y), representing investment expenditures by regional governments. Such analysis facilitates a deeper understanding of how central and regional fiscal transfers influence local developmental spending priorities.

Table 2. Panel Data Regression Analysis with Random Effect Model (REM)

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.19E+11	4.55E+10	2.625536	0.0097
X1	0.044740	0.045930	0.974084	0.3318
X2	0.304611	0.103937	2.930717	0.0040
X3	0.273817	0.023094	11.85639	0.0000

R-squared	0.617877	Mean dependent var	5.17E+11
Adjusted R-squared	0.609126	S.D. dependent var	3.31E+11
S.E. of regression	2.07E+11	Akaike info criterion	54.97559
Sum squared resid	5.59E+24	Schwarz criterion	55.06167
Log likelihood	-3706.852	Hannan-Quinn criter.	55.01057
F-statistic	70.60719	Durbin-Watson stat	1.582788
Prob(F-statistic)	0.000000		

The constant term (C) of the regression model has a coefficient value of approximately 1.19E+11, which is statistically significant at the 1% significance level (t-statistic = 2.625536; p-value = 0.0097). This result indicates the presence of a substantial base level of capital expenditures independent of variations in DAU, DAK, and PAD. Thus, even without adjustments or increments in the specified independent variables, local governments exhibit a foundational degree of commitment to capital investments, possibly driven by mandated minimum expenditure levels or entrenched regional developmental obligations.

Regarding the General Allocation Fund (DAU – X1), the analysis yields a positive coefficient of 0.044740. Despite the positive association, this coefficient does not achieve statistical significance (t-statistic = 0.974084; p-value = 0.3318), suggesting that variations in DAU do not exert a meaningful influence on capital expenditures within the studied regions. This insignificance may imply that DAU allocations are predominantly utilized for routine operational expenses rather than being directly channeled into investment projects. It further suggests a limited discretionary capacity or flexibility for regional governments to allocate general-purpose funds towards capital-intensive developmental activities.

In contrast, the Special Allocation Fund (DAK – X2) demonstrates a notably significant positive influence on Capital Expenditure with a coefficient of 0.304611, statistically significant at the 1% level (t-statistic = 2.930717; p-value = 0.0040). This finding underscores that increased levels of DAK, which are intended explicitly for funding targeted development projects and regional priorities, directly stimulate enhanced capital investment. The statistically significant result confirms the effectiveness of DAK in meeting specific infrastructure and developmental goals, reinforcing the critical role of targeted central government allocations in fostering local development initiatives and addressing regional infrastructural disparities.

Similarly, Regional Original Revenue (PAD – X3), representing the autonomous fiscal capacity of regions, also positively and significantly influences capital expenditures, evidenced by a coefficient of 0.273817, highly significant at the 1% level (t-statistic = 11.85639; p-value = 0.0000). This statistically robust result emphasizes the importance of fiscal autonomy and local revenue-generating capability in determining the extent and scale of capital expenditure decisions. Enhanced PAD implies greater flexibility and increased local capacity to finance development projects, thereby reflecting the efficacy of regional self-reliance and internal revenue mobilization as integral components of local financial management and infrastructure expansion.

Evaluating the overall model performance, the coefficient of determination (R-squared) is reported at 0.617877, indicating that approximately 61.79% of the variance observed in capital expenditure is systematically explained by the three predictor variables included in the model (DAU, DAK, and PAD). This result signifies a robust explanatory power, providing substantial confidence in the model's capacity to represent the underlying fiscal dynamics affecting regional expenditure decisions. Additionally, the adjusted R-squared value, at 0.609126, corroborates the robustness of the model by accounting for the degrees of freedom associated with the predictors.

The overall model significance is conclusively established through the F-statistic of 70.60719, which is significant at the 1% level (Prob(F-statistic) = 0.000000). This statistically significant F-test underscores that the specified explanatory variables jointly exert a significant influence on the dependent variable. The model's validity is further supported by diagnostic measures, including the Durbin-Watson statistic of 1.582788, suggesting an absence of serious autocorrelation issues within the residuals, thus confirming the reliability and appropriateness of the Random Effect Model in capturing the regional fiscal dynamics analyzed in this study.

Collectively, the regression outcomes provide compelling evidence highlighting the differential impacts of various funding sources on local government capital expenditure. Specifically, the results confirm that targeted governmental allocations (DAK) and autonomous regional revenues (PAD) are crucial and significant drivers of capital investment decisions, whereas general governmental transfers (DAU) appear less impactful. These insights carry important implications for policymakers and regional administrators, emphasizing the critical role of fiscal autonomy and targeted fiscal policy in optimizing regional capital investment and infrastructure development.

Discussion

The Effect of General Allocation Fund on Capital Expenditure in Districts/Municipalities

The analysis indicates that variations in the General Allocation Fund (DAU) do not significantly influence capital expenditures among the local governments examined. Although theoretically DAU allocations are designed to strengthen fiscal autonomy and flexibility for regional governments, the empirical findings suggest that these resources tend to be absorbed into routine administrative and operational expenses rather than being strategically invested in long-term development initiatives. This lack of significant association points to a potential gap between policy intent and actual practice, where local governments may prioritize immediate financial responsibilities over capital-intensive development activities aimed at enhancing regional economic growth.

Several contextual factors could account for the limited influence of DAU on regional capital spending. Primarily, local governments are often confronted with substantial fixed or obligatory expenditures, such as personnel wages, operational costs, maintenance of existing public infrastructure, and fulfillment of statutory responsibilities. Such compulsory budget allocations significantly reduce discretionary financial capacity, leaving limited resources available for initiating or expanding capital projects. Additionally, strict budgetary frameworks and rigid regulatory policies governing financial management might further constrain the flexibility of local authorities, preventing effective channeling of DAU into developmental investments.

The observed outcome may also highlight underlying inefficiencies or suboptimal fiscal management practices within regional governance structures. General-purpose intergovernmental transfers, such as DAU, are specifically designed to enhance regional financial independence and encourage proactive development activities. However, their predominant utilization for recurrent expenditures rather than long-term investment suggests potential misalignment with intended policy objectives. Addressing this issue may require targeted interventions by policymakers, including the introduction of explicit guidelines, enhanced monitoring, and incentive-based mechanisms to ensure that regional governments allocate substantial proportions of these transfers toward strategic capital projects. Such measures would facilitate improved alignment between fiscal resources and developmental priorities, ultimately supporting sustainable regional economic advancement.

Furthermore, the lack of a meaningful relationship between DAU and capital expenditure underscores the necessity of exploring supplementary or alternative funding mechanisms specifically aimed at promoting capital investments. Conditional transfers, earmarked funds, or performance-based fiscal instruments represent potential solutions that could explicitly direct financial resources toward developmental objectives. In addition, future research should delve deeper into understanding the administrative, institutional, and political factors influencing DAU allocation patterns. Comprehensive investigations into these dimensions may reveal systemic inefficiencies or structural barriers that hinder the optimal utilization of general-purpose funds, thereby guiding policy refinements to enhance regional economic development and infrastructural sustainability.

The Effect of Special Allocation Fund on Capital Expenditure in Districts/Municipalities

In contrast to the General Allocation Fund (DAU), the Special Allocation Fund (DAK) exhibits a robust and statistically significant positive influence on capital expenditure. The significant relationship implies that increased allocations of DAK, which are explicitly earmarked for specific development projects and priority infrastructure needs, effectively stimulate regional governments' capital investment activities. This evidence aligns with the intended policy objectives behind DAK allocations, confirming their critical role in directly facilitating regional infrastructure development and targeted economic growth.

The positive and significant impact of DAK can be primarily attributed to its conditional nature, whereby allocated funds are explicitly tied to predetermined developmental objectives and project-specific deliverables. Such conditionalities ensure that local governments use these resources strategically for capital-intensive projects, including infrastructure expansion, healthcare facilities, educational institutions, and other development-oriented activities. Consequently, regional disparities and infrastructure gaps can be effectively reduced through targeted investments financed by DAK, thus achieving greater coherence between central government priorities and local developmental needs.

Furthermore, these results highlight the comparative effectiveness of targeted funding mechanisms in achieving clear developmental outcomes. Unlike general-purpose transfers, the targeted and conditional characteristics of DAK funds mitigate risks of diversion or inefficient utilization of resources. This structured approach enhances transparency and accountability, thereby ensuring that financial resources provided by the central government directly translate into tangible, long-term regional infrastructure enhancements and socioeconomic benefits.

Given these findings, policymakers might consider reinforcing the strategic use of conditional allocations like DAK to ensure sustained investment in critical regional infrastructure. Moreover, future research should further investigate the specific types of projects that most effectively utilize DAK resources, assessing their long-term socioeconomic impacts on regional development and growth. Such insights would support the refinement of allocation criteria and enhance the overall efficacy of central-local government fiscal coordination, thereby strengthening regional economic resilience and reducing infrastructure disparities.

The Influence of Regional Original Revenue on Capital Expenditure in Districts/Municipalities

The analysis also reveals a strong positive association between Regional Original Revenue (PAD) and capital expenditures, highlighting the critical role of fiscal autonomy and regional revenue-generating capabilities in local government investment decisions. The observed significant relationship emphasizes that regions with enhanced capacities to generate internal revenues are better positioned to finance and sustain capital-intensive developmental projects independently. Consequently, higher PAD not only increases local governments' financial flexibility but also allows for strategic and responsive allocation of resources toward infrastructure development, ultimately stimulating regional economic growth.

This significant finding underscores the efficacy and importance of local financial autonomy in achieving targeted development outcomes. Regions capable of independently mobilizing resources have greater discretion and flexibility in planning and executing projects tailored specifically to local developmental needs. Unlike transfers from the central government, internally generated revenues enable regional authorities to act swiftly, strategically, and adaptively to evolving regional priorities without relying extensively on external conditionalities or central government directives. Thus, enhanced PAD translates directly into more effective financial planning, infrastructure expansion, and improved responsiveness to regional socioeconomic objectives.

Furthermore, the robust relationship between PAD and capital expenditures reflects the broader policy implications of strengthening regional financial independence. Policymakers should prioritize initiatives aimed at enhancing regional fiscal self-sufficiency through measures such as improved local tax collection systems, diversified revenue sources, and the strengthening of institutional governance structures. By bolstering regional revenue capacities, local governments can systematically increase their investment in critical infrastructure and economic development projects, thereby reducing dependency on central transfers and fostering sustainable regional economic resilience.

The significant influence of PAD on capital expenditures highlights the need for policy interventions focused on enhancing local revenue generation mechanisms and fiscal governance frameworks. Future research could further explore the specific strategies and institutional practices that successfully augment local fiscal autonomy and examine how variations in PAD allocation affect long-term regional development outcomes. Such investigations would offer valuable insights for policymakers seeking to optimize local financial management, ultimately supporting balanced and sustained regional growth.

Flypaper Effect Analysis

The fourth hypothesis of this research is confirmed, highlighting the presence of the "flypaper effect" in the capital expenditure patterns of regencies and municipalities within West Java. The term "flypaper effect" refers to a fiscal phenomenon where funds from external transfers tend to "stick" where they are allocated, having a stronger impact on government spending compared to locally generated revenues. In the context of this study, the focus is on two primary transfer funds: the General Allocation Fund (Dana Alokasi Umum - DAU) and the Special Allocation Fund (Dana Alokasi

Khusus - DAK), and their influence relative to the Regional Original Revenue (Pendapatan Asli Daerah - PAD).

The regression analysis conducted in this study reveals that the coefficient for DAK surpasses both DAU and PAD, underscoring its significant and positive impact on capital expenditure. This outcome aligns with the inherent characteristics of DAK, which is earmarked for specific purposes, predominantly capital investments. The designated nature of DAK restricts local governments from reallocating these funds for other uses, thereby ensuring that they are channelled directly into capital projects. This automatic alignment with capital expenditure explains the pronounced effect observed.

Conversely, DAU is structured as a block grant, offering greater flexibility in its utilisation. Local governments often allocate DAU to cover essential operational costs and basic services that are not sufficiently funded by PAD. These expenditures include employee salaries, routine maintenance, and fundamental public services. The flexible nature of DAU leads to its diversion towards recurrent expenses, thus diminishing its relative impact on capital expenditure. This is reflected in the regression results, where the DAU coefficient is both low and statistically insignificant.

Furthermore, PAD, which represents locally generated revenue, shows a limited effect on capital expenditure. This could be attributed to the constraints in local revenue generation capacities, compelling local governments to rely more heavily on transfer funds like DAK and DAU. The differential impacts of these funds highlight the dependency of regional capital expenditure on specific allocation funds, reinforcing the flypaper effect within West Java's fiscal framework.

Conclusion

Key findings highlight that Regional Original Revenue (PAD) exerts a positive and significant influence on capital expenditure. This correlation implies that an increase in PAD empowers local governments to allocate more funds for infrastructure development, including roads, public facilities, and other long-term assets aimed at enhancing community welfare. The study underscores that optimising PAD, particularly through the robust performance of local taxes and levies driven by local economic growth, directly bolsters the capability for capital investments.

Moreover, the Special Allocation Fund (DAK), sourced from the State Budget (APBN) and designated explicitly for regional development, also demonstrates a notable and significant contribution to capital expenditure. This fund is crucial as it targets national priority projects and addresses urgent needs within local governments. The significant impact of DAK suggests that regions utilise these funds extensively to augment governmental fixed assets, such as constructing healthcare facilities, educational institutions, and transportation infrastructure, thereby improving public service delivery.

In contrast, the General Allocation Fund (DAU) exhibits a positive but insignificant impact on capital expenditure. Although DAU is designed to support the comprehensive fiscal needs of local budgets, its flexible nature often results in allocations for operational expenses rather than capital projects. These may include routine maintenance, administrative costs, and employee salaries. The adaptability of DAU enables its diversion to support immediate necessities such as disaster relief or non-infrastructure-related priorities. Consequently, the study reveals that DAU's influence on driving capital expenditure remains minimal compared to PAD and DAK.

An intriguing phenomenon identified in this research is the flypaper effect, observed within the context of capital expenditures in West Java's regencies and municipalities during the study period. This effect occurs when the coefficient of transfer funds—either DAU or DAK—is greater than that of PAD concerning their impact on capital expenditure. The findings suggest that local governments in West Java respond more significantly to DAK transfers than to their own PAD capacities when determining capital expenditure allocations.

Recommendation

Future research in the area of fiscal policy and capital expenditure can be significantly enhanced by extending the time series of analysis. By doing so, researchers will be able to capture a more comprehensive picture of how transfers and own-source revenue influence capital expenditure over a longer period. For instance, analyzing data spanning more than five years can help identify long-term trends, cyclical patterns, and structural shifts that may not be evident in shorter periods. This extended timeframe allows for the observation of how economic cycles, policy changes, and external factors impact the relationship between revenue sources and capital expenditure, thus providing more robust and insightful conclusions.

Additionally, the current study has primarily focused on DAU (General Allocation Fund) and DAK (Special Allocation Fund) as the independent variables representing transfer funds. However, there are other potential independent variables that could significantly influence capital expenditure, such as the Sharing Fund (DBH). Future research should consider incorporating these additional variables to provide a more holistic understanding of the factors affecting capital expenditure. By broadening the range of independent variables, researchers can uncover nuanced relationships and interactions that may have been overlooked in studies with a narrower focus.

Another valuable approach for future studies is the consideration of grouping or clustering research subjects. This can be particularly beneficial when analyzing data at the district or city level, where economic, demographic, and geographic characteristics can vary widely. Categorizing regions based on their typology—such as urban, rural, industrial, or tourism areas—can offer deeper insights into how these specific contexts influence the response of capital expenditure to different revenue sources. Such typological distinctions can highlight unique patterns and trends that are specific to certain types of regions, thereby enriching the overall analysis.

Furthermore, examining the level of regional independence based on the capacity of locally generated revenue (PAD) can provide critical insights. Dividing regions according to their level of fiscal independence, such as the proportion of PAD to total revenue, may reveal significant differences in capital expenditure allocation behavior. For example, regions with high PAD may exhibit more flexible and autonomous capital expenditure patterns, as they are less reliant on external transfer funds. Conversely, regions heavily dependent on transfer funds might display more constrained and uniform expenditure behaviors. This differentiation can help policymakers tailor fiscal strategies that are sensitive to the unique financial dynamics of each region.

In conclusion, extending the time series of analysis, incorporating a broader range of independent variables, and employing clustering techniques based on regional characteristics and fiscal independence are all promising avenues for future research. These approaches will not only enhance the depth and breadth of fiscal policy studies but also provide more targeted and actionable insights for policymakers and stakeholders.

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