

An Analysis of the Relationship Between Government Spending and Economic Growth in Developing Countries: A Qualitative Analysis of Spending Size, Composition, and Fiscal Efficiency

Maulina Nabila¹, Dayuni², Ahmad Bahar Sagita³, Gina Puspita⁴, Muhammad Saied⁵

¹Institut Prima Bangsa, Indonesia

² Politeknik Siber Cerdika Internasional, Indonesia

³ Sekolah Tinggi Manajemen Informatika dan Komputer Ikmi Cirebon, Indonesia

⁴ Sekolah Tinggi Agama Islam Kuningan, Indonesia

⁵ Politeknik Technical Education Development Centre, Indonesia

*Email: nabilamaulina01@gmail.com¹, dayyuni41760@gmail.com², baharsagita1@gmail.com³, gpuspita924@gmail.com⁴, muhammadsaied18@gmail.com⁵

ABSTRACT

The debate over the relationship between government spending and economic growth in developing countries is never over because the empirical findings are far from uniform. This article examines this relationship through a critical literature review enriched by descriptive analysis of secondary data from the World Development Indicators, the IMF's Fiscal Monitor, and World Bank reports and working papers. The focus of the analysis is placed on three dimensions: the size of spending, the composition of spending, and the efficiency of fiscal management. The results of the synthesis show that government spending does not work automatically as a growth engine. The size of the budget is important, but its influence is largely determined by the structure of spending, the quality of institutions, fiscal space, and the ability of the state to convert spending into physical capital and productive human capital. Public investment spending tends to have a more pronounced growth impact when efficiency is high, fiscal space is adequate, and projects are selectively selected. On the other hand, education and health spending more often shows a gradual impact, with long-term benefits that depend on the quality of services, rather than simply a nominal increase in spending. The main implication is that the fiscal agenda in developing countries should shift from simply enlarging the budget to improving the composition, governance, and effectiveness of public spending.

Keywords: government spending; economic growth; fiscal policy; developing countries; public investment

INTRODUCTION

In developing economies, government spending occupies a very strategic position because the state functions not only as a regulator, but also as a development actor. Limited infrastructure, low quality of public services, inequality in access to education and health, and weak market capacity make fiscal intervention often the main instrument to drive economic transformation. In this context, government spending is not only understood as administrative expenditure, but as a means to form the foundation of long-term growth through the provision of public goods, human capital development, and strengthening real sector productivity.

However, increasing government spending does not necessarily lead to better economic performance. Many developing countries are facing a complex fiscal dilemma: development spending needs are enormous, while state revenue capacity is relatively limited, economic structures are vulnerable to external shocks, and debt burdens tend to increase (Lorenzo et al., 2024). This condition makes every budget decision have great economic consequences. Therefore, the debate on the relationship between government spending and economic growth remains relevant, especially as fiscal space narrows and demands on the effectiveness of public spending become higher.

Theoretically, the relationship between government spending and economic growth has long been discussed in various schools of economic thought. In a Keynesian framework, government spending is seen as able to drive aggregate demand, increase output, and expand employment

opportunities, especially when private sector activity is weakening. Meanwhile, in endogenous growth theory, certain government expenditures—especially those of a productive nature—can increase economic capacity in the long run through the provision of infrastructure, education, and institutional support. However, the same theory also warns that spending that is too large, inefficient, or financed by taxes that suppress productive activity can cause distortion and inhibit growth (RJ Barro, 1990).

The inconsistency of empirical findings further shows that government spending cannot be treated as a homogeneous variable. Devarajan et al., (1996), for example, found that in a number of developing countries, current spending is positively correlated with growth, while capital expenditure shows a negative relationship. These findings seem paradoxical when compared to the common assumption that capital expenditure is always more productive. However, these results can be understood if capital expenditure in practice is absorbed in projects that are mistargeted, high-cost, low-benefit, or not supported by adequate operational and maintenance financing.

On the other hand, subsequent studies show a more nuanced picture. Bose et al., (2007) emphasized that when government budget constraints are calculated more carefully, capital expenditure and education spending actually have a more consistent relationship with economic growth. These findings show that the problem does not lie in the simple dichotomy between current spending and capital expenditure, but in the quality of the budget composition and the institutional context in which the policy is implemented. In other words, the effectiveness of government spending is greatly influenced by how the budget is prepared, managed, and translated into truly productive public output (Alshammary et al., 2022; Arawatari et al., 2023).

More recent literature also reinforces the view that the impact of public spending is highly dependent on state efficiency and capacity. Public investment can have a multiplier effect on output, but the benefits are much greater in countries that have good project selection processes, relatively strong budget governance, and sufficient fiscal space to maintain financing sustainability (Adarov et al., 2024; Furceri & Li, 2017). The same applies to education and health spending. Budget increases in these two sectors do not automatically increase growth if they are not followed by service quality, target accuracy, and an adequate accountability system (Anowor et al., 2023; Kousar et al., 2023). Therefore, the discussion on government spending needs to shift from just a matter of quantity to a matter of quality.

However, in many policy discussions, government spending is still often read as an aggregate as a percentage of GDP. Such an approach is useful for providing an overview, but it is inadequate to explain variations in growth performance between developing countries (Jama, 2024; Ullah et al., 2024). Employee spending on educators, untargeted subsidies, basic infrastructure investments, public asset maintenance costs, and routine administrative expenditures clearly have different economic impacts. Simplifying all of these components into one aggregate figure risks covering up the fundamental problem that determines whether public spending is productive or otherwise.

Departing from this background, this article aims to analyze the relationship between government spending and economic growth in developing countries by emphasizing three main aspects, namely the size of spending, the composition of spending, and the efficiency of its management. The question posed is not only whether government spending has an effect on growth, but also what kind of spending has the most potential to drive sustainable growth and under what kind of institutional conditions that influence becomes stronger. As such, this article is expected to

provide a more critical reading of the existing literature while offering more relevant policy implications for developing countries that must manage fiscal constraints while still pursuing a long-term development agenda.

Despite the growing body of literature on government spending and economic growth, a persistent research gap remains in the systematic examination of how the interplay among spending size, expenditure composition, and institutional efficiency jointly determines fiscal outcomes across heterogeneous developing country contexts. Most existing studies either focus narrowly on a single expenditure category or treat developing countries as a homogeneous group, thereby masking the structural and institutional diversity that shapes fiscal effectiveness (Buthelezi, 2023; Okunlola et al., 2024).

This article addresses that gap by integrating descriptive data analysis with a directed critical review of the fiscal-growth literature, with the aim of producing a multi-dimensional analytical framework applicable to developing economies in general. The novelty of this study lies in its simultaneous and comparative treatment of three analytical dimensions size, composition, and efficiency within a unified framework informed by the most recent institutional data from the IMF and World Bank, while explicitly acknowledging the conditional and context-dependent nature of fiscal multipliers.

RESEARCH METHODS

This article uses a qualitative-descriptive approach based on directed literature review and secondary data analysis. Primary sources include widely referenced academic publications in the fiscal and growth literature, notably the work of Bose et al., (2007); Devarajan et al., (1996O; Furceri & Li, (2017); RJ Barro, (1990), as well as some cutting-edge studies from the IMF, World Bank, and IDB. In addition, the article uses World Development Indicators data to read variations in government expenditure indicators between state income groups, as well as the IMF Fiscal Monitor 2024–2025 and World Bank Global Economic Prospects/press release 2025 to capture the latest fiscal context of developing countries.

The literature search was conducted systematically across three primary databases: Google Scholar, EconLit, and the institutional repositories of the IMF, World Bank, and Inter-American Development Bank (IDB). Search terms included combinations of “government spending,” “public expenditure,” “economic growth,” “fiscal multiplier,” “developing countries,” “public investment,” and “fiscal efficiency.” Inclusion criteria were as follows: (1) peer-reviewed journal articles and working papers published between 1990 and 2025; (2) studies that explicitly address the relationship between government expenditure and economic growth in low- or middle-income countries; and (3) sources with sufficient methodological transparency to assess the credibility of their findings. Studies were excluded if they focused exclusively on advanced economies without providing comparative developing-country analysis, or if they lacked adequate documentation of data sources and estimation methods.

The analysis was carried out in three stages. First, the article maps theoretical arguments and empirical findings regarding the relationship between government spending and economic growth. Second, the article compares seemingly conflicting results, especially between studies that emphasize the importance of ongoing spending, studies that favor capital spending, and studies that highlight education, health, and public investment spending. Third, the article interprets the findings within the framework of emerging countries' fiscal policies, with particular attention to the issues of efficiency, fiscal space, and institutional quality. By its nature it is a synthesis of secondary literature and data, this article is not intended to generate new causal estimates for one particular country, but rather to formulate analytical arguments that are relevant to the context of developing

countries in general.

The data synthesis technique employed in this study is a narrative synthesis approach, consistent with established practice in qualitative literature reviews (Popay et al., 2006). This approach involves: (a) developing a theoretical framework to organize the evidence; (b) tabulating and grouping studies according to spending type and reported direction of effect; and (c) exploring relationships within and between studies to identify patterns, contradictions, and moderating factors. Where empirical estimates are reported across multiple studies, the article presents the range of findings rather than a pooled average, in order to preserve the contextual variation inherent to developing country settings. Quantitative secondary data drawn from the World Development Indicators and the IMF Fiscal Monitor are used descriptively and illustratively, not as the basis for inferential statistical analysis.

RESULTS AND DISCUSSION

The initial descriptive picture shows that the size of government spending does not have a simple pattern when compared between groups of countries. The variation in government spending as a percentage of *Gross Domestic Product (GDP)* shows that developing countries do not always have lower levels of spending than developed countries.

Table 1. Average Government Expenditure (% of GDP) by Country Group (2024)

Group of Countries	Government Expenditure (% GDP)
Low Income	13,6%
Lower-Middle Income	11,0%
Upper-Middle Income	15,9%
High Income	17,4%

Source: Data Processed

Based on Table 1, it can be seen that there is no linear relationship between the level of state revenue and the amount of government spending. This shows that the size of government spending is not enough to explain the variation in economic growth. Other factors such as fiscal structure, institutional capacity, and policy priorities have a more decisive role in shaping the effectiveness of these expenditures (Alshammary et al., 2022; Misi Lopes et al., 2023).

In addition to the aggregate size, the composition of government spending is an important aspect that affects economic growth.

Table 2. Results of Empirical Studies on Government Spending and Economic Growth

Researcher	Shopping Type	Influence on Growth
Devarajan et al., (1996)	Shopping runs	Positive
Devarajan et al., (1996)	Capital expenditure	Negatives
Bose et al., (2007)	Capital expenditure	Positive
Bose et al., (2007)	Education spending	Significant positives

Source: Data Processed

Table 2 shows that the influence of government spending on economic growth is highly dependent on the type of spending. The differences in results between studies indicate that not all expenditures have the same impact. Spending that is productive and efficiently managed tends to

make a positive contribution to growth, while spending that is not on target has the potential to cause inefficiencies.

Furthermore, public investment is one of the important components in encouraging economic growth.

Table 3. The Impact of Public Investment on Economic Growth

Research Source	Increased Public Investment	Impact on Output
Furceri & Li, (2017)	Investment shock	+0.2 (short-term)
Adarov et al., (2024)	+1% GDP	+1.1% (5 years)
IMF (2025)	Reallocation of investment expenditure	+4% (10 years)

Source: Data Processed

Table 3 shows that public investment has a positive impact on economic growth, although the magnitude of this influence depends on fiscal conditions and management efficiency. Countries with better institutional capacity tend to benefit more from public investment (Jalles et al., 2024).

In addition to investment, the overall composition of government spending also affects the effectiveness of fiscal policies.

Table 4. Composition of Global Government Expenditure (IMF 2025)

Production Type	Percentage of Total Expenditure
Employee spending	±25%
Public investment	±18%
Education	±11%
Health	±10–12%

Source: Data Processed

Table 4 shows that government spending is still dominated by employee spending, while the proportion of productive spending is relatively smaller. This indicates a potential imbalance in the budget structure that can affect the effectiveness of spending in driving economic growth (Afonso & Alves, 2025).

Overall, the results show that the relationship between government spending and economic growth is complex and influenced by a variety of factors, including the composition of spending, management efficiency, and institutional quality (Arawatari et al., 2023; Nguyen & Bui, 2022).

Discussion

The findings in Table 1 confirm that the size of government spending does not have a simple relationship with economic growth. Variations between groups of countries show that the magnitude of spending does not automatically result in higher growth. This reinforces the argument that approaches that focus only on the ratio of expenditure to GDP tend to simplify the complexity of fiscal policy in developing countries (Jama, 2024; Lorenzo et al., 2024).

Furthermore, the results in Table 2 show that the composition of expenditure is a more decisive factor than the size of total expenditure. The difference in findings between Bose et al., (2007); Devarajan et al., (1996) cannot be seen as a contradiction, but rather as evidence that the

effectiveness of spending is highly contextual. In many cases, current spending supports the sustainability of economic functions through the financing of public service operations, while capital expenditure can become unproductive if it is not accompanied by adequate planning and supervision.

The findings in Table 3 reinforce the strategic role of public investment in driving economic growth. However, these positive impacts are not universal. The effectiveness of investment is highly dependent on the efficiency of implementation, project quality, and the country's fiscal condition. Countries with good governance are able to optimize the benefits of public investment, while countries with low efficiency tend to experience budget waste that reduces the impact of growth (Afonso & Alves, 2025; Jalles et al., 2024).

Meanwhile, Table 4 shows that the government's expenditure structure is still dominated by administrative spending, such as employee spending. This condition can reduce fiscal space for productive spending which has a greater impact on economic growth (Afonso & Alves, 2025). Therefore, fiscal policies in developing countries need to be directed at budget reallocations towards more productive sectors, such as public investment, education, and health.

By integrating all these findings, it can be concluded that the relationship between government spending and economic growth is not only determined by the size of the budget, but rather by how the budget is allocated and managed. Efficiency, institutional quality, and the accuracy of policy goals are key factors in determining the success of government spending in encouraging sustainable economic growth (Misi Lopes et al., 2023; Okunlola et al., 2024). It is nonetheless important to critically acknowledge the limitations inherent in the secondary data used throughout this analysis.

The aggregate expenditure figures presented in Table 1, sourced from the World Development Indicators, are classified according to IMF Government Finance Statistics (GFS) standards; however, country-level compliance with these standards varies considerably, and reclassification revisions can introduce discontinuities in time-series comparisons. Similarly, the expenditure composition data in Table 4, derived from the IMF Fiscal Monitor (2025), represent broad global averages that necessarily obscure within-group heterogeneity across the diverse set of developing economies. The investment multiplier estimates compiled in Table 3 originate from studies using different empirical methodologies—including local projection models, structural VARs, and dynamic panel estimation—which limits the comparability of the reported magnitudes. In particular, the apparent contradiction between Bose et al., (2007); Devarajan et al., (1996) regarding the growth effect of capital expenditure cannot be fully resolved through a narrative synthesis alone.

Devarajan et al., (1996) employed cross-sectional data for 43 developing countries over 1970–1990, a period characterized by significant capital expenditure misallocation and limited governance capacity, while Bose et al., (2007) used a more refined panel approach with explicit budget constraint controls. This methodological divergence, combined with differences in sample coverage and time horizon, suggests that the conflicting results are not simply paradoxical but rather reflect genuinely context-dependent relationships. The broader implication is that aggregate empirical summaries, while useful for identifying broad patterns, should be interpreted with caution when applied to specific country cases.

CONCLUSION

This study analyzed the relationship between government spending and economic growth in developing countries across three dimensions: spending size, expenditure composition, and fiscal

efficiency. The findings confirm that this relationship is significant but non-linear and not automatic. The magnitude of spending as a share of GDP alone is insufficient to explain growth variations; expenditure composition and budget management quality play a far more decisive role. Productive spending on public investment, education, and health yields greater growth contributions, though benefits materialize across different time horizons. Fiscal efficiency is equally critical public investment delivers optimal returns only when supported by sound project selection and institutional governance.

Inefficient spending, by contrast, risks wasteful outcomes that undermine growth. This study contributes by advocating a paradigm shift in developing countries' fiscal policy: from budget expansion toward improving spending quality, composition, and accountability. A key limitation is the reliance on qualitative synthesis and secondary data, precluding country-specific causal estimates. Future research should employ panel cointegration methods, System-GMM estimation, and quasi-experimental designs to explicitly model the joint effects of expenditure composition, institutional quality, and fiscal space on growth outcomes.

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