

THE GENDER IMPACT OF FISCAL CAPACITY AND PUBLIC SPENDING: AN INTER-PROVINCIAL STUDY OF LOCAL GOVERNMENTS IN INDONESIA

Sandhyakalaning Jiwatami Ridwan Putri¹, Nurhidayati², Brama Yudha Kusmara³

^{1,2}Politeknik Keuangan Negara STAN, Indonesia

³Direktorat Jenderal Perimbangan Keuangan, Kementerian Keuangan Republik Indonesia

Email: jiwatami@pknstan.ac.id

Abstract

This study investigates the relationship between local fiscal capacity, public sector expenditure, gender equality, and economic inclusion across districts and cities in West Java, Central Java, and East Java from 2015 to 2024. Using a panel dataset combining gender indicators (IPG, IDG), inclusive economic development (IPEI), and fiscal variables (PAD, DAK, and sectoral expenditures), the analysis relies exclusively on correlation-based evidence to explore the structural linkages within the fiscal–gender–inclusion nexus. The results reveal that PAD is positively correlated with education, health, and economic spending, while DAK exhibits a compensatory negative correlation with most development indicators, consistent with its allocation to more disadvantaged regions. Sectoral spending shows divergent patterns: health expenditure correlates positively with gender development (IPG), education spending shows a small negative relationship due to targeting of lagging areas, and economic spending demonstrates weak gender-related linkages. Both IPG and IDG are positively associated with IPEI, indicating that regions achieving higher gender equality also experience more inclusive economic outcomes. Overall, the findings support theoretical expectations that fiscal capacity and public spending shape gender and inclusion outcomes, but also highlight substantial provincial disparities in fiscal effectiveness. The study underscores the need for gender-responsive and regionally targeted fiscal strategies to promote inclusive development.

Keywords: *Gender Equality; Fiscal Capacity; Regional Public Finance; Inclusive Economic; Public Spending.*

A. INTRODUCTION

Gender equality is a fundamental objective of sustainable development and a critical indicator of a country's socio-economic progress. Numerous global reports demonstrate that advancing gender equality can substantially accelerate economic growth (McKinsey Global Institute, 2015; World Bank, 2018). Since the early 2000s, gender-responsive budgeting (GRB) has gained wide adoption among OECD and UNDP member countries as a framework to ensure that public expenditure contributes to reducing gender disparities and enhancing social welfare (Elson, 2002; UN Women, 2015). More recent developments in theory and practice, however, emphasize that the revenue side of public finance also plays a crucial role in shaping the capacity and sustainability of gender-responsive policies at the local and village levels.

The emergence of gender-responsive fiscal policy expands the scope of GRB by integrating the management of public revenue and intergovernmental fiscal transfers into gender-sensitive budgeting (Stotsky, 2016; UN Women, 2015). This approach underscores that local revenue structures, through taxation, user charges, and central transfers, shape the government's ability to deliver gender-responsive public services. Empirical studies increasingly show that public expenditure patterns influence gender equality outcomes by improving women's access to education, health, employment, and economic participation. Stotsky (2016), in an IMF study, highlights that gender-sensitive public budgeting contributes

to increased female labor force participation and strengthens inclusive economic development in developing countries. Similarly, regional studies in Asia (Budlender & Hewitt, 2017) confirm that the implementation of gender budgeting is positively associated with improvements in the Gender Development Index (GDI) and the Gender Empowerment Measure (GEM).

In the Indonesian context, gender equality is measured primarily through the Gender Development Index (IPG) and the Gender Empowerment Index (IDG), which reflect women's access, opportunities, and roles in education, health, the economy, and political participation. The government has also developed the Inclusive Economic Development Index (IPEI) through the Ministry of National Development Planning (Bappenas) to assess the extent to which economic growth provides equitable opportunities for all segments of society. Together, these indices represent Indonesia's commitment to equitable and sustainable development.

Previous empirical research has shown that public spending in education, health, and social sectors is generally associated with improvements in gender indices. However, increases in local fiscal capacity, particularly PAD and central transfers, do not always translate into higher gender equality scores (Misra & Dwi, 2020; Widyastuti et al., 2021). Spending that supports inclusive economic development has been found to expand employment opportunities and reduce gender-based poverty (Bappenas, 2022; UN Women, 2015). Nonetheless, several studies highlight persistent institutional challenges, including weak local gender institutions, limited gender-disaggregated data, and insufficient capacity among government personnel to implement gender-responsive planning and budgeting (Khaerah & Mutiarin, 2018).

This study adopts the Gender Responsive Fiscal Framework (GRFF), which posits that gender equality outcomes depend not only on public expenditure but also on the underlying fiscal capacity that enables such spending. Strong fiscal capacity creates the necessary fiscal space for local governments to implement gender-responsive spending across social, economic, and institutional sectors. This integrated conceptual model contributes in two ways: first, by linking both revenue and expenditure components within the broader framework of gender-responsive fiscal policy—an aspect often treated separately in prior research; and second, by incorporating IPEI as an aggregate indicator of economic inclusion, allowing IPG, IDG, and IPEI to jointly represent the interplay between equality, empowerment, and inclusivity.

By synthesizing the existing literature and analyzing district-level spending patterns, this study aims to: (1) examine the role of local governments as key policy actors and budget managers in closing gender gaps; and (2) assess whether increases in local fiscal capacity automatically led to improved gender equality, or whether institutional interventions and affirmative policies are still required to ensure that public revenue is allocated in a gender-responsive manner. The findings are expected to enrich academic and policy discussions on gender-responsive fiscal policy in Indonesia, particularly at the subnational level, and to provide empirical support for strengthening gender-responsive planning and budgeting (GRPB) as part of efforts to achieve the Sustainable Development Goals (SDGs), especially Goal 5 (Gender Equality) and Goal 10 (Reduced Inequalities).

B. LITERATURE REVIEW

Regional development under fiscal decentralization is established in the notion that subnational governments play a crucial role in delivering public services and promoting inclusive development. In classical public finance theory, Musgrave (1959) identifies the fiscal functions of government as allocation, distribution, and stabilization, while Oates (1972) emphasizes that fiscal decentralization enhances informational efficiency because local governments are closer to community needs. In Indonesia, fiscal decentralization aims to strengthen local autonomy while reducing interregional disparities through expanded fiscal capacity and greater expenditure flexibility (Halim & Kusufi, 2012).

Local fiscal capacity, reflected in Own-Source Revenue (PAD) and central government transfers, particularly the Special Allocation Fund (DAK), forms the foundation for subnational governments to provide quality public services. According to Fiscal Space Theory, fiscal capacity determines the extent to which local governments can finance social development (Heller, 2005). Regions with higher PAD have greater flexibility to allocate spending to strategic sectors such as education, health, and economic empowerment. In contrast, DAK serves as a redistributive fiscal instrument targeted primarily at regions with limited fiscal capacity; consequently, DAK often correlates negatively with development indicators because it is selectively allocated to disadvantaged areas.

In contemporary discourse, public finance is no longer viewed as gender-neutral. Feminist Economics (Elson, 1999; Kabeer, 2016) argues that revenue structures and expenditure patterns can generate gender biases, directly or indirectly. The Gender Responsive Fiscal Framework (Stotsky, 2016; UN Women, 2015) stresses that local budgets should be formulated by considering the differentiated needs and constraints faced by women and men. Spending in education and health is essential for strengthening women's human capital, while economic expenditure can expand women's access to productive resources, entrepreneurship, and employment opportunities.

Human Capital Theory (Becker, 1964) provides a theoretical basis for understanding how public investments in education and health enhance productivity and societal welfare. Improvements in women's human capital have been shown to increase the Gender Development Index (GDI/IPG) and Gender Empowerment Index (GEM/IDG) globally (UNDP, 2020). At the local level, adequate education spending can increase female school participation, whereas health expenditure supports reproductive health and reduces structural barriers to women's economic participation. However, these relationships may not be linear; education spending is often higher in lagging regions, which may produce negative correlations in static cross-sectional analysis.

The effectiveness of public spending is heavily influenced by institutional capacity. Institutional Theory (North, 1990) posits that the quality of institutions—including planning, budgeting, accountability, and oversight—determines the extent to which public budgets translate into service delivery outcomes. In regions with stronger governance, increases in PAD are more effectively converted into gender-inclusive public services. Conversely, in regions with weaker institutions, additional fiscal resources do not necessarily translate into improved development outcomes, producing weaker or inconsistent correlational patterns.

In modern development economics, the Inclusive Growth Framework (World Bank, 2009; OECD, 2014) highlights that economic performance should be evaluated not only by output growth but also by the extent to which growth expands opportunities equitably across population groups. The Inclusive Economic Development Index (IPEI), used in this study, aligns conceptually with this framework. Higher PAD in urban–industrial economies such as East Java tends to be associated with greater economic opportunities, and thus theoretically and empirically exhibits stronger correlations with IPEI.

Furthermore, theories of spatial inequality and territorial development suggest that economic structure and the distribution of fiscal capacity across districts within a province shape the relationship between fiscal variables and social outcomes (Kanbur & Venables, 2005). Provinces with high spatial inequality—such as West Java and East Java—exhibit sharper fiscal–gender and fiscal–inclusion disparities compared to more balanced provinces like Central Java.

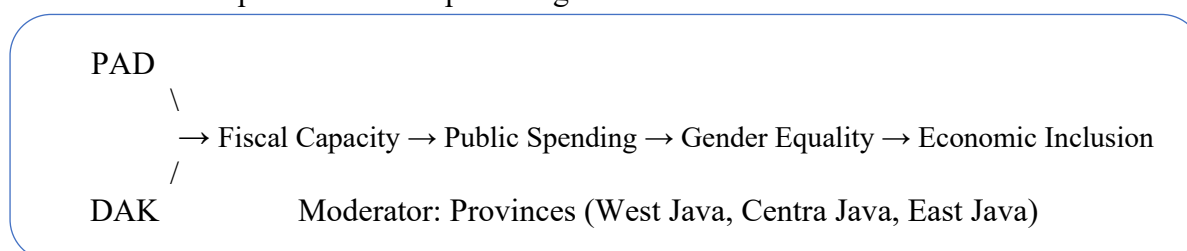
Taken together, the relationship between fiscal capacity, public expenditure, gender equality, and economic inclusion is shaped not only by fiscal magnitude but also by regional economic structures, institutional capacity, initial development conditions, and gender-responsive fiscal policy orientation. This theoretical foundation guides the interpretation of

correlational patterns among PAD, DAK, sectoral public expenditure, and gender and inclusion indicators across three provinces with distinct economic and social characteristics.

Based on the theoretical foundations outlined above, the logical relationships among the variables in this study can be explained as follows:

1. Local Government Revenue (PAD and DAK) → Public Expenditure
Fiscal capacity—reflected in locally generated revenue (PAD) and central government transfers (DAK)—determines the fiscal space available for local governments to finance public services. Regions with higher PAD have greater flexibility to allocate expenditure toward gender-responsive priorities. Meanwhile, DAK, as a conditional transfer, is directed toward priority sectors such as education and health, which have direct implications for gender equality.
2. Education and Health Expenditure → IPG and IDG
Education expenditure enhances women’s access to schooling and employment opportunities, while health expenditure improves women’s well-being and life expectancy. Both sectors contribute to increases in the Gender Development Index (IPG) by improving life expectancy, average years of schooling, and income indicators. They also strengthen the Gender Empowerment Index (IDG) through expanded economic and political participation for women.
3. Economic Expenditure → IPEI
Economic sector spending, including support for SMEs, economic infrastructure, and vocational training, drives inclusive economic growth. Economic programs incorporating women’s empowerment strengthen the Inclusive Economic Development Index (IPEI) by expanding women’s access to economic opportunities and productive resources.
4. PAD, DAK, and Sectoral Expenditure → Gender Equality and Economic Inclusion (IPG, IDG, IPEI)
Conceptually, PAD and DAK function as fiscal enablers, providing the financial capacity to support development initiatives. Sectoral expenditures act as policy instruments that channel fiscal resources toward gender-responsive and inclusive development outcomes. The combination of adequate fiscal capacity and gender-oriented public spending is expected to improve all three indicators, IPG, IDG, and IPEI.

The conceptual relationships among these variables can be illustrated as follows:



This model illustrates the conceptual pathways linking fiscal capacity, public expenditure, gender equality, and economic inclusion at the district/city level. PAD and DAK constitute the core components of fiscal capacity, which in turn influence sectoral public spending. Public expenditure affects gender equality outcomes, which subsequently contribute to improvements in economic inclusion. The provincial context (West Java, Central Java, and East Java) is incorporated as a moderating factor that shapes the strength and direction of these interrelationships across regions.

C. METHODS

This study employs an exploratory–descriptive approach using correlation analysis and descriptive, comparative methods. This approach is selected to examine the relationships between fiscal capacity, represented by local own-source revenue (PAD) and earmarked central transfers (DAK), patterns of local government spending (education, health, and economic functions), and the level of gender equality and inclusive development, measured through IPG, IDG, and IPEI. The primary objectives are: (1) to identify the patterns of association between fiscal variables and gender indicators at the district level, and (2) to assess whether increases in local fiscal capacity are linearly associated with improvements in gender equality and economic inclusion.

The study utilizes secondary data obtained from official government sources and national publications, including PAD, DAK, and local expenditure from the Directorate General of Fiscal Balance (DJPK), gender indicators (IPG and IDG) from Statistics Indonesia (BPS), IPEI from the Ministry of National Development Planning (Bappenas), and various supporting datasets from the Ministry of Home Affairs, Bappenas, and local development planning documents (RPJMD) to validate gender mainstreaming priorities and program orientations.

The selection of variables is grounded in their theoretical relevance within the framework of inclusive regional development. PAD and DAK are used as indicators of fiscal capacity because they determine the fiscal space available for local governments to provide public services. This fiscal capacity is subsequently operationalized through expenditures on education, health, and economic development, three sectors that, from a theoretical perspective, constitute key instruments for human capital formation and the expansion of economic opportunities. The impact of public spending on gender equality is captured through IPG and IDG, two nationally recognized indicators that reflect gender outcomes in basic welfare and empowerment dimensions. Meanwhile, inclusive economic performance is represented by IPEI, which captures multidimensional aspects of equitable and broad-based economic participation at the district level. Together, these variables align with theories of fiscal policy, human capital, and gender-responsive governance, reflecting the logical mechanisms underlying inclusive and gender-responsive development.

The study focuses on all districts within three major provinces on the island of Java, West Java, Central Java, and East Java, over a ten-year period from 2015 to 2024. The selection of these provinces is based on empirical and conceptual considerations relevant to the study's focus on the relationship between fiscal capacity, sectoral expenditure, and gender equality outcomes. First, the three provinces represent varying degrees of fiscal capacity. West Java has relatively high PAD, driven largely by industrial and service sectors. Central Java demonstrates a more moderate fiscal profile with considerable dependence on intergovernmental transfers (DAK and DAU). East Java combines strong industrial, trade, and agricultural bases. This diversity enables a richer comparative analysis of how variations in fiscal capacity shape spending patterns and gender equality outcomes at the district level. Second, in terms of population concentration and the complexity of gender development, the three provinces collectively account for more than 40% of Indonesia's total population, making them a critical locus for understanding human development and gender dynamics. Data from BPS indicate that although IPG and IDG scores in Java have improved over time, substantial disparities persist across districts, particularly in women's economic and political participation. Focusing on these provinces therefore provides a valuable basis for exploring the effectiveness of local government spending in reducing gender gaps amid differing socio-economic and fiscal conditions.

By examining district-level data across the largest and most socioeconomically diverse provinces on Java Island, the study aims to produce an empirical model that may serve as a

reference for other regions in Indonesia. In line with the national inclusive development agenda, which prioritizes reducing socio-economic inequality and ensuring equitable access to education, health services, and employment opportunities, the findings of this study are expected to contribute to evidence-based policymaking that supports more gender-responsive and inclusive fiscal governance.

D. RESULTS AND DISCUSSION

1. Descriptive Statistics

Based on the conceptual model presented, gender equality functions as a moderating condition that shapes pathways toward economic inclusion. Data processing was conducted using two separate datasets: (1) the IPG–IDG dataset (900 observations), and (2) the IPEI dataset (497 observations). This separation was necessary to accommodate differences in data availability across official government sources.

Table 1: Summary of Descriptive Statistics

Variables	Mean	Std. deviation	Minimum	Maximum	Variables	West Java	Central Java	East Java
PAD	0,19	0,09	0,06	0,61	PAD	0,23	0,18	0,18
DAK	0,04	0,02	0,00	0,15	DAK	0,04	0,04	0,04
Econ	0,08	0,05	0,00	0,43	Econ	0,07	0,08	0,09
Health	0,18	0,06	0,00	0,63	Health	0,19	0,18	0,18
Educ	0,32	0,08	0,00	0,88	Educ	0,31	0,34	0,31
IPG	90,85	4,01	78,23	98,23	IPG	89,07	92,28	90,79
IDG	68,52	7,64	46,29	86,29	IDG	67,14	69,74	68,38
IPEI	5,56	0,30	4,63	6,70	IPEI	5,48	5,64	5,51

On average, PAD accounts for only 19.4% of total regional revenue, while DAK represents approximately 4.1% of total regional expenditure. The range of PAD is considerably wide (5%–61%), indicating substantial disparities in fiscal capacity across districts. Average expenditure shares for the economic, health, and education functions range between 8% and 32%. Education consistently represents the largest expenditure category, whereas economic spending is the smallest. Economic spending also exhibits substantial variation (0–41%), suggesting heterogeneous development priorities across districts.

The average IPG score across 900 observations is 90.85, reflecting relatively strong gender equality in basic dimensions such as education, health, and income. The low variation in IPG indicates that basic access is relatively equitable across the three provinces. In contrast, the average IDG score is much lower (68.52), with a range of 46–84. This reflects that the largest gender disparities occur in empowerment-related domains, including women’s political and economic participation. IDG variation is relatively high, signalling persistent inter-district inequalities. In the IPEI-specific dataset, the mean IPEI value is 5.56 (on a 1–7 scale), indicating a moderate level of economic inclusion. IPEI variation is narrower than that of IDG, suggesting greater homogeneity across regions with respect to inclusive economic performance.

Provincial-level data reveal contrasting patterns in the relationship between fiscal capacity and gender outcomes. West Java exhibits high education expenditure and a large PAD base but records the lowest IDG and IPEI levels, suggesting that fiscal resources have not been effectively translated into women’s empowerment and economic inclusion. Central Java demonstrates the most balanced outcomes, with the highest IPG and IDG scores despite having moderate fiscal capacity, implying that spending effectiveness and equitable service delivery exert a stronger influence on gender development than fiscal magnitude alone. Meanwhile, East Java possesses the largest PAD and economic expenditure but shows high internal

disparities and gender outcomes that are not commensurate with its fiscal strength, resulting in moderate IPEI performance. Overall, the descriptive statistics indicate that greater fiscal capacity does not necessarily correspond to improved gender equality or economic inclusion; governance quality, expenditure effectiveness, and intra-provincial distributional patterns are more decisive determinants.

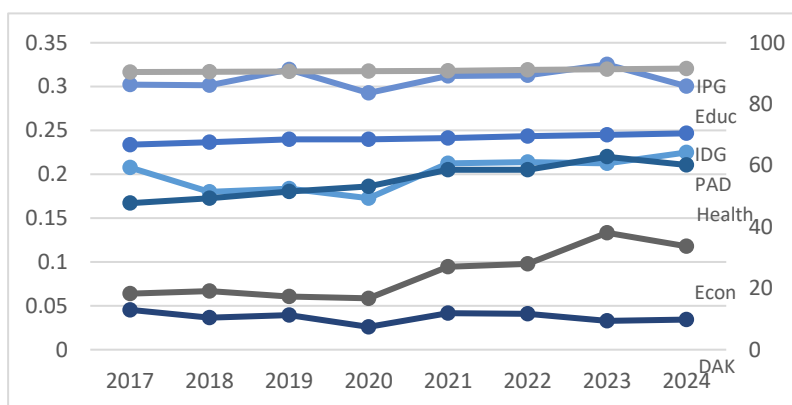


Figure 1. Trend of Fiscal Capacity, Public Spending, and Gender Equality

2. Correlation Analysis

The correlation analysis conducted on Dataset A (n = 900) and Dataset B (n = 497) reveals several empirical patterns regarding the relationships between fiscal capacity, sectoral public expenditure, gender equality, and economic inclusion at the district/city level. The correlations are illustrated in the heatmap below.

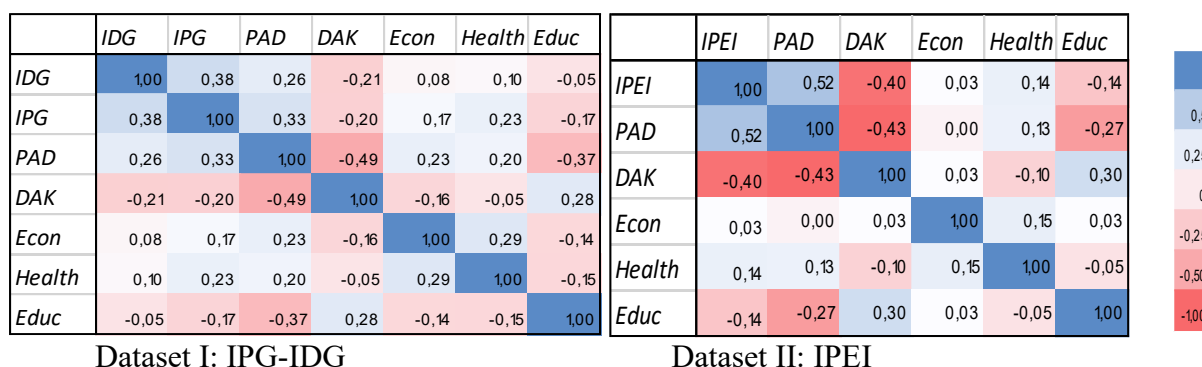


Figure 2. Heatmap Correlation

PAD exhibits a positive correlation with economic spending (r = 0.234) and health spending (r = 0.202), indicating that districts with higher locally generated revenue tend to allocate more resources to productive sectors and basic services. Conversely, the relationship between PAD and education spending is negative (r = -0.371), suggesting the presence of compensatory spending patterns in districts with lower levels of human development. As for DAK, negative correlations appear with PAD (r = -0.495) and with most components of public spending, except for education spending, which shows a positive correlation (r = 0.277). This pattern indicates that DAK is more frequently allocated to districts with low PAD and greater needs for basic public services.

The relationships between sectoral public spending and gender indicators vary across sectors. Health spending is positively correlated with IPG (r = 0.230) and IDG (r = 0.098), whereas education spending shows negative correlations with IPG (r = -0.173) and IDG (r = -0.054). Economic spending demonstrates very weak correlations with IPG (r = 0.166) and IDG (r = 0.078), suggesting that this spending category has not yet substantially contributed to

gender equality improvements. With respect to the linkage between gender equality and economic inclusion, IPG is moderately correlated with IPEI ($r = 0.462$) and IDG is positively correlated with IPEI ($r = 0.317$). This indicates that districts with higher basic gender capabilities and greater women's empowerment tend to achieve more inclusive economic development.

		PAD	DAK	Econ	Health	Educ
West Java	IPG	0,49	-0,25	0,15	0,25	-0,34
	IDG	0,11	-0,01	0,13	0,00	-0,08
	IPEI	0,54	-0,45	0,05	0,05	-0,27
Central Java	IPG	0,47	-0,28	0,16	0,34	-0,31
	IDG	0,27	-0,09	0,09	0,10	-0,04
	IPEI	0,52	-0,33	-0,03	0,03	-0,23
East Java	IPG	0,40	-0,34	0,13	0,30	-0,19
	IDG	0,44	-0,40	0,07	0,09	-0,03
	IPEI	0,78	-0,45	-0,15	0,15	-0,21

Figure 3. Heatmap Correlation per Province

Based on the correlation map presented in Figure 3, West Java, with its relatively high fiscal capacity, appears to exhibit stronger associations between fiscal capacity, gender outcomes, and economic inclusion. However, central government transfers (DAK) are predominantly directed toward lagging districts within the province due to substantial internal disparities. Despite having the highest education expenditure, West Java's education spending does not translate into improvements in women's empowerment, as reflected in its position as the province with the lowest IDG score. Central Java demonstrates the most stable pattern among the three provinces, with more even distribution of gender and inclusion outcomes across districts. Public spending in this province appears to be more effective compared to West Java and East Java. In contrast, East Java shows the strongest association between economic indicators and gender outcomes, indicating that districts with stronger PAD bases are significantly more advanced in both gender equality and economic inclusion relative to those with weaker fiscal capacity, signalling high intra-provincial inequality. Although East Java allocates the highest share to economic expenditure, this spending has not been effective in promoting gender-responsive development. Overall, these findings highlight that the relationships among variables are not uniform across provinces. They are shaped by heterogeneity in fiscal capacity, differences in sectoral spending structures, and the diverse socio-economic characteristics of districts.

The correlation analysis conducted on the two panel datasets reveals a complex set of relationships between fiscal capacity, sectoral public spending, gender equality, and inclusive economic development at the district level in West Java, Central Java, and East Java. These findings provide empirical insights that enrich the literature on how subnational fiscal mechanisms interact with social and economic development outcomes in a decentralized developing-country context such as Indonesia.

The correlations indicate that locally generated revenue (PAD) is positively associated with economic and health spending. This finding aligns with classical public finance theory (Musgrave, 1959; Oates, 1972), which posits that fiscal capacity is a primary determinant of a government's ability to perform allocative and distributive functions. Higher PAD provides greater fiscal space, enabling local governments to expand public service provision, particularly in productive and social sectors. Meanwhile, the negative correlations observed for Special Allocation Funds (DAK) do not imply an adverse impact of DAK; rather, they reflect its redistributive design. DAK is intentionally targeted toward lagging regions, areas with low

development indicators and limited fiscal capacity. Consequently, districts with high DAK allocations tend to exhibit lower IPG, IDG, and IPEI values. This pattern is consistent with the fiscal transfer literature in developing economies, which highlights allocation bias and need-based targeting as key features of intergovernmental fiscal systems.

The relationships between sectoral public spending and gender indicators vary across sectors. Health spending shows a positive correlation with both IPG and IDG, offering strong empirical support for human capital theory (Becker, 1964), which argues that investments in health enhance women's basic capabilities, particularly in life expectancy and reproductive health. This trend is also consistent with the Gender Responsive Fiscal Framework (UN Women, 2015), which emphasizes the role of health-sector allocations in reducing gender disparities.

In contrast, education spending exhibits negative correlations with IPG and IDG. At face value, this appears to contradict human capital theory; however, in the Indonesian subnational context, this pattern more accurately reflects compensatory spending dynamics (reverse causality). Districts with lower gender development tend to allocate a higher share of their budgets to education in an effort to catch up. Thus, the negative correlations do not reflect negative causal effects but rather the concentration of spending in underdeveloped areas. This phenomenon aligns with the targeted social investment literature, which cautions that static correlations between spending and outcomes can be biased toward underlying needs.

Regarding economic spending, the very weak correlations with IPG and IDG indicate that local economic development policies remain largely gender-insensitive. Economic budgets in many regions continue to prioritize general infrastructure, industrial zones, and physical projects that do not directly improve women's access to productive resources or economic participation. This finding supports a key critique in Feminist Economics that macroeconomic policies often remain gender-blind and fail to incorporate the structural constraints faced by women.

The relationships between gender indicators and inclusive economic development are consistent with theories of inclusive growth. IPG exhibits a strong positive correlation with IPEI, suggesting that improvements in women's basic capabilities, education, health, and income, have meaningful implications for inclusive economic performance. IDG also correlates positively with IPEI, supporting the argument that women's empowerment in economic, political, and social spheres is a crucial driver of inclusive growth. These findings reinforce the Inclusive Growth Framework (OECD; World Bank), which holds that economic growth becomes more inclusive when women have equal access to labor markets, productive assets, and decision-making roles. At the subnational level, this suggests that gender equality is not merely a social concern but is directly linked to economic performance and development quality.

The provincial-level heterogeneity indicates that institutional capacity plays a significant role in mediating the relationships among the variables. Central Java, for example, demonstrates the strongest gender outcomes despite having lower fiscal capacity. This supports North's (1990) argument that institutional quality, including budget governance, service delivery effectiveness, and equity, matters more than the size of the budget itself. In contrast, West Java and East Java possess higher fiscal capacity but exhibit larger intra-provincial disparities. These disparities weaken the positive effect of PAD on gender equality and inclusive development, suggesting that uneven development undermines the ability of public spending to generate equitable outcomes. This aligns with spatial inequality theory (Kanbur & Venables, 2005), which posits that regional disparities can reduce the effectiveness of public policies and exacerbate interregional inequalities even in fiscally strong provinces.

Overall, the correlation results yield four key insights:

1. Fiscal capacity matters, but it is not sufficient. PAD enhances public spending and development outcomes, but its effects depend heavily on institutional quality and equity.
2. Public spending has heterogeneous impacts. Health spending shows consistently positive relationships, education spending is compensatory, and economic spending remains non-inclusive.
3. Gender equality is a prerequisite for inclusive economic development. Districts with higher IPG and IDG levels also exhibit higher IPEI.
4. Provincial context shapes policy effectiveness. Governance quality, institutional norms, and local economic structures can strengthen or weaken fiscal–development linkages.

Taken together, this study confirms several theoretical predictions while also revealing the complexities inherent in implementing fiscal and gender policies within Indonesia's decentralized governance system.

E. CONCLUSION

The findings of this study show that fiscal capacity, particularly locally generated revenue (PAD), plays a central role in strengthening public expenditure and supporting gender equality as well as economic inclusion, while special allocation grants (DAK) function primarily as redistributive instruments directed toward regions with weaker development performance. Health expenditure consistently supports improvements in the Gender Development Index (GDI/IPG), whereas education and economic spending do not show positive associations due to their compensatory nature and the fact that they are not yet gender-responsive. Gender equality, both in terms of basic capabilities (IPG) and empowerment (IDG), demonstrates a strong positive association with inclusive economic development (IPEI), indicating that strengthening women's capabilities and participation is a prerequisite for achieving high-quality and inclusive growth.

These findings carry important policy implications for subnational governments. Local administrations need to allocate PAD more strategically toward programs that enhance women's access to education, health, and economic opportunities; strengthen the design of DAK to make it more effective in promoting gender development in lagging regions; improve the efficiency and gender responsiveness of economic and education spending; and reinforce institutional capacity for gender-responsive planning and budgeting (GRPB) so that fiscal instruments operate optimally in promoting inclusive and gender-equitable development.

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