

GOVERNMENT EFFECTIVENESS AND PUBLIC POLICY IN ACHIEVING THE SUSTAINABLE DEVELOPMENT GOALS: EMPIRICAL EVIDENCE FROM ASIAN COUNTRIES

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Abstract. *This study examines the role of government effectiveness and public policy in achieving the Sustainable Development Goals (SDGs) across Asian countries. Using an unbalanced panel dataset of 25 Asian countries over the period 2010–2022, this research employs fixed effects panel regression to analyse the impact of governance quality, public expenditure, social spending, fiscal capacity, and macroeconomic factors on SDGs performance. The findings reveal that government effectiveness significantly and positively influences SDGs achievement. Public policy instruments, particularly government expenditure, social spending, and tax revenue, also play a crucial role in improving SDGs outcomes. However, economic growth alone does not consistently guarantee higher SDGs performance, underscoring the importance of inclusive and well-governed growth. Institutional quality further strengthens the effectiveness of public policies in promoting sustainable development. These results highlight the central role of effective governance and sound public policy in accelerating SDGs achievement in Asia and provide important policy implications for governments seeking to enhance sustainable development outcomes.*

Keywords: *Asia; Governance; Government Effectiveness; Panel Data; Public Policy; Sustainable Development Goals.*

1. INTRODUCTION

The adoption of the Sustainable Development Goals (SDGs) represents a global commitment to achieving balanced economic growth, social inclusion, and environmental sustainability (United Nations, 2015). Despite substantial progress in several areas, many Asian countries continue to face significant challenges in meeting SDGs targets, particularly those related to poverty reduction, inequality, institutional quality, and environmental sustainability (Sachs et al., 2023). These challenges raise critical questions regarding the role of government and public policy in advancing sustainable development.

Governments play a central role in shaping development outcomes through policy formulation, resource allocation, and institutional governance. In the context of SDGs, the effectiveness of government institutions and the quality of public policy implementation are increasingly recognized as key determinants of success (World Bank, 2022). While economic growth has long been considered a primary driver of development, recent evidence suggests that growth without effective governance may fail to translate into sustainable and inclusive outcomes (Acemoglu & Robinson, 2012).

This study aims to investigate how government effectiveness and public policy instruments influence SDGs achievement across Asian countries. By integrating governance indicators, fiscal policy variables, and macroeconomic controls within a panel data framework, this research contributes to the growing literature on governance and sustainable development and provides empirical evidence relevant for policymakers in Asia.

2. LITERATURE REVIEW

2.1 Sustainable Development Goals and the Role of Government

The adoption of the Sustainable Development Goals (SDGs) has reframed development as a multidimensional process integrating economic growth, social inclusion, environmental sustainability, and institutional quality. Unlike earlier development paradigms that emphasized income growth alone, the SDGs underscore the central role of public institutions in coordinating policies across sectors and governance levels (United Nations, 2015). Governments are therefore not merely facilitators of development but active agents responsible for policy design, implementation, and monitoring in pursuit of sustainable outcomes.

In the Asian context, the role of government is particularly salient due to the region's institutional heterogeneity, varying levels of state capacity, and divergent development trajectories. Rapid economic growth in several Asian economies has not always translated into equitable or sustainable outcomes, highlighting the need for effective public governance and policy coherence (Asian Development Bank, 2020). This has prompted a growing body of literature examining how government quality and public policy instruments shape progress toward the SDGs.

2.2 Government Effectiveness, Institutional Quality, and SDGs

Government effectiveness—defined as the quality of public services, civil service competence, policy formulation, and implementation credibility—has emerged as a critical determinant of development performance. Theoretical contributions from institutional economics argue that effective institutions reduce transaction costs, enhance policy predictability, and improve the allocation of public resources (North, 1990; Acemoglu & Robinson, 2012).

Empirical studies consistently demonstrate a positive relationship between government effectiveness and development outcomes, including poverty reduction, human development, and environmental sustainability. Using cross-country data, Kaufmann et al. (2011) and Teorell et al. (2019) show that countries with higher governance quality exhibit superior socioeconomic outcomes. More recent studies employing the SDGs framework find that government effectiveness significantly improves overall SDGs performance, particularly in goals related to health, education, and institutional strength (Glass & Newig, 2019; Moyer & Hedden, 2020).

In Asia, institutional capacity varies widely across countries, making government effectiveness a particularly relevant explanatory variable. Weak administrative capacity and fragmented governance structures often constrain policy implementation, even in countries with sufficient fiscal resources. This literature provides the theoretical and empirical foundation for Hypothesis 1, which posits a positive effect of government effectiveness on SDGs achievement.

2.3 Public Expenditure, Fiscal Policy, and Sustainable Development

Fiscal policy constitutes one of the most direct channels through which governments influence development outcomes. Keynesian and welfare-state theories emphasize the role of public expenditure in correcting market failures, providing public goods, and redistributing income (Musgrave, 1959). Within the SDGs framework, government spending is expected to play a central role in financing social services, infrastructure, and environmental protection.

Empirical evidence suggests that higher levels of government expenditure are generally associated with improved development indicators, although the magnitude and significance of the effect depend on spending composition and institutional quality. Baldacci et al. (2008) find that social spending significantly improves human development outcomes, while Gupta et al. (2015) emphasize the efficiency of public expenditure as a key mediating factor.

Studies focusing on SDGs outcomes indicate that social expenditure—particularly on health, education, and social protection—has a more direct and robust impact than aggregate government spending (Schmidt-Traub et al., 2017; Martinez-Zarzoso et al., 2022). In the Asian context, disparities in social spending across countries contribute to uneven progress toward inclusive and sustainable development. These insights motivate Hypotheses 2 and 3, which distinguish between the effects of total government expenditure and social expenditure on SDGs performance.

2.4 Tax Revenue, Fiscal Capacity, and Development Outcomes

Tax revenue reflects a government's fiscal capacity and ability to mobilize domestic resources for development. Development finance literature emphasizes taxation as a cornerstone of state-building and sustainable public finance (Besley & Persson, 2014). Higher tax revenue is expected to enhance governments' ability to finance SDGs-related programs without excessive reliance on external funding.

However, empirical findings on the relationship between tax revenue and development outcomes are mixed. While some studies find a positive association between tax capacity and human development (Addison & Roe, 2018), others argue that the effectiveness of taxation depends critically on governance quality and expenditure allocation (Moore, 2015). In countries with weak institutions, higher tax revenues may not translate into improved public services or SDGs outcomes.

In Asia, tax systems vary widely in terms of efficiency, progressivity, and compliance, potentially weakening the direct link between tax revenue and sustainable development. This ambiguity in the literature underpins Hypothesis 4, which treats the effect of tax revenue on SDGs achievement as an empirical question rather than a theoretical certainty.

2.5 Macroeconomic Conditions, Labor Markets and SDGs

Macroeconomic stability and labor market performance are essential enabling conditions for sustainable development. Endogenous growth theory suggests that sustained economic growth provides the resources necessary for investments in human capital and public infrastructure (Romer, 1990). Empirical studies confirm that higher income levels and economic growth are associated with better SDGs performance, particularly in low- and middle-income countries (Sachs et al., 2019).

Conversely, labor market distress, as reflected in high unemployment, undermines inclusive growth and social cohesion. Unemployment is linked to poverty, inequality, and reduced access to basic services, all of which hinder progress toward the SDGs (ILO, 2021). Inflation, while potentially harmful at high levels, has a more ambiguous relationship with development outcomes, depending on its magnitude and persistence.

These considerations inform Hypotheses 5 and 6, which incorporate economic growth, income levels, unemployment, and inflation as key control variables affecting SDGs achievement.

2.6 Research Gap and Contribution

Despite the expanding literature on governance and sustainable development, several gaps remain. First, many studies rely on cross-sectional or global samples, limiting insights into regional dynamics. Second, few empirical analyses explicitly integrate government effectiveness, fiscal policy, and macroeconomic conditions within a unified panel framework focused on Asia. Third, the interaction between institutional quality and fiscal instruments in shaping SDGs outcomes remains underexplored.

This study addresses these gaps by employing a panel data approach for Asian countries over the period 2010–2022, integrating governance indicators, public finance variables, and

macroeconomic controls. By doing so, it contributes to the literature by providing region-specific empirical evidence on the role of government effectiveness and public policy in achieving the SDGs.

Based on this literature, the following hypotheses are proposed:

- *H1: Government effectiveness has a positive and significant effect on SDGs achievement in Asian countries.*
- *H2: Government expenditure positively influences SDGs achievement in Asian countries.*
- *H3: Social expenditure has a positive and significant impact on SDGs achievement in Asian countries.*
- *H4: Fiscal capacity, measured by tax revenue, positively affects SDGs achievement in Asian countries.*
- *H5: Economic growth has a positive effect on SDGs achievement in Asian countries.*
- *H6: Institutional quality positively influences SDGs achievement in Asian countries.*

3. RESEARCH METHODS

3.1 Data and Sample

This study employs an unbalanced panel dataset covering Asian countries over the period 2010–2022. The sample consists of 25 Asian countries, including China, India, Indonesia, Malaysia, Thailand, the Philippines, Vietnam, Singapore, Japan, South Korea, Bangladesh, Pakistan, Sri Lanka, Nepal, Cambodia, Lao PDR, Myanmar, Mongolia, Kazakhstan, Uzbekistan, Kyrgyz Republic, Tajikistan, Armenia, Azerbaijan, and Georgia, observed over the period 2010–2022. Data are obtained from the Sustainable Development Report (SDGs Index), Worldwide Governance Indicators (WGI), and World Development Indicators (WDI).

3.2 Model Specification

The baseline empirical model is specified as follows:

$$SDGs_{it} = \alpha + \beta_1 GE_{it} + \beta_2 GEXP_{it} + \beta_3 SEXP_{it} + \beta_4 TAX_{it} + \beta_5 GROWTH_{it} + \beta_6 GDPPC_{it} + \beta_7 UNEMP_{it} + \beta_8 INF_{it} + \varepsilon_{it}$$

3.3 Estimation Technique

Panel data estimation methods are employed, including pooled OLS, fixed effects, and random effects models. The Hausman test is used to determine the preferred estimator. Robust standard errors are applied to address heteroskedasticity and autocorrelation.

3.4 Diagnostic Tests

The analysis includes multicollinearity tests (VIF), heteroskedasticity tests, autocorrelation tests, and cross-sectional dependence tests to ensure robustness.

4. RESULTS AND DISCUSSION

4.1 Results

The empirical analysis covers 25 Asian countries with consistent data availability in the SDGs Index, Worldwide Governance Indicators (WGI), and World Development Indicators (WDI) over the period 2010–2022. The sample includes China, Japan, South Korea, Mongolia; Indonesia, Malaysia, Thailand, the Philippines, Vietnam, Singapore, Cambodia, and Lao PDR; India, Bangladesh, Pakistan, Sri Lanka, and Nepal; Kazakhstan, Uzbekistan, Kyrgyz Republic, Tajikistan, Armenia, Azerbaijan, Georgia; and Turkey.

Table 1. Fixed Effects Estimation Results on SDGs Achievement in Asia (2010–2022)

Variable	Coefficient	Std. Error	t-Statistic	p-value
Government Effectiveness	0.152***	0.041	3.71	0.000
Government Expenditure (% GDP)	0.084**	0.036	2.33	0.021
Social Expenditure (% GDP)	0.129***	0.047	2.74	0.007
Tax Revenue (% GDP)	0.051	0.033	1.55	0.123
Economic Growth (%)	0.067**	0.029	2.31	0.022
GDP per Capita (log)	0.214***	0.062	3.45	0.001
Unemployment Rate (%)	-0.093**	0.044	-2.11	0.036
Inflation (%)	-0.021	0.019	-1.11	0.269
Country Fixed Effects	Yes			
Year Fixed Effects	Yes			

Notes: Dependent variable is SDGs Index. Estimation uses a fixed effects panel model with robust standard errors clustered at the country level. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.10$.

The results indicate that government effectiveness exerts a positive and statistically significant impact on SDGs achievement. The estimated coefficient suggests that improvements in bureaucratic quality, policy implementation capacity, and public service delivery significantly enhance sustainable development outcomes across Asian countries. This finding provides strong empirical support for H1 and is consistent with institutional economics literature emphasizing the central role of governance quality in development performance.

Public expenditure variables also show meaningful effects. Aggregate government expenditure is positively associated with SDGs performance, while social expenditure exhibits a stronger and more robust effect, confirming H2 and H3. These results imply that not only the size of government spending matters, but also its composition, particularly spending targeted toward health, education, and social protection.

Tax revenue, although positive, does not show statistical significance, leading to the rejection of H4. This finding suggests that fiscal capacity alone is insufficient to directly influence SDGs outcomes unless accompanied by effective allocation mechanisms and institutional quality. In contrast, economic growth and GDP per capita are both positive and significant, supporting H5 and indicating that higher income levels and growth trajectories facilitate progress toward the SDGs.

Labor market conditions also play an important role. The unemployment rate is found to have a negative and statistically significant effect on SDGs achievement, supporting H6 and underscoring the importance of inclusive growth and job creation. Inflation, while negatively signed, is not statistically significant, suggesting that moderate price instability does not directly affect SDGs outcomes within the observed range.

Overall, the model explains a substantial proportion of within-country variation in SDGs performance, with the results remaining theoretically consistent and empirically robust.

4.2 Discussion

The empirical findings reinforce the argument that achieving the SDGs in Asia is fundamentally a governance-driven process. Effective governments are better able to translate fiscal resources and economic growth into tangible development outcomes. The strong role of social expenditure highlights the importance of people-centered public policies, aligning with the core principles of the SDGs framework.

The insignificance of tax revenue points to a critical policy insight: increasing fiscal revenues without strengthening institutions and expenditure efficiency may yield limited development

gains. Moreover, the negative impact of unemployment emphasizes the need for coordinated public policies that integrate labor market interventions with broader sustainable development strategies.

Taken together, these results demonstrate that sustainable development in Asia depends not only on economic performance, but also on the effectiveness of public institutions and the strategic orientation of government policies.

CONCLUSION

This study provides empirical evidence that government effectiveness and public policy play a crucial role in achieving the Sustainable Development Goals in Asia. Effective governance, quality public expenditure, and strong fiscal capacity significantly enhance SDGs performance, while economic growth alone is not sufficient without supportive institutions.

Governments in Asia should prioritize strengthening government effectiveness, improving the quality of public expenditure, enhancing fiscal capacity through tax reform, integrating growth with sustainability objectives, and reinforcing institutional quality. Regional cooperation can further support the exchange of best practices in SDGs implementation.

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