

Who Absorbs Fiscal Adjustment? Transfer Composition and Local Budget Adaptation in Indonesia

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Abstract

This study examines how changes in the scale and composition of intergovernmental transfers are associated with patterns of fiscal adjustment across local government expenditure in Indonesia. It compares three contrasting fiscal episodes: the 2020 emergency adjustment, the 2025 policy-induced transfer recomposition, and the 2026 budget-year adjustment. The analysis combines harmonized aggregate regional budget and intergovernmental transfer data for 2019–2026 with accounting decomposition, structured pattern comparison, and policy-document triangulation. Fiscal adjustment was distributed unevenly across expenditure categories. In 2020, capital expenditure declined by 28.02%, compared with 3.03% for personnel expenditure. In 2025, a 0.91% increase in the aggregate central transfer allocation concealed substantial changes across individual transfer instruments, including a 65.35% reduction in physical special allocation funds, while realized capital expenditure declined by 20.80% and personnel expenditure increased by 3.83%. The 2026 budget displays a similar planned pattern, with capital expenditure declining by 29.55%, compared with 1.18% for personnel expenditure. Conceptually, the study develops a composition-sensitive fiscal adjustment framework that distinguishes directly observed fiscal dimensions from conditioning concepts. For public financial management, it proposes a scale–composition–incidence assessment lens. The evidence identifies recurring descriptive correspondences but does not establish statistical associations or causal effects between individual transfer instruments and expenditure categories.

Keywords: intergovernmental transfers, fiscal adjustment, local government budgets, capital expenditure, Indonesia

1. INTRODUCTION

Fiscal stress becomes a public financial management problem when governments can no longer maintain existing budget commitments without adjustment. The managerial question is therefore not simply whether revenue declines or expenditure falls, but where adjustment occurs within the budget. Governments may defer spending, reprioritize programmes, use reserves, mobilize additional revenue, or combine these responses, but such measures are rarely distributed proportionately across expenditure categories. Research on local fiscal stress shows that responses vary with available fiscal buffers, organizational capacity, existing commitments, and managerial assessments of financial pressure (Aikins, 2023; Arnold & George McKenna, 2024; Barbera et al.,

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2025; Dodd et al., 2026; Foged, 2022; Singla et al., 2023; Zhang & (David) Guo, 2024) Fiscal adjustment therefore needs to be examined not only in aggregate terms but also through its distribution across budget categories.

This issue is especially important in decentralized systems, where subnational governments carry substantial responsibilities for service delivery and investment while depending, to varying degrees, on own source revenue and intergovernmental transfers. Research on fiscal decentralization and intergovernmental finance shows that transferred resources are associated with expenditure decisions, fiscal buffers, efficiency, and responses to shocks (Afonso, Tovar Jalles, et al., 2024; Aikins, 2023; Choudhury & Sahu, 2023; Ritonga & Buanaputra, 2024; Tang et al., 2024). Yet intergovernmental transfers are not a uniform source of finance. Individual instruments differ in purpose, eligibility, conditionality, discretion, and intended use. A modest change in the aggregate transfer envelope may therefore coexist with substantially larger changes in specific instruments. This distinction exposes a gap between two related literatures. Research on fiscal stress and cutback management explains how governments reprioritize expenditure under constraint (Arapis & Chatterjee, 2025; Barbera et al., 2025; Foged, 2022), whereas research on fiscal decentralization and intergovernmental transfers focuses primarily on transfer design, fiscal capacity, efficiency, or aggregate expenditure responses (Afonso, Tovar Jalles, et al., 2024; Choudhury & Sahu, 2023; Tang et al., 2024). Less attention has been given to the analytical link between changes within the transfer mix and the distribution of adjustment across expenditure categories. This matters because expenditure commitments differ in their short term adjustability, while transfer instruments differ in their fiscal function and potential substitutability.

Indonesia provides a useful setting for examining this issue. Local governments have extensive responsibilities for service delivery and investment, while transfers from the central government remain an important component of regional finance. The transfer system is differentiated across revenue-sharing transfers, general-purpose transfers, physical and non-physical special-purpose transfers, and Village Funds. The period from 2019 to 2026 also contains contrasting fiscal episodes is the 2020 pandemic related emergency adjustment, the 2025 policy induced efficiency and transfer recomposition, and the 2026 budget year adjustment. The 2022 reform of central local fiscal relations additionally changed the institutional environment within which the later episodes occurred. Existing studies show that Indonesian local budgeting is influenced by fiscal rules, central policy direction, political interaction, and administrative capacity (Indrawati et al., 2024; Lewis, 2023; Rakhman & Saudagaran, 2023; Ritonga & Buanaputra, 2024; Vidyattama et al., 2022).

Against this background, the article asks: How are changes in the scale and composition of intergovernmental transfers associated with patterns of adjustment across local government expenditure categories? Two additional questions guide the analysis. First, how do the scale and composition of transfer adjustments differ across the fiscal episodes examined? Second, which revenue and expenditure margins display the largest corresponding adjustments? The study addresses these questions through structured comparison, accounting decomposition, harmonized longitudinal fiscal data, and triangulation with policy documents. It does not estimate causal effects between individual transfer instruments and expenditure categories. Instead, it identifies recurring fiscal patterns and assesses their correspondence with relationships anticipated by the analytical framework. This distinction is particularly important for 2026, where the evidence concerns budgeted and current year allocation positions rather than a completed annual outcome. The article makes three contributions. First, empirically, it documents recurring asymmetries in expenditure adjustment across contrasting fiscal episodes and shows that relatively stable aggregate transfers can coexist with substantial changes across individual transfer instruments. Second, conceptually, it develops a composition sensitive fiscal adjustment framework connecting transfer scale and composition with resource substitutability, expenditure rigidity, and observed adjustment incidence. Its novelty lies in connecting intergovernmental transfer structure with selective budget adjustment without treating observed correspondence as causal transmission. Third, practically, it translates

these distinctions into a scale composition incidence assessment lens for public financial management is how large the adjustment is, which fiscal resources change, and where corresponding adjustment appears within the expenditure budget.

2. LITERATURE REVIEW AND THEORETICAL FRAMEWORK

a. Fiscal Stress and Selective Budget Adjustment

Fiscal stress does not necessarily produce uniform budget cuts. Expenditure categories differ in the extent to which they can be changed within a given fiscal period because commitments vary in legal rigidity, political salience, contractual obligations, timing, and reversibility. Governments may respond through expenditure reductions, deferrals, reprioritization, reserve use, revenue measures, or combinations of these strategies. Their ability to do so also depends on available financial resources, organizational capacity, and managerial assessments of fiscal pressure (Aikins, 2023; Arapis & Chatterjee, 2025; Barbera et al., 2025; Dom et al., 2026; Donatella & Karlsson, 2025; Foged, 2022; Lara-Rubio et al., 2026). Personnel expenditure and continuing operating commitments may be difficult to adjust quickly because they are associated with employment obligations, service continuity, or pre-existing commitments. Some procurement, discretionary activities, and capital projects may offer greater scope for postponement or rescheduling. These distinctions are not absolute. Capital expenditure may become difficult to alter once contracts have been committed, while parts of recurrent expenditure may remain discretionary. Relative rigidity should therefore be understood as an institutional characteristic rather than inferred directly from observed expenditure changes. This distinction implies that fiscal adjustment need not be distributed proportionately across expenditure categories. Importantly, however, the aggregate data used in this study identify differences in observed adjustment but do not independently measure the degree of rigidity underlying each expenditure category. AE1 Selective budget adjustment. Fiscal adjustment is expected to be distributed unevenly rather than proportionately across expenditure categories. Differences in expenditure rigidity offer one possible explanation for this asymmetry but are not directly measured in the aggregate data.

b. Transfer Composition and Resource Substitutability

Selectivity on the expenditure side has a counterpart on the revenue side. Intergovernmental transfers are often summarized by their aggregate value even though individual instruments differ in purpose, eligibility, conditionality, local discretion, and permitted use. Transfer composition therefore refers to the distribution of the total transfer envelope across instruments with different fiscal functions and conditions of use. Two transfer packages with similar aggregate values need not provide equivalent fiscal options. A reduction in an instrument associated with designated investment activity differs from an equivalent change in a more broadly usable transfer. Likewise, maintaining some instruments while reducing others may change the composition of fiscal resources even where the total transfer envelope changes only modestly. Research on intergovernmental finance similarly emphasizes that the effects and uses of transferred resources depend on institutional design and instrument characteristics (Afonso, Alves, et al., 2024; Afonso, Tovar Jalles, et al., 2024; Aikins, 2023; Choudhury & Sahu, 2023; Tang et al., 2024).

The significance of such changes also depends on resource substitutability. Lost resources may in some circumstances be replaced through PAD, other transfers, accumulated balances, or financing. Other resources may be harder to substitute because of their purposes or conditions of use. Resource substitutability is therefore a conditioning concept rather than an observed outcome: transfer composition does not mechanically determine expenditure adjustment. Looking only at aggregate transfers can consequently understate changes in the fiscal resource mix. A relatively small change in the headline transfer envelope may conceal substantial reallocations among individual instruments and corresponding changes in the range of fiscal options available to subnational governments.

c. Composition-Sensitive Fiscal Transmission

A composition-sensitive perspective begins by distinguishing the scale of intergovernmental transfers from the composition of the transfer envelope. Changes in individual instruments may substantially alter the mix of fiscal resources available within the subnational system even were aggregate transfers change only modestly. The contribution of this perspective is therefore not simply to decompose an aggregate transfer total into its components. It treats transfer composition as analytically relevant because individual instruments differ in purpose, conditions of use, and potential substitutability, while expenditure adjustment itself is distributed unevenly across budget categories. The framework distinguishes three directly observed fiscal dimensions transfer scale, transfer composition, and adjustment incidence and two principal conditioning concepts resource substitutability and expenditure rigidity. The conditioning concepts are theoretically relevant to how fiscal adjustment may be accommodated, but they are not directly measured in the aggregate data used here. PAD, financing, accumulated balances, and execution conditions are treated as additional contextual margins that can buffer or reshape the observed adjustment pattern.

Transfer scale captures the size of the overall change in intergovernmental resources. Transfer composition identifies which instruments increase, decline, or are reconfigured. Adjustment incidence identifies where observed changes are concentrated across personnel expenditure, goods and services, capital expenditure, financing, or other margins. Resource substitutability concerns whether reduced resources can potentially be replaced through alternative revenues, transfers, balances, or financing, while expenditure rigidity concerns institutional differences in the short-term adjustability of commitments. The framework does not assume a one to one relationship between individual transfer instruments and expenditure categories. Local governments may reallocate resources, substitute funding sources, alter implementation schedules, or use financing. National aggregates also cannot reveal the decision processes of individual provinces, regencies, or municipalities. Observed correspondence is therefore treated as descriptive pattern association rather than evidence that a particular transfer instrument caused a particular expenditure response. The framework also clarifies why transfer composition may contain information not captured by aggregate scale. Where individual instruments move substantially in different directions, a headline transfer measure may provide an incomplete description of the fiscal environment facing local governments. AE2 Informational relevance of transfer composition. Aggregate transfer scale is expected to provide an incomplete account of fiscal adjustment where individual transfer instruments move substantially in different directions. In such episodes, transfer composition provides additional information for interpreting the observed pattern of budget adjustment.

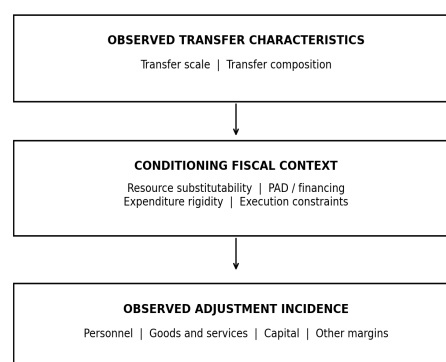


Figure 1. Analytical framework for composition-sensitive fiscal adjustment
(Source: Author's conceptualisation)

The upper and lower blocks represent observed fiscal dimensions. Conditioning concepts are analytically relevant but are not all directly measured in the aggregate data. Arrows indicate analytical ordering rather than estimated causal effects.

d. Alternative Adjustment Margins

Expenditure is not the only margin through which fiscal pressure may be managed. Local governments may revise own-source revenue targets, strengthen revenue mobilization, use accumulated balances, alter financing, or combine these measures with expenditure adjustment. Fiscal reserves and revenue enhancement strategies have been documented as responses to fiscal stress alongside expenditure reductions (Aikins, 2023; Arapis & Chatterjee, 2025; Askim et al., 2022). The distinction between planned and realized buffering is important. A higher PAD target represents an intended response to expected fiscal pressure, it does not establish increased realized revenue capacity. Planned financing likewise does not demonstrate that resources ultimately became available or were sufficient. Revenue and financing measures are therefore interpreted as complementary adjustment margins rather than as direct evidence of successful fiscal replacement.

AE3 Buffering response. Where transfer contraction is anticipated, budget plans may show attempts to offset part of the pressure through higher own source revenue targets, available balances, or financing. Such changes indicate planned buffering and should not be interpreted as realized replacement capacity unless supported by execution data.

3. RESEARCH METHODS

a. Fiscal Architecture and Transfer Measures

Indonesia combines extensive decentralized expenditure responsibilities with a financing system in which local budgets remain closely connected to central government transfers. Local revenue comprises own source revenue (Pendapatan Asli Daerah, PAD), transfers, and other revenue. To examine transfer composition over time, the study constructs a harmonized core transfer basket comprising five instruments that can be traced consistently across the study period: revenue-sharing funds (Dana Bagi Hasil, DBH), general allocation funds (Dana Alokasi Umum, DAU), physical special allocation funds (Dana Alokasi Khusus Fisik, DAK Fisik), non-physical special allocation funds (Dana Alokasi Khusus Nonfisik, DAK Nonfisik), and Village Funds (Dana Desa). These instruments are analytically comparable as components of intergovernmental finance but are not assumed to provide equivalent fiscal discretion. DBH shares specified central revenues with subnational governments; DAU performs a broader equalization and financing role, although parts of its use have become more specified, DAK Fisik is more closely associated with designated investment activity, DAK Nonfisik supports specified non capital services; and Village Funds are directed to village-level purposes and provide substantially less scope for redeployment within district or municipal budgets. Their inclusion in the core basket therefore does not imply that each rupiah of transfer provides the same degree of budgetary flexibility.

This heterogeneity is central to the analysis. Aggregate transfers capture scale, while the distribution across individual instruments captures composition. The harmonization therefore follows comparable economic functions rather than if administrative labels or degrees of discretion remained unchanged throughout 2019–2026. The institutional framework also changed during the period. Law No. 1/2022 on Financial Relations between the Central Government and Regional Governments modified arrangements concerning local revenue, intergovernmental transfers, expenditure, financing, and fiscal coordination (Government of Indonesia, 2022). The reform is treated as an institutional transition rather than as a fiscal-stress episode. Indonesian budgeting nevertheless remains shaped by central rules, political and administrative institutions, and local implementation capacity (Lewis, 2023; Rakhman & Saudagaran, 2023; Ritonga & Buanaputra, 2024; Vidyattama et al., 2022).

b. Comparative Fiscal-Adjustment Episodes

The empirical design compares three fiscal-adjustment episodes that differ in origin and evidentiary status. They are not treated as equivalent shocks or as natural experiments. Their

analytical value lies in providing contrasting settings in which recurring patterns of fiscal adjustment can be compared. The first episode is the 2020 emergency adjustment. The COVID-19 pandemic combined revenue disruption, urgent expenditure needs, and national budget reallocation. PMK No. 35/PMK.07/2020 established arrangements for the management of Transfers to Regions and Village Funds during the pandemic response and was subsequently amended as emergency measures developed (Ministry of Finance, 2020). The 2019–2020 comparison therefore captures a realized emergency episode rather than an isolated transfer-policy intervention. Changes in expenditure are interpreted as part of this broader fiscal adjustment rather than as the causal effect of transfer reductions alone. The 2022 HKPD reform has a different analytical status. It is treated as an institutional transition marking a change in the framework governing central local fiscal relations between the pandemic episode and the later policy-induced adjustment. Changes after 2022 are therefore interpreted within the post HKPD setting rather than attributed mechanically to the reform itself.

The second completed episode is the 2025 policy-induced adjustment. Presidential Instruction No. 1/2025 established an expenditure efficiency mandate for the national and local budgets (Government of Indonesia, 2025b). Minister of Finance Decree No. 29/2025 subsequently adjusted regional TKD allocations (Ministry of Finance, 2025a), while PMK No. 56/2025 established procedures for implementing expenditure efficiency within the state budget and reinforced monitoring of expenditure and transfers (Ministry of Finance, 2025b). The adjustment did not operate as a uniform proportional reduction across transfer instruments. The 2024–2025 comparison is consequently treated as a realized policy-induced episode within the post HKPD framework. The third episode is the 2026 budget-year adjustment. The initial 2026 APBN was established by Law No. 17/2025 and detailed through Presidential Regulation No. 118/2025 (Government of Indonesia, 2025a). During implementation, the Directorate General of Fiscal Balance communicated a further adjustment to regional transfer allocations through S-75/PK/2026 on 7 August 2026 (Directorate General of Fiscal Balance, 2026). The empirical cut-off for current-year transfer data is 11 September 2026, using the national SIKD transfer portal. Complete full-year realization was not yet available, the episode is therefore treated as a current-budget-year case rather than a completed ex-post outcome.

The 2020 and 2025 episodes use completed annual realization data, while the 2026 analysis relies on comparable budget and allocation positions. Budget and realization observations are not treated as equivalent. Available 2026 execution values are used only to describe implementation status at the study cut off, not as substitutes for a completed annual outcome.

Table 1. Comparative fiscal-adjustment episodes and institutional context

Episode	Comparison basis	Nature of episode	Institutional mechanism	Evidence status	Analytical role
2020	2019 actual vs 2020 actual	External emergency	COVID-related fiscal reallocation and transfer adjustment	Full year realized	Reactive adjustment
2022	—	Institutional transition	HKPD reform	Contextual	Institutional break/background
2025	2024 actual vs 2025 actual	Policy-induced adjustment	Expenditure efficiency and selective TKD recomposition	Full year realized	Realized policy adjustment
2026	2025 budget/allocation vs 2026 budget/allocation; adjusted 2026 allocation where relevant	Current budget-year adjustment	APBN/TKD allocation and in-year adjustment	Budgeted/current allocation; full-year realization unavailable	Current-year adaptation

c. Data and Analytical Strategy

The study uses a structured, focused comparison of fiscal-adjustment episodes supported by harmonized fiscal accounts, accounting decomposition, structured pattern comparison, and policy document triangulation. The unit of analysis is the fiscal-adjustment episode observed at the aggregate national subnational level. Given the short completed annual series and the use of national aggregates, the strategy prioritizes transparent comparison rather than causal estimation (George & Bennett, 2005; Hendren et al., 2023). In this article, the term “pattern association” refers to descriptive correspondence across fiscal dimensions and episodes; it does not denote an estimated statistical association.

1) Data and Harmonization

Four groups of evidence are used. Aggregate APBD data provide annual budget and realization values for revenue, PAD, transfers, expenditure categories, and financing for 2019–2026 (Ministry of Finance, 2026). Central TKD data provide aggregate transfer allocations and component instruments, including the updated 2026 allocation available through the SIKD transfer portal at the study cut-off (Directorate General of Fiscal Balance, 2026). Statistics Indonesia provides population and national accounts series used for normalization (Statistics Indonesia, 2026). Official legal and policy documents establish institutional context, timing, stated policy objectives, and affected fiscal instruments. Because fiscal terminology and classifications are not fully consistent across the study period, the fiscal series are harmonized before comparison. Harmonization follows economic substance, defined as substantive comparability of fiscal function across years rather than similarity of administrative labels alone. Categories are treated as comparable where they perform substantially similar fiscal functions. Where equivalence cannot be established with sufficient confidence, an item is retained separately or classified as Other rather than forced into a harmonized category.

Exact duplicate export records are defined as rows identical across all fields contained in the relevant source extract and are removed; non-identical observations are retained. Terminological variants referring to the same fiscal function are mapped to a common analytical category. For transfers, the crosswalk retains DBH, DAU, DAK Fisik, DAK Nonfisik, and Village Funds as the core basket. Items outside these consistently traceable categories remain in Other. Supplementary Table S1 records the harmonization logic and treatment of the core categories. Central TKD and transfers recorded in aggregate APBD revenue are kept analytically distinct because they may differ in scope, timing, accounting recognition, classification, and institutional flow. Central TKD is used to assess transfer scale and composition, while APBD accounts characterize the local fiscal envelope and expenditure incidence. No mechanical reconciliation is imposed between the two series. Budget and realization observations are also separated throughout the analysis. As a consistency check, harmonized component totals are compared with the corresponding published aggregate totals where directly comparable totals are available. Apparent year-to-year discontinuities are reviewed against changes in source classification and policy documents before being interpreted as substantive fiscal changes.

2) Analytical Time Structure and Normalization

Completed annual realizations for 2019–2025 constitute the core expose evidence. Budget data for 2019–2026 are analyzed separately as planned fiscal positions. Available 2026 implementation data at the 11 September 2026 cut off are treated only as supplementary current year evidence. Budget and realization observations are therefore not combined within the same episode comparison. Key indicators are additionally expressed in 2025 prices, per capita terms, and as shares of GDP. Real values are calculated using an implicit GDP deflator derived from current price and constant 2010 GDP and rebased to 2025. These alternative measures are used as robustness checks on the interpretation of nominal aggregate trends.

3) Structured Comparison Protocol

The same six questions are applied systematically to each episode: how much did the core transfer envelope change; how did its composition change; how did the local fiscal envelope and available buffers change; which expenditure categories recorded the largest absolute and proportional adjustments; did budget execution change, and how did observed fiscal movements correspond with the direction, timing, and scope identified in relevant policy documents? Transfer scale is assessed from changes in the core basket, composition from component values and shares, expenditure incidence from changes across expenditure categories, and potential buffering from PAD and financing positions. The principal expose comparisons are 2019–2020 and 2024–2025. The 2025–2026 comparison is treated as a current budget year case using like for like budget and allocation data rather than as a completed annual outcome.

4) Decomposition and Policy Triangulation

Accounting decomposition identifies where fiscal change is concentrated. Revenue change is separated into PAD, transfers, and other revenue; expenditure change into personnel, goods and services, capital, and other expenditure; and transfer change into DBH, DAU, DAK Fisik, DAK Nonfisik, Village Funds, and Other. The decomposition is an accounting exercise and is not interpreted as an estimate of elasticity or causal contribution. Because Village Funds differ from the other instruments in local budgetary substitutability, the core transfer comparison is also examined without Village Funds as a sensitivity check. Policy-document triangulation is interpretive rather than causal. Fiscal accounts identify observed aggregate movements, while policy documents independently establish formal timing, scope, affected components, and stated policy direction. The documentary corpus is restricted to official legal and policy materials directly relevant to the episodes examined. Documents are included where they provide evidence on at least one of the following: policy objective, affected fiscal component, direction of adjustment, explicit protection or compression, implementation timing, or an explicitly stated expected response.

The unit of coding is a provision or documentary statement containing relevant information. Where a document does not specify an expected response, the field is coded as not specified rather than inferred from fiscal outcomes. Documentary evidence and fiscal-account movements are compared using three classifications. Convergence is recorded where the observed movement corresponds in direction, timing, and affected component with a sufficiently specific documentary provision. Divergence is recorded where the observed movement runs contrary to the direction explicitly identified in the documentary evidence. No correspondence is recorded where the provision is too general, the fiscal categories are not sufficiently comparable, or the available evidence is insufficient to establish a meaningful match. Documentary correspondence supports institutional interpretation but does not constitute causal validation. Supplementary Table S2 provides the policy document coding matrix and audit trail.

5) Inference Boundaries

National aggregates reveal system wide accounting patterns but cannot identify heterogeneity or decision processes across individual provinces, regencies, and municipalities. The completed annual series is short, classifications change over time, and complete full year 2026 realization is unavailable. Temporal or accounting correspondence between transfer and expenditure categories therefore does not establish that changes in one caused changes in another. The study makes three bounded forms of inference if it identifies descriptive fiscal changes, compares recurring patterns across contrasting episodes, and assesses documentary correspondence with formally stated policy arrangements. It does not estimate local-level behavioral responses, causal treatment effects, instrument-specific expenditure elasticities, or statistical associations between transfer and expenditure categories. Accordingly, references to association or correspondence should be read within these limits.

4. RESULTS AND DISCUSSION

a. Long-Run Fiscal Context

The 2019–2025 fiscal structure shows two concurrent developments. PAD increased as a share of aggregate revenue, while transfers remained the dominant source. Personnel expenditure also increased as a share of total expenditure, whereas capital expenditure remained below its 2019 share. In real 2025 prices and per capita terms, capital expenditure in 2025 remained below its 2019 level. These patterns do not establish weaker services or investment outcomes; they indicate that the composition of fiscal space changed before the later adjustment episodes. Local governments therefore entered the later period with persistent transfer dependence and a larger share of expenditure committed to personnel. These long-run patterns provide context rather than a causal explanation for the subsequent adjustment episodes.

b. Emergency Adjustment in 2020

The 2020 episode was broad-based. Aggregate revenue declined by 6.92%, PAD by 10.08%, and TKD recorded in APBD by 5.83%; total expenditure declined by 5.56%. Adjustment was uneven across expenditure categories: personnel expenditure declined by 3.03%, goods and services by 9.78%, and capital expenditure by 28.02%. Capital budget execution also declined from 91.84% in 2019 to 66.58% in 2020. Capital expenditure therefore recorded the largest proportional contraction, while personnel expenditure changed substantially less. The observed asymmetry is consistent with AE1. The aggregate evidence identifies the asymmetry itself, it does not independently establish the degree of rigidity underlying each expenditure category.

c. Transfer Recomposition in 2025

The 2025 episode shows most clearly why aggregate transfer scale can conceal compositional change. In the adjusted central transfer allocation, the broad transfer envelope increased by only 0.91% between 2024 and 2025, while individual instruments moved substantially in different directions. DBH increased by 16.37%, DAU by 2.55%, and DAK Nonfisik by 10.20%, whereas DAK Fisik declined by 65.35% and Village Funds by 2.82%. Realized APBD outcomes also changed unevenly. Aggregate revenue declined by 6.43%, TKD recorded in APBD by 7.38%, and total expenditure by 9.34%. Personnel expenditure increased by 3.83%, while goods and services declined by 6.83% and capital expenditure by 20.80%. These observations do not establish that the reduction in DAK Fisik caused the decline in capital expenditure. Rather, the two developments occurred within the same fiscal episode: a near-stable aggregate central transfer allocation concealed substantial instrument-level recomposition, while realized expenditure adjustment was strongly asymmetric. This correspondence is consistent with the composition-sensitive framework, but the aggregate data cannot identify an instrument specific expenditure effect.

Table 2. Selected intergovernmental transfer components and total TKD allocation, Rp trillion

Component	2024	2025	Δ 2024–25	2026*	Δ 2025–26
DBH	153.3	178.4	+16.4%	70.3	–60.6%
DAU	427.7	438.6	+2.6%	416.5	–5.0%
DAK Fisik	53.8	18.6	–65.4%	5.0	–73.2%
DAK Nonfisik	133.1	146.7	+10.2%	149.3	+1.8%
Dana Desa	71.0	69.0	–2.8%	51.9	–24.8%
Total TKD	869.0	876.9	+0.9%	713.5	–18.6%

Note: The broad transfer envelope corresponds to the SIKD total that includes transfer components not shown separately. The 2026 column reports current/adjusted allocation data available at the study cut-off (11 September 2026), not a completed annual outcome. Source: Ministry of Finance/DJPK SIKD; author's calculations.

d. Distribution of Expenditure Adjustment

Table 3. Comparative fiscal adjustment profiles

Variable	2019–2020 actual	2024–2025 actual	2025–2026 budget
Revenue	–6.92%	–6.43%	–11.72%
PAD	–10.08%	–1.16%	+6.00%
TKD-APBD	–5.83%	–7.38%	–20.26%
Total expenditure	–5.56%	–9.34%	–11.08%
Personnel	–3.03%	+3.83%	–1.18%
Goods/services	–9.78%	–6.83%	–10.42%
Capital	–28.02%	–20.80%	–29.55%

The two completed episodes differ substantially in origin and fiscal context. The 2020 episode combined a large PAD contraction, lower transfers, and implementation disruption, whereas the 2025 episode occurred alongside policy-induced transfer recomposition. Nevertheless, capital expenditure recorded the largest proportional contraction in both episodes, while personnel expenditure showed considerably smaller proportional adjustment. The pattern is descriptive rather than deterministic. It indicates a recurring concentration of adjustment in capital expenditure but does not demonstrate that capital expenditure is mechanically or deliberately reduced first.

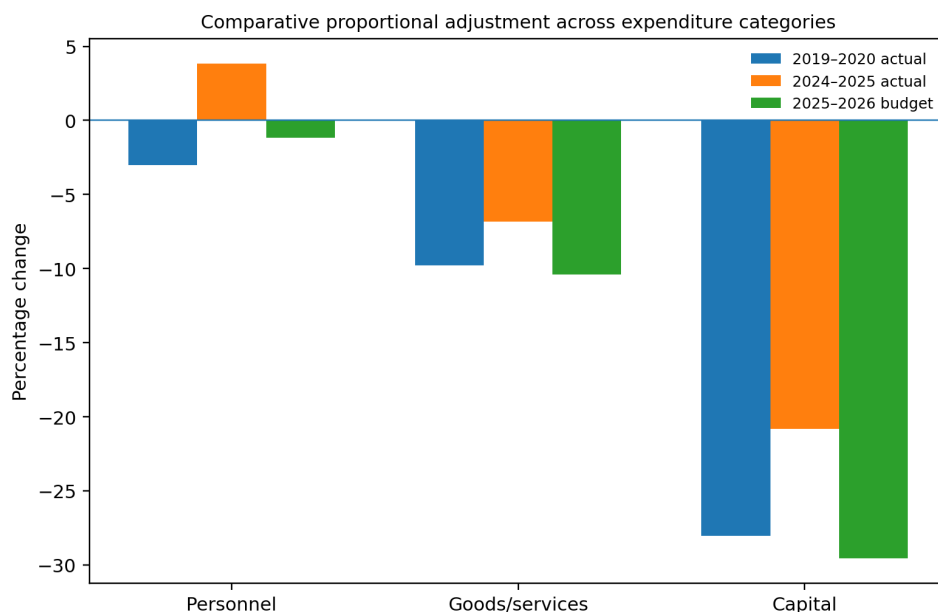


Figure 2. Comparative proportional adjustment across expenditure categories.

Source: Authors' calculations.

d. Current Year Budgetary Adaptation in 2026

The 2026 budget and current allocation provide evidence of planned and current-year adaptation rather than a completed annual outcome. Relative to the comparable 2025 budget/allocation position, aggregate revenue declines by 11.72% and TKD recorded in APBD by 20.26%, while PAD is budgeted to increase by 6.00%. Personnel expenditure declines by 1.18%, goods and services by 10.42%, and capital expenditure by 29.55%. The uneven expenditure pattern is consistent with AE1. The higher PAD target is also consistent with the buffering response anticipated in AE3, but it does not demonstrate that own-source revenue has replaced lower transfer resources. The updated SIKD allocation available on 11 September 2026 also confirms that the transfer composition remained highly differentiated during the current budget year, including a DAK Fisik allocation of Rp5.0 trillion and substantially lower DBH and Village Fund allocations than in 2025.

e. Assessment of Analytical Expectations

AE1 is reflected consistently in the episode comparisons. Expenditure adjustment is not distributed proportionately across categories. Capital expenditure records the largest proportional decline in both completed episodes and again in the 2026 budget, while personnel expenditure changes substantially less. The analysis identifies this asymmetry without treating observed changes as direct measures of expenditure rigidity. AE2 is illustrated most clearly by the 2025 episode. Aggregate central transfer allocation changed only marginally while individual instruments moved substantially in different directions. This demonstrates the informational relevance of composition beyond aggregate scale. The simultaneous asymmetry in expenditure adjustment is descriptively consistent with the framework but does not establish an instrument to expenditure relationship. AE3 receives limited support from current-year budget evidence. The higher 2026 PAD target is consistent with an intended buffering response, but planned revenue cannot be interpreted as realized replacement capacity. Across the three analytical expectations, the most robust empirical result is therefore the recurrence of asymmetric expenditure adjustment across contrasting fiscal episodes.

f. Interpretation and Contributions

1) Empirical Contribution: Recurring Asymmetric Adjustment

The principal empirical contribution is the identification of recurring asymmetric expenditure adjustment across fiscal episodes with different origins. In both completed episodes, capital expenditure contracted substantially more than personnel expenditure, while the 2026 budget displays a similar planned pattern. A second empirical contribution concerns transfer measurement. The 2025 episode demonstrates that an almost unchanged aggregate transfer allocation can coexist with large movements among individual transfer instruments. Aggregate transfer scale therefore provides an incomplete description of fiscal adjustment where the underlying transfer mix changes substantially. These findings are descriptive as they identify system level patterns without attributing them to causal decisions by individual local governments.

2) Conceptual Contribution: Composition-Sensitive Fiscal Adjustment

Conceptually, the framework adds an upstream transfer-composition dimension to the analysis of selective budget adjustment. Cutback-management research focuses primarily on how governments respond when fiscal pressure reaches the budget, while intergovernmental-finance research examines transfer design and the distribution of central resources. The composition-sensitive framework connects these analytical domains without assuming causal transmission. The framework separates directly observed dimensions from conditioning concepts. Transfer scale, transfer composition, and adjustment incidence are observed directly in the fiscal data. Resource substitutability and expenditure rigidity provide theoretically relevant explanations for why similar aggregate changes may be accommodated differently, but they are not directly measured in this aggregate design. This distinction prevents the observed expenditure pattern from being used circularly as a proxy for the rigidity that is invoked to interpret it.

3) Practical Contribution: Scale-Composition-Incidence

For public financial management, the study proposes a three part scale composition incidence assessment lens. Scale asks how much the overall fiscal resource envelope changes. Composition asks which transfer instruments increase, decline, or are reconfigured. Incidence asks where corresponding adjustment appears within the budget. Revenue mobilization, financing, accumulated balances, and budget execution should be monitored separately because they may provide additional adjustment or buffering margins. This lens helps prevent stable aggregate indicators from being interpreted as evidence of an unchanged fiscal position. A relatively stable headline transfer total may conceal substantial changes in the types of fiscal resources available, while an aggregate

expenditure change may conceal materially different adjustments across personnel, operating, and capital budgets.

4) Implications for Central and Local Finance Managers

For central finance authorities, transfer reform and fiscal consolidation should be assessed not only through total savings or aggregate transfer values but also through the composition of adjustment and its correspondence with local expenditure patterns. Monitoring by transfer instrument can reveal whether repeated fiscal episodes coincide with disproportionate changes in particular expenditure categories. For local finance managers, short term budget balance should be distinguished from recurring compression or postponement of capital expenditure. Where capital allocations decline, monitoring should extend to project pipelines, contractual commitments, maintenance requirements, and future investment needs. Higher PAD targets should likewise be treated as intended buffers until realization data confirm that additional revenue has been mobilized. The evidence does not show that transfer recomposition mechanically causes capital compression. Rather, composition-sensitive monitoring helps identify where adjustment repeatedly appears and where further managerial investigation may be warranted. This is consistent with broader public-management research emphasizing alignment between information, accountability, and resource decisions (Salomonsen et al., 2024; Shaxson et al., 2024).

5) Limitations and Future Research

The national aggregate design imposes important limits on inference. Aggregation conceals heterogeneity among provinces, regencies, and municipalities in transfer dependence, PAD capacity, expenditure commitments, financing conditions, and implementation choices. The annual series is relatively short, fiscal classifications change over time, and the 2026 evidence represents a current budget-year position rather than a completed annual realization. Future research should therefore construct province, regency, and municipality level panel datasets linking exposure to individual transfer instruments with expenditure outcomes over time. Such data would make it possible to examine whether the aggregate patterns documented here are also observed within and across individual local governments and whether they vary with transfer dependence, PAD capacity, fiscal space, or expenditure structure.

With sufficiently detailed longitudinal data, future research could employ panel methods and, where appropriate identifying assumptions are satisfied, quasi-experimental designs to examine whether these descriptive associations support stronger causal interpretation. Higher-frequency fiscal data could additionally distinguish sustained expenditure compression from delayed execution or within-year rescheduling. The present study should therefore be understood as identifying system-level descriptive correspondences and a conceptual framework that generates testable propositions for subsequent disaggregated research, rather than as a causal test of those propositions.

5. CONCLUSION AND POLICY RECOMMENDATIONS

This study shows that aggregate fiscal indicators alone provide an incomplete account of subnational fiscal adjustment. Across Indonesia's 2020 emergency adjustment and the 2025 policy-induced transfer recomposition, expenditure adjustment was strongly asymmetric: capital expenditure recorded substantially larger proportional declines than personnel expenditure. The 2025 episode also demonstrates that a near-stable aggregate central transfer allocation can conceal substantial changes across individual transfer instruments. The 2026 budget displays a similar planned expenditure pattern, although full-year realization remains unavailable. The study contributes a composition-sensitive fiscal adjustment framework connecting transfer scale and composition with adjustment incidence while treating resource substitutability and expenditure rigidity as conditioning concepts rather than directly observed variables. For public financial management, these distinctions can be translated into a scale composition incidence assessment

lens: how much fiscal support changes, which types of resources change, and where corresponding adjustment appears within the budget. The framework is interpretive rather than causal.

The analysis is limited by national aggregation, a short annual series, classification changes, and incomplete full-year realization for 2026. Future research should use province-, regency-, and municipality-level panel data to examine whether these aggregate patterns persist across heterogeneous local governments and, where stronger identification is possible, whether observed descriptive associations can support causal interpretation. Fiscal adjustment is therefore not adequately understood by asking only how much fiscal support changes. A more informative assessment also asks what changes within that support and where adjustment appears within the budget.

Policy Recommendations

Central and local government finance managers should assess transfer reform through the combined lenses of scale, composition, and observed expenditure incidence rather than aggregate funding changes alone. Where substantial recomposition occurs across transfer instruments, budget monitoring should examine whether expenditure categories repeatedly experience disproportionate adjustment. Capital expenditure warrants particular attention because it recorded the largest proportional decline across the episodes examined. This does not demonstrate that transfer recomposition caused capital compression. It does indicate that repeated capital adjustment should be monitored alongside project pipelines, contractual commitments, maintenance requirements, and future investment needs. When significant transfer changes are planned, central and local finance authorities should assess exposure across recurrent commitments, investment programmes, and available fiscal buffers. Higher PAD targets should be treated as prospective buffers rather than realized substitutes for transfer resources until revenue performance is confirmed.

DECLARATIONS

Generative AI Use

During the preparation of this manuscript, the author used ChatGPT (OpenAI) in a limited manner for language editing, readability improvement, and structural refinement. The author independently reviewed and validated the research design, data, calculations, source verification, analytical judgments, interpretation, and final content, and takes full responsibility for the integrity of the manuscript.

Author Contributions

Sabferrial Fernando Imam: Conceptualization, Methodology, Formal Analysis, Investigation, Data Curation, Validation, Visualization, Writing Original Draft, Writing Review & Editing, and Project Administration. The author has read and approved the final manuscript.

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Conflict of Interest

The author declares that there are no competing financial or non-financial interests related to this study.

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SUPPLEMENTARY METHODOLOGICAL TABLES

Table S1. Fiscal data harmonization crosswalk

Analytical category	Source labels/functions retained	Harmonization rule	Treatment / check
DBH	Dana Bagi Hasil / revenue-sharing transfer series	Retained where the source item represents statutory revenue sharing	Retained as DBH; annual total checked against source aggregate where comparable
DAU	Dana Alokasi Umum / general allocation transfer series	Retained as the general allocation/equalization transfer, including source-year variants	Retained as DAU; specified subcomponents remain within the source-year DAU total
DAK Fisik	Physical special allocation transfer	Retained where the transfer finances designated physical/infrastructure activity	Retained as DAK Fisik
DAK Nonfisik	Non-physical special allocation transfer	Retained where the transfer finances specified non-capital services	Retained as DAK Nonfisik
Village Funds	Dana Desa	Retained as a distinct core component because it is traceable throughout the comparison period	Retained; sensitivity check excludes Village Funds because substitutability differs
Other	Remaining transfer instruments not consistently represented in the five core categories	No forced reassignment where functional equivalence is uncertain	Retained as Other; included in broad total where applicable
Duplicate records	Rows identical across all fields in the relevant source extract	Exact duplicates removed; non-identical rows retained	Cleaning rule applied before aggregation
Budget vs realization	Budget/allocation and realized observations	Status preserved rather than harmonized into a single series	Compared only on a like-for-like basis within an episode

Note: The crosswalk documents the analytical treatment used in the manuscript. It does not imply that legal conditions or local discretion were identical across years.

Table S2. Policy-document coding and triangulation matrix

Episode	Document	Objective / affected component	Direction / timing	Observed fiscal pattern	Classification
2020	PMK No. 35/PMK.07/2020	COVID-19 response; management of transfers and Village Funds	Emergency adjustment; 2020	Broad revenue and expenditure contraction; capital adjustment largest	Convergence
2022	Law No. 1/2022 (HKPD)	Reform of central–local fiscal relations	Institutional transition	Post-2022 episodes occur under revised framework	Contextual / no direct correspondence test
2025	Presidential Instruction No. 1/2025	Expenditure efficiency in APBN and APBD	Efficiency mandate; 2025	Selective transfer adjustment and asymmetric local expenditure change	Convergence at policy-direction level
2025	Minister of Finance Decree No. 29/2025	Adjustment of TKD allocations by region	Selective transfer adjustment; 2025	Large component changes despite near-stable broad aggregate	Convergence