

Fiscal Policy and Economic Growth: A Comparative Study of Fiscal Regimes in Developing and Developed Countries

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Abstract

This article analyzes the relationship between fiscal policy and economic growth from a comparative perspective between developed (OECD) and developing countries, focusing on structural differences in tax regimes, public spending composition, and fiscal sustainability. A quantitative approach is adopted, using macroeconomic data for the period 2000–2023 from the World Bank, IMF, and OECD, applying multiple regression and correlation analysis. The objective is to evaluate how fiscal policy variables — particularly tax burden, revenue composition, public expenditure, and budget balance — influence real GDP per capita growth. Preliminary results indicate that in developed countries, fiscal policy acts as a stabilizing tool, while in developing economies, fiscal constraints and macroeconomic volatility limit its effectiveness in promoting growth. Furthermore, institutional quality and expenditure efficiency appear more critical for growth than the absolute tax level. It concludes that effective fiscal policy relies less on the magnitude of taxation and more on composition, predictability, and fiscal credibility. The study contributes to ongoing debates on the role of the State and fiscal discipline in sustainable growth across different development stages.

Keywords: *fiscal policy; economic growth; public expenditure; taxation; developing countries; OECD.*

INTRODUCTION

Fiscal policy occupies a central position in contemporary economic debate, serving as one of the main instruments of government intervention in the economy. Over the past few decades, the effectiveness of fiscal policies has been widely discussed, especially in the context of countries with different levels of development and institutional structures.

In developed countries, fiscal policy is often used countercyclically, supported by strong institutions, high tax collection capacity, and credible fiscal rules (Blanchard, 2019). In developing countries, fiscal policy faces additional challenges, such as fiscal constraints, revenue volatility, and dependence on external sources of financing (Gupta & Tareq, 2008). The economic literature has extensively explored the relationship between fiscal policy and economic growth, highlighting that the impact of spending and taxes on GDP depends on the composition of expenditures, tax efficiency, and the sustainability of public finances (Barro, 1990; Easterly & Rebelo, 1993). However, there is still empirical disagreement on whether fiscal expansion stimulates or inhibits long-term growth, especially in emerging economies.

This study proposes a comparative analysis between two groups of countries:

- Developed countries (OECD members), characterized by broad tax systems, stable fiscal institutions, and low debt risk;
- Developing countries, represented by the BRICS economies (Brazil, Russia, India, China, and South Africa) and other intermediate economies.

The main research question is:

RQ: How do different tax regimes affect economic growth in countries with different levels of development?

The overall objective is to assess the impact of fiscal policy on real GDP per capita growth in both groups. The specific objectives are:

1. To examine the relationship between the tax burden, public spending, and growth;
2. To analyze the role of the fiscal deficit and public debt in fiscal sustainability.
3. To compare fiscal efficiency between developed and developing countries;
4. Identify institutional determinants that influence the effectiveness of fiscal policy.

This article contributes to the debate on the role of the State and fiscal discipline in economic growth, offering recent empirical evidence based on international comparative data.

THEORETICAL BACKGROUND

Fiscal Policy and the Role of the State in the Economy

Fiscal policy is defined as the set of measures related to revenue collection and public expenditures, to influence the level of economic activity, income distribution, and macroeconomic stability (Musgrave, 1959).

From a Keynesian perspective, fiscal policy plays an essential role in stabilizing the economic cycle through increased spending and tax reductions during recessions (Keynes, 1936). From a neoclassical perspective, excessive fiscal intervention can generate distortions, displacing resources from the private sector and reducing long-term growth (Barro, 1990). Contemporary endogenous growth models incorporate the impact of fiscal policy through public investment in infrastructure, education, and innovation, suggesting that certain types of public spending can increase total factor productivity (Romer, 1990).

Tax Structure and Regimes

A country's fiscal structure involves both the composition of tax revenue (direct and indirect taxes, on consumption, income, and capital) and the composition of public expenditure (investment, government consumption, social transfers, and interest).

In OECD countries, the average tax burden is around 34% of GDP, while in developing countries this figure rarely exceeds 20% of GDP (OECD, 2023; World Bank, 2024). In addition to the magnitude, the quality of taxation is crucial: taxes on income and profits tend to have a lesser regressive impact, while taxes on consumption—predominant in developing countries—reduce equity and can restrict growth (Tanzi & Zee, 2000). The efficiency of public spending also differs between groups: developed countries present a greater return on spending on human capital and infrastructure (Afonso, Schuknecht & Tanzi, 2010), while in emerging countries, part of the expenditure is absorbed by administrative inefficiencies or unproductive subsidies (Clements et al., 2013).

Fiscal Policy, Stability, and Growth

The theory of endogenous growth (Barro, 1990; Lucas, 1988) proposes that fiscal policies can permanently influence the growth rate, depending on how they affect investment in physical and human capital.

Empirical studies indicate that productive public investments, especially in infrastructure and education, tend to have positive long-term effects on growth (Aschauer, 1989). However, high current expenditures and persistent deficits can have opposite effects, increasing public debt and putting pressure on interest rates (Reinhart & Rogoff, 2010).

In developed countries, expansionary fiscal policies tend to have more predictable multiplier effects, due to institutional stability and access to long-term financing. In developing economies, however, the same fiscal impulse can generate inflation, exchange rate depreciation, and loss of credibility (Ilzetzki, Mendoza & Végh, 2013).

Institutional Differences and Fiscal Management Capacity

Recent literature highlights the role of fiscal institutions in the effectiveness of economic policy (Acemoglu, Johnson & Robinson, 2005). Countries with greater fiscal transparency, clear fiscal rules, and independent tax authorities tend to experience higher growth and lower macroeconomic volatility (Alesina & Perotti, 1996). In developing countries, low institutional and revenue-raising capacity limits the scope for countercyclical fiscal policies, often making them procyclical—that is, expansion during periods of growth and contraction during recessions (Gavin & Perotti, 1997). Thus, the impact of fiscal policy on growth depends not only on the magnitude of fiscal variables but also on the quality of the institutions that implement and monitor them.

Based on the theoretical review, the following hypotheses are formulated:

- H1: The tax burden has a negative impact on economic growth in developing countries, but is neutral or slightly positive in developed countries.
- H2: Public investment spending is positively correlated with growth in both groups.
- H3: An excessive fiscal deficit reduces growth in developing countries, but not necessarily in developed countries.
- H4: Institutional quality positively moderates the effect of fiscal policy on growth.

METHODOLOGY

This study adopts a quantitative, comparative, and explanatory approach to analyze the impact of tax variables on real GDP per capita growth. The research uses a longitudinal, cross-sectional panel data design, covering 40 countries—20 developed, OECD members, and 20 developing—from 2000 to 2023. This division follows the classification of the World Bank (2024) and the OECD (2023), based on income and institutional quality criteria. The information was obtained from highly reliable international sources, including the World Bank (World Development Indicators), the International Monetary Fund (Fiscal Monitor and World Economic Outlook), the OECD database, and the regional banks IDB and African Development Bank. All monetary variables were converted to constant 2015 prices and expressed as a percentage of GDP where applicable, to ensure temporal and cross-country comparability. The main econometric model is a panel model with fixed effects, controlling for unobserved heterogeneity by country and year, in addition to incorporating macroeconomic control variables—such as private investment, trade openness, inflation, and human capital—to mitigate omission and endogeneity problems. Additionally, dynamic versions (System GMM) were estimated to capture long-term effects and reduce reverse causality biases. The analysis includes interactions between fiscal variables and the OECD membership dummy, allowing us to identify structural differences between developed and emerging economies. Methodological choices prioritize consistency, international comparability, and statistical robustness, ensuring the empirical validity of the results.

ANALYSIS AND DISCUSSION OF RESULTS

Descriptive Statistics

The empirical analysis is based on an econometric framework designed to estimate the impact of fiscal policy on real per capita economic growth, following the theoretical and empirical literature developed by Barro (1990), Easterly and Rebelo (1993), and Afonso and Furceri

(2010). The core objective is to assess how the main fiscal instruments — taxation, public expenditure, deficit, and public debt — influence economic performance, while also accounting for the mediating role of institutional quality.

The baseline model is specified as follows:

$$Growth_{it} = \alpha + \beta_1 Tax_{it} + \beta_2 Exp_{it} + \beta_3 Def_{it} + \beta_4 Debt_{it} + \beta_5 Inst_{it} + \varepsilon_{it}$$

where:

- $Growth_{it}$ denotes the real per capita GDP growth rate of country i in year t ;
- Tax_{it} represents the total tax burden as a percentage of GDP;
- Exp_{it} refers to total public expenditure (% of GDP);
- Def_{it} captures the fiscal deficit (% of GDP);
- $Debt_{it}$ is the gross public debt (% of GDP); and
- $Inst_{it}$ corresponds to the institutional quality index (scale 0–100), based on the *Worldwide Governance Indicators* (WGI), encompassing dimensions such as political stability, government effectiveness, regulatory quality, and control of corruption.

To capture structural differences between advanced and developing economies, a dummy variable $OCDE_i$ was introduced, taking the value 1 for OECD member countries and 0 otherwise. Moreover, to test whether the effect of taxation on growth varies with the level of development, an interaction term between Tax_{it} and $OCDE_i$ was included, yielding the extended model:

$$Growth_{it} = \alpha + \beta_1 Tax_{it} + \beta_2 Exp_{it} + \beta_3 Def_{it} + \beta_4 Debt_{it} + \beta_5 Inst_{it} + \beta_6 OCDE_i + \beta_7 (Tax_{it} \times OCDE_i) + \varepsilon_{it}$$

This specification allows for the identification not only of the average effects of fiscal variables on economic growth but also of how these effects differ across institutional and developmental contexts. In particular, the interaction term reveals whether taxation may have less harmful — or even positive — effects in countries with stronger institutions and more efficient fiscal systems.

The models were estimated using Ordinary Least Squares (OLS) and Fixed Effects (FE) panel estimators, thereby controlling for unobserved country-specific heterogeneity — such as structural or geographical characteristics — as well as for common time shocks. Robust standard errors were applied to correct for potential heteroskedasticity and serial correlation, ensuring the statistical reliability of the results.

The descriptive statistics (Table 1) highlight substantial structural differences between the two groups of countries. Developed economies exhibit, on average, higher tax burdens and public expenditures, coupled with lower deficits and debt-to-GDP ratios, and significantly stronger institutional frameworks. Conversely, developing countries display greater fiscal volatility, weaker revenue capacity, and more fragile institutional environments, which help explain the divergent fiscal-growth dynamics observed in the subsequent regression analysis. These preliminary findings provide a crucial contextual foundation for interpreting the econometric results discussed in the following sections.

Table 1. Average Fiscal Indicators (2000–2023)

Indicator (% of GDP)	OECD Countries (Average)	Developing Countries (Average)
Total tax burden	33.8	19.7
Total public expenditure	38.1	24.5
Average fiscal deficit	-3.2	-5.4
Gross public debt	79.4	66.8
Real GDP per capita growth	1.9	3.8
Institutional quality index (0–100)	85	54

Source: World Bank (2024), IMF (2024), OECD (2023).

Although developing countries experience higher GDP growth rates on average, this expansion occurs in an environment characterized by greater fiscal volatility, macroeconomic instability, and less consolidated institutions. In other words, growth is often driven by cyclical factors—such as commodity cycles, increased public consumption, or external capital flows—rather than by sustainable structural fundamentals. In developed countries, growth tends to be more moderate but more stable, reflecting the presence of robust fiscal institutions, efficient tax systems, and spending policies geared toward long-term productivity.

Pearson's correlation analysis clearly highlights these structural differences. GDP per capita growth shows a significant positive correlation with public investment ($r = 0.42$) and, even more strongly, with the institutional quality index ($r = 0.56$). This confirms that economic growth is closely linked to the state's ability to invest efficiently and to ensure a predictable, transparent, and favorable institutional environment for private investment. On the other hand, negative correlations are observed between growth and public debt ($r = -0.38$), as well as with the fiscal deficit ($r = -0.33$), suggesting that persistent fiscal imbalances tend to restrict the potential for economic expansion, either by increasing financing costs or by reducing the confidence of economic agents.

The differences between the groups of countries are particularly illustrative. In OECD countries, the correlation coefficient between public expenditure and growth is slightly positive ($r = 0.18$), indicating that government spending, when well-allocated, contributes to sustaining growth and economic stability. In developing countries, this relationship is negative ($r = -0.21$), reflecting the presence of less productive public spending, often focused on current consumption or inefficient subsidies, to the detriment of structural investments. This asymmetry reinforces the idea that the quality and composition of public spending are more decisive than its absolute volume. In contexts of institutional fragility and low administrative efficiency, increased spending tends to generate fiscal imbalances and inflation, without necessarily stimulating productivity or private investment.

These preliminary results, presented in Table 2, summarize the short-term relationships observed between fiscal variables and economic growth for the period analyzed (2000–2023). They provide an initial overview that guides subsequent econometric analysis, allowing for a more robust assessment, through regression models, of how the different dimensions of fiscal policy—taxation, expenditure, deficit, and debt—interact with institutional quality to influence the economic performance of both developed and developing countries.

Table 2. Regressions of Real GDP per Capita Growth (2000–2023)

Variable	OLS (All Countries)	Fixed Effects Panel	OECD Interaction Model
Constant	0.87 (0.11)**	0.72 (0.09)**	0.81 (0.10)**
Tax burden (Tax)	-0.05 (0.02)*	-0.03 (0.01)*	-0.04 (0.02)*
Public expenditure (Exp)	0.06 (0.02)**	0.07 (0.02)**	0.08 (0.03)**
Fiscal deficit (Def)	-0.08 (0.03)**	-0.05 (0.02)*	-0.04 (0.02)
Public debt (Debt)	-0.04 (0.01)**	-0.03 (0.01)**	-0.02 (0.01)*
Institutional index (Inst)	0.09 (0.02)**	0.08 (0.02)**	0.10 (0.02)**
OECD (dummy)	—	—	0.28 (0.09)**
Tax × OECD	—	—	0.06 (0.02)**
Adjusted R ²	0.43	0.52	0.58

Notes: Robust standard errors in parentheses. $p < 0.01$; $p < 0.05$.

The empirical results obtained reveal striking differences in how fiscal policy influences economic growth, depending on the level of development and institutional quality of the countries analyzed. Generally speaking, it is observed that the total tax burden exerts an adverse effect on economic growth, indicating that high levels of taxation tend to discourage productive activity. However, this effect becomes positive when compared to the OECD group of countries, suggesting that developed economies manage taxation more efficiently, transforming it into an instrument of redistribution and productivity stimulation. This is mainly due to the presence of more equitable, predictable, and less distortive tax systems, as well as solid and transparent fiscal institutions.

Public spending and institutional quality showed significantly positive effects on growth, confirming the importance of an efficient allocation of public resources. When expenditures are directed towards high-return sectors—such as infrastructure, education, innovation, and healthcare—they tend to generate lasting multiplier effects. However, this beneficial effect is only fully manifested in contexts of good governance, where public management is efficient and control mechanisms reduce waste and corruption.

On the other hand, fiscal deficits and public debt were negatively associated with economic growth, especially in emerging economies, where fiscal credibility is weaker and there is less room for countercyclical policies. These results indicate that excessive debt tends to increase country risk, increase financing costs, and restrict the government's ability to make productive investments in the future.

The analysis partially confirms the proposed hypotheses. In developed countries, fiscal policy tends to operate in a stabilizing and efficient manner, supported by robust institutions, credible fiscal frameworks, and well-defined budgetary rules. In contrast, in developing countries, fiscal policy is often procyclical, meaning it tends to amplify economic cycles: in periods of expansion, public spending increases excessively, while in periods of recession it is cut, intensifying macroeconomic volatility.

Furthermore, the positive effect of public spending on growth is not automatic: it depends on the quality of investments and the degree of transparency in budget execution. Unproductive or politically motivated spending not only fails to stimulate growth but can also generate fiscal imbalances and erode the confidence of economic agents.

These findings are in line with previous studies, such as those by Ilzetzi et al. (2013) and Afonso & Furceri (2010), which show that the institutional structure and credibility of the state strongly condition the effectiveness of fiscal multipliers. Similarly, Tanzi (2011) argues

that administrative efficiency and control of corruption are essential factors in transforming tax revenue into concrete economic benefits.

The divergence between the fiscal effects observed in the two groups of countries, therefore, reflects profound structural and institutional differences. In developed economies, taxation finances high-quality public services—such as education, health care, and security—that generate returns in human capital and productivity. In many emerging countries, the combination of administrative inefficiency, low tax collection capacity, and corruption reduces the positive impact of taxation. It limits the effectiveness of fiscal policy as a growth instrument.

Finally, the positive interaction between the tax burden and OECD country status indicates that progressive, stable, and predictable tax systems are less detrimental to growth than structures based on distortive and volatile taxes, typical of developing economies. This evidence reinforces the notion that the quality of fiscal institutions—and not just the volume of revenues or expenditures—is crucial to the success of fiscal policy as a driver of sustainable economic development.

CONCLUSIONS

The results of this study show that the effectiveness of fiscal policy varies significantly depending on the level of economic development and institutional quality of each country. It can be observed that, among advanced economies, especially in OECD member countries, fiscal policy tends to play an effective role in promoting economic growth. This occurs, above all, when public spending is directed to productive areas and when tax systems are structured equitably and efficiently. In these contexts, fiscal policy acts as a stimulus instrument, favoring investment, innovation, and productivity. In contrast, in developing countries, the impact of fiscal policy is more heterogeneous and, in many cases, limited. Factors such as structural constraints, low tax collection capacity, administrative inefficiencies, and political instability compromise the effective use of tax instruments. Thus, although public spending and taxation can, in theory, stimulate growth, the absence of solid institutions and transparent mechanisms reduces the potential of these policies. In more detail, the main conclusions of this study are as follows:

1. Economic growth is positively associated with productive public spending and institutional quality, reinforcing the importance of sound fiscal governance.
2. The tax burden, in itself, is not a determining factor for growth; what truly matters is the structure and efficiency of the tax system.
3. High levels of public deficits and debt have persistent adverse effects on growth, especially in emerging countries with less fiscal credibility.
4. Tax reforms that prioritize simplification, transparency, and institutional stability tend to increase macroeconomic effectiveness and the predictability of public policies.

Based on these results, some public policy recommendations are relevant. First, it is essential to strengthen fiscal institutions and improve public spending management, ensuring greater efficiency and accountability in resource allocation. Second, adopting countercyclical fiscal rules and mechanisms that promote fiscal discipline is recommended to reduce vulnerability to external shocks. Furthermore, it is necessary to redirect public spending toward high-return sectors, such as infrastructure, education, and innovation, which generate multiplier effects on productivity and employment. Finally, reducing dependence on indirect taxes and expanding the progressive tax base contribute to greater fiscal justice and system sustainability.

These measures, taken together, are essential for fiscal policy to move beyond being a merely temporary adjustment tool and become a driver of sustainable and inclusive economic growth. Despite its relevant results, the study has limitations inherent in the availability and quality of the data used, as well as the structural heterogeneity of the economies analyzed. Differences in

public policies, institutions, and economic cycles hinder direct comparisons between countries and may bias the results.

Therefore, future research can overcome these limitations by including additional variables that more comprehensively capture the determinants of economic growth, such as private investment, the degree of trade openness, and price stability (inflation). Furthermore, the application of dynamic econometric methods, such as the GMM (Generalized Method of Moments) or structural VAR models, can allow for a more robust analysis of the long-term effects and interactions between fiscal policy and growth. Finally, national or regional case studies can provide a deeper understanding of the internal mechanisms of fiscal policy transmission, highlighting the institutional and contextual specificities that condition its effectiveness.

REFERENCES

- Afonso, A., Schuknecht, L., & Tanzi, V. (2010). *Public sector efficiency: Evidence for new EU member states and emerging markets*. *Applied Economics*, 42(17), 2147–2164.
- Afonso, A., & Furceri, D. (2010). *Government size, composition, volatility and economic growth*. *European Journal of Political Economy*, 26(4), 517–532.
- Acemoglu, D., Johnson, S., & Robinson, J. A. (2005). *Institutions as the fundamental cause of long-run growth*. *Handbook of Economic Growth*, 1A, 385–472.
- Alesina, A., & Perotti, R. (1996). *Fiscal discipline and the budget process*. *American Economic Review*, 86(2), 401–407.
- Aschauer, D. (1989). *Is public expenditure productive?* *Journal of Monetary Economics*, 23(2), 177–200.
- Banco Mundial. (2024). *World Development Indicators*. Washington, DC.
- Barro, R. J. (1990). *Government spending in a simple model of endogenous growth*. *Journal of Political Economy*, 98(5), 103–125.
- Blanchard, O. (2019). *Public debt and low interest rates*. *American Economic Review*, 109(4), 1197–1229.
- Clements, B., Gupta, S., & Inchauste, G. (2013). *Fiscal policy for growth and development*. IMF Fiscal Affairs Department.
- Easterly, W., & Rebelo, S. (1993). *Fiscal policy and economic growth: An empirical investigation*. *Journal of Monetary Economics*, 32(3), 417–458.
- Gavin, M., & Perotti, R. (1997). *Fiscal policy in Latin America*. NBER Macroeconomics Annual, 12, 11–72.
- Gupta, S., & Tareq, S. (2008). *Mobilizing revenue: Strengthening domestic revenue bases*. IMF Working Paper WP/08/231.
- Ilzetzki, E., Mendoza, E. G., & Végh, C. A. (2013). *How big (small?) are fiscal multipliers?* *Journal of Monetary Economics*, 60(2), 239–254.
- Lucas, R. E. (1988). *On the mechanics of economic development*. *Journal of Monetary Economics*, 22(1), 3–42.
- Musgrave, R. A. (1959). *The theory of public finance*. McGraw-Hill.
- OCDE. (2023). *Revenue Statistics 2023*. Paris: OECD Publishing.
- Reinhart, C. M., & Rogoff, K. S. (2010). *Growth in a time of debt*. *American Economic Review*, 100(2), 573–578.
- Romer, P. M. (1990). *Endogenous technological change*. *Journal of Political Economy*, 98(5), 71–102.
- Tanzi, V., & Zee, H. (2000). *Tax policy for emerging markets: Developing countries*. IMF Working Paper WP/00/35.
- Tanzi, V. (2011). *Government versus markets: The changing economic role of the state*. Cambridge University Press.