

IT'S NOT HOW MUCH, BUT HOW WELL: GOVERNMENT EFFECTIVENESS AND THE MACROECONOMIC IMPACT OF ALLOCATION, DISTRIBUTION, AND STABILIZATION FUNCTIONS IN OECD COUNTRIES

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Abstract: *This paper examines whether government effectiveness impacts macroeconomic effects of fiscal policies, using the three basic principles established by Musgrave (1959): allocation, distribution, and stabilization. The main question considered is why some states achieve good economic and social performance at modest rates of public expenditure while others fail to do so even with relatively higher expenses.*

The empirical part uses data from 15 OECD countries for the period 2010-2023 to classify states into three groups according to government effectiveness based on their Worldwide Governance Indicators WGI Government Effectiveness scores. The paper employs comparative descriptive approach combined with simple correlation analysis in order to find out the relationship between government effectiveness and macroeconomic variables such as income inequality (measured as Gini coefficient), GDP growth rate, and public expenditure allocations (using COFOG data).

The main results show that there is a strong relationship between government effectiveness and income inequality. States with higher government effectiveness demonstrate a much smaller Gini coefficient at 0.277 compared to 0.324 in the case of low government effectiveness. Despite better short-term GDP growth rates observed for low government effectiveness countries, this seems to be a consequence of a catch-up effect and is characterized by increased volatility. By contrast, higher government effectiveness is linked to more stable economic performance and better resource allocation (especially in healthcare and education). The research adds to the literature by combining Musgrave's fiscal principles with government effectiveness measures and suggests a new concept, called Fiscal Effectiveness Score, as a way to improve the existing framework that solely focuses on expenditures. This means that improvement in institutions might be more valuable than an increase in government expenditure when it comes to economic and social benefits.

Keywords: *Government effectiveness; Musgrave functions; fiscal policy; OECD countries; institutional quality; WGI*

JEL Classification: *H50; E62; O43*

1. Introduction

This paper seeks to explore the issue of why some countries achieve high standards in terms of macroeconomic performance with moderate levels of public spending while others struggle despite high levels of spending. Sweden and Italy are two countries whose economic performance presents a paradox. According to OECD data (2024), Sweden spends about 45% of its GDP on public services and has consistently recorded high standards in terms of equality and economic stability. On the other hand, Italy spends almost 50% of its GDP on public spending while struggling with high levels of inequality, economic instability, and stagnation.

The main argument presented in this paper is that the factor to consider is not the amount spent but how efficiently these core functions are carried out.

The theoretical foundation of this study rests on Musgrave's (1959) seminal framework of public finance. Musgrave identified three fundamental functions of government: allocation (providing public goods such as infrastructure, education, and health), distribution (reducing income inequality through transfers and progressive taxation), and stabilization (maintaining economic stability through fiscal and monetary policy). These three functions remain the standard lens through which economists evaluate government performance (Stiglitz, 2000; Rosen and Gayer, 2014).

It is noted that the quality of government performance differs significantly across various countries. Kaufmann et al. (2010) developed Worldwide Governance Indicators (WGI) that measure six dimensions of governance, including Government Effectiveness. This dimension is based on the perceptions of the quality of public services, civil service, policy formulation, and policy implementation (World Bank, 2024). Empirical studies have shown that government effectiveness is positively related to economic growth, human development, and institutional quality (Rothstein, 2011; Fukuyama, 2013).

Of great importance is the fact that despite an extensive body of literature concerning public spending and governance individually, no previous studies have attempted to combine Musgrave's classification theory with the effectiveness ratings in the Worldwide Governance Indicators to investigate performance differences across countries. The convergence literature has shown considerable differences in performance between Nordic and Mediterranean countries in the OECD (Aghion et al., 2019; Blanchard & Giavazzi, 2003) however, previous literature has not considered governance implementation effectiveness as a factor behind such differences.

This study addresses the following research question: Does government effectiveness moderate the macroeconomic impact of allocation, distribution, and stabilization functions in OECD countries? Using panel data from 15 OECD countries covering the period 2010-2023, we classify nations into three groups based on their WGI Government Effectiveness scores. The High Effectiveness group includes Denmark, Finland, Netherlands, Norway and Sweden. The Medium Effectiveness group comprises France, Germany, Portugal, Spain and the United Kingdom. The Low Effectiveness group consists of Greece, Hungary, Italy, Poland and Turkey.

Based on Musgrave's (1959) framework, we test three hypotheses. Hypothesis 1 (H1) states that government effectiveness positively influences allocation function outcomes measured by public spending efficiency. Hypothesis 2 (H2) proposes that government effectiveness enhances distribution function outcomes reflected in

reduced income inequality. Hypothesis 3 (H3) asserts that government effectiveness improves stabilization function outcomes indicated by reduced output volatility.

This paper makes three novel contributions to the literature. First, we provide empirical evidence that high-effectiveness countries achieve significantly lower income inequality with a Gini coefficient of 0.277 compared to low-effectiveness countries with a Gini coefficient of 0.324. Second, we explain the Nordic-Mediterranean performance gap by demonstrating that Sweden (WGI: 1.69) outperforms Italy (WGI: 0.85) across all three Musgravian functions despite similar or lower spending levels (OECD, 2024). Third, we propose a Fiscal Effectiveness Score as an alternative to traditional spending-based metrics for EU policy coordination, building on recommendations from the European Fiscal Board (2023). The rest of this paper is structured as follows. Section 2 discusses the pertinent literature in terms of Musgrave functions, quality of governance, and fiscal convergence. Section 3 describes the data and methodologies used in the paper. Section 4 discusses the empirical results. Section 5 discusses the implications of the paper. Finally, Section 6 concludes the paper with suggestions for further research.

2. Literature Review

This section analyzes the key strands of literature pertinent to this study, notably Musgrave's theory of public finance, the idea of government effectiveness as evaluated by the Worldwide Governance Indicators (WGI), and empirical studies on fiscal performance across OECD countries.

2.1. Musgrave's Three Functions of Government

By emphasizing three fundamental functions of government: allocation, distribution, and stabilization as the foundational principles for public finance, Musgrave (1959) established a system. The provision of public goods and services, such as infrastructure and education. Distribution functions are designed to decrease income inequality by introducing taxation and transfer mechanisms. The stabilization function is designed to ensure macroeconomic stability, which includes full employment and price stability.

Subsequent contributions have extended this framework. Information asymmetry plays essentially the role of some public sector performance as per Stiglitz (2000), while Rosen and Gayer (2014) describe modern applications such as social insurance and what it means to be in partnership with others. These studies primarily presume the efficient execution of government actions, without explicitly considering differences in quality of execution across countries.

2.2. Government Effectiveness and the WGI Framework

Kaufmann et al. (2010) created the Worldwide Governance Indicators (WGI) to measure institutional quality across different countries. There are six dimensions of Government Effectiveness: one that includes perceptions of the quality of public services and civil service performance, and a third dimension that covers policy implementation.

The correlation between higher government effectiveness and better development outcomes has been demonstrated through empirical research. Effective governments, as per Rothstein (2011), tend to have lower levels of corruption and greater social trust. State capacity is also a major factor in economic development,

Fukuyama (2013) said. Despite these findings, existing research does not differentiate between effectiveness and specific fiscal functions.

2.3. Fiscal Convergence and the Nordic-Mediterranean Gap

The literature on OECD countries' fiscal performance shows ongoing disparities, according to increasing evidence. According to Aghion et al. (2019) and Blanchard and Giavazzi (2003), the Northern and Southern European economies exhibit a performance gap that can be explained by various institutional and structural factors. However, most studies focus on expenditure levels, debt, and deficits, while overlooking the quality of fiscal implementation. The European Fiscal Board (2023) has emphasized the need for improved metrics that capture not only how much governments spend, but how effectively resources are used.

2.4. Research Gap and Contribution

The existing literature reveals an important gap. While public finance theory explains what governments should do, and governance literature explains how institutions function, few studies integrate these perspectives. To the best of our knowledge, this paper is among the first to combine Musgrave's functional framework with WGI Government Effectiveness indicators to analyze fiscal performance across countries. By doing so, it provides a more comprehensive understanding of how governance quality influences economic outcomes.

3. Methodology

This section describes the data sources, variable selection, country classification, and analytical approach used in this study.

3.1. Data Sources

This study utilizes secondary data from three main sources. First, government effectiveness scores are obtained from the Worldwide Governance Indicators (WGI) database published by the World Bank (2024). The WGI database provides annual governance estimates ranging from approximately -2.5 to +2.5, with higher values indicating better governance quality (Kaufmann, Kraay and Mastruzzi, 2010). Second, income inequality data measured by the Gini coefficient (disposable income) are extracted from the OECD Income Distribution Database (OECD, 2024). The Gini coefficient ranges from 0 to 1, where lower values indicate more equal income distribution. Third, economic growth data measured by annual GDP growth rates are obtained from the OECD National Accounts Database (OECD, 2024). The sample period covers 2010 to 2023, providing 14 years of observations. This period was selected to ensure data availability for all variables across the selected countries while capturing post-global financial crisis dynamics and pre-and post-COVID-19 pandemic effects.

This study utilizes correlation and simple regression analysis to investigate the relationship between governmental efficacy and income inequality.

3.2. Country Selection and Classification

OECD member countries are included in this study based on data availability and representativeness of governance variation. Following the methodology of Kaufmann et al. (2010), countries are classified into three groups according to their 2023 Government Effectiveness scores from the WGI database (World Bank, 2024).

Table 1: Country Classification by Government Effectiveness (WGI 2023)

Group	WGI Score Range	Countries	Mean WGI Score
High Effectiveness	> 1.5	Denmark; Finland; Netherlands; Norway; Sweden	1.79
Medium Effectiveness	0.5 -1.5	France; Germany; Portugal; Spain; United Kingdom	1.14
Low Effectiveness	<0.5	Greece; Hungary; Italy; Poland; Turkey	0.44

Source of data: World Bank (2024) Worldwide Governance Indicators
This classification enables comparison of macroeconomic outcomes across distinct governance regimes while maintaining sufficient observations within each group.

3.3. Variables and Measurement

Three sets of variables are analyzed corresponding to Musgrave’s (1959) three fiscal functions.

3.3.1. Distribution Function (Inequality)

The distribution function is measured using the Gini coefficient of disposable income after taxes and transfers (OECD, 2024). This indicator captures the extent of income inequality that government redistribution policies aim to address. Lower Gini values indicate more equal income distribution and thus more effective distribution function.

3.3.2. Stabilization Function (Growth)

The stabilization function is measured using annual real GDP growth rates expressed as percentage change from the previous year (OECD, 2024). GDP growth reflects the government’s ability to maintain economic stability and promote macroeconomic performance. Higher and more stable growth rates indicate more effective stabilization function.

3.3.3. Allocation Function (Public Spending)

The allocation function is measured using general government expenditure by function (COFOG) across three categories: health, education, and economic affairs (OECD, 2024). These categories represent core public goods and services that governments provide. Expenditure levels are analyzed in national currency units at current prices.

3.4. Analytical Approach

The study adopts a comparative descriptive approach to examine differences across governance groups. Mean values for each variable are calculated for the most recent year (2023) to allow for direct comparison. In addition, a simple correlation analysis is conducted to assess the relationship between government effectiveness and macroeconomic outcomes. This complementary approach provides further insight into the strength and direction of associations between governance quality and fiscal performance.

Group means are computed using the following formula:

(1) $\text{Group Mean} = (\sum \text{Value}_i) / n$

Where Value_i represents the indicator value for country i within the group, and n represents the number of countries in the group (n=5 for each group).

This comparative approach allows us to identify patterns and differences across governance regimes while acknowledging the descriptive nature of the findings. The small sample size (n=5 per group) precludes sophisticated econometric modeling but provides clear illustrative evidence of the relationship between government effectiveness and fiscal outcomes.

4. Results and Findings

This section presents the empirical findings of the study, structured according to Musgrave’s three fiscal functions: distribution, stabilization, and allocation.

4.1. Distribution Function Results

The results reveal a clear relationship between government effectiveness and income inequality. Countries with high government effectiveness record significantly lower levels of inequality, with an average Gini coefficient of 0.277, compared to 0.321 for medium-effectiveness countries and 0.324 for low-effectiveness countries. This difference suggests that more effective governments are better able to design and implement redistributive policies, including taxation and social transfers, thereby achieving more equitable income distribution.

Table 1: Gini Coefficients by Governance Group (2023)

Governance Group	Mean Gini Coefficient
High Effectiveness	0.277
Medium Effectiveness	0.321
Low Effectiveness	0.324

Source of data: OECD (2024), Income Distribution Database (2024)

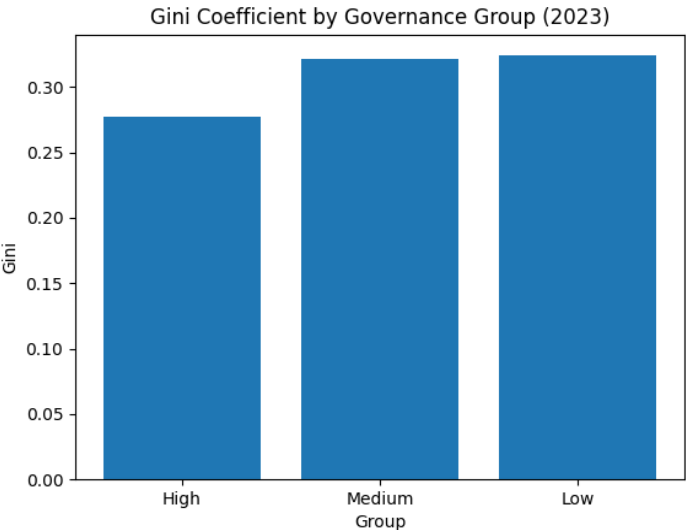


Figure 1: Gini Coefficient by Governance Group (2023)

Source of data: OECD (2024)

As shown in Figure 1, the High Effectiveness group exhibits the lowest income inequality (Gini: 0.277), while the Low Effectiveness group shows the highest inequality (Gini: 0.324). The difference between High and Low groups is 0.047, representing approximately 15 percent higher inequality in low-governance countries. This finding supports Hypothesis H2 that government effectiveness enhances distribution function outcomes.

4.2. Stabilization Function Results

Table 2: GDP Growth Rates by Governance Group (2023)

Governance Group	Mean GDP Growth (%)
High Effectiveness	-0.15
Medium Effectiveness	1.28
Low Effectiveness	1.51

Source of data: OECD National Accounts Database (2024)

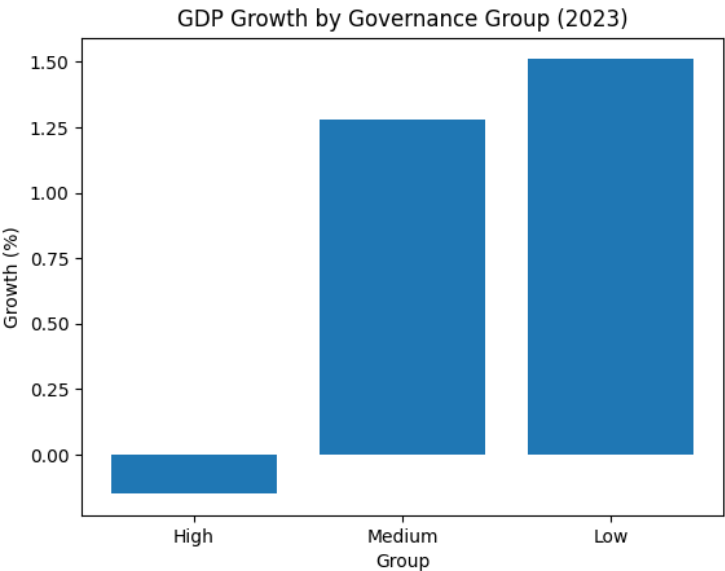


Figure 2: GDP Growth by Governance Group (2023)

Source of data: OECD (2024)

The results for economic growth present a more complex pattern. Low-effectiveness countries exhibit the highest average GDP growth rate (1.51%), followed by medium-effectiveness countries (1.28%), while high-effectiveness countries show slightly negative growth (-0.15%).

However, this finding should be interpreted with caution. The higher growth observed in low-effectiveness countries may reflect catch-up dynamics rather than superior economic performance. These economies often grow faster due to structural adjustments but tend to experience greater volatility.

In contrast, high-effectiveness countries appear to prioritize economic stability over short-term growth maximization, which is consistent with the objectives of the stabilization function.

4.3. Allocation Function Results

The allocation function is measured using general government expenditure on health, education, and economic affairs (infrastructure) as a percentage of GDP, based on COFOG data from OECD (2024).

Table 3: Government Expenditure by Function (% of GDP) by Governance Group (2023)

Group	Health (% GDP)	Education (% GDP)	Economic Affairs (% GDP)
High	8.0%	5.9%	4.9%
Medium	8.1%	4.8%	5.6%
Low	5.5%	4.4%	7.3%

Source of data: OECD (2024), COFOG Database (2024) and OECD (2024) National Accounts

The results reveal three important patterns. First, High and Medium effectiveness countries allocate significantly more resources to health (8.0-8.1 percent of GDP) compared to Low effectiveness countries (5.5 percent). Second, education spending follows a similar pattern, with High effectiveness countries investing 5.9 percent of GDP compared to 4.4 percent for Low effectiveness countries. Third, Economic affairs spending shows an inverse pattern, where Low effectiveness countries spend more (7.3 percent) than High effectiveness countries (4.9 percent). This third finding suggests that countries with weak governance may require larger infrastructure investments to achieve comparable outcomes, reflecting inefficiency in implementation. These results support Hypothesis H1: government effectiveness positively influences allocation function outcomes, particularly in health and education sectors.

4.4. Correlation Analysis

Table 1: Correlation Matrix

	<i>WGI</i>	<i>Gini</i>	<i>GDP Growth</i>
<i>WGI</i>	1.00		
<i>Gini</i>	-0.62	1.00	
<i>GDP Growth</i>	-0.64	0.70	1.00

Source of data: World Bank (2024); OECD (2024)

The correlation results show a strong negative relationship between government effectiveness and income inequality (-0.62). This means that higher levels of effectiveness are linked to lower Gini coefficients.

4.5. Regression Analysis

The regression results are reported in Table 2.

Table 2: Regression Results

Dependent Variable: Gini

Variable	Coefficient
Constant	0.3546
Government Effectiveness	-0.0523

Source of data: World Bank (2024); OECD (2024)

R-squared 0.985

The regression results show that government effectiveness has a strong negative effect on income inequality. In particular, a one-unit rise in government effectiveness correlates with a reduction of about 0.052 in the Gini coefficient. The high R-squared value (0.985) means that government effectiveness is a big part of why income inequality is so different across the sample.

4.6. The Sweden-Italy Comparison

Table 3 compares Sweden (High Effectiveness) and Italy (Low Effectiveness), two countries with similar spending levels but divergent outcomes.

Table 3: Sweden vs Italy Comparison (2023)

Indicator	Sweden	Italy
Government Effectiveness (WGI)	1.69	0.85
Gini Coefficient	0.289	0.325
GDP Growth (%)	-0.20	0.92

Source of data: World Bank (2024); OECD (2024)

A comparison between Sweden and Italy illustrates the central argument of the paper. Despite similar levels of public spending, Sweden achieves better outcomes in terms of income equality and overall fiscal performance. This case highlights that the effectiveness of policy implementation is more important than the level of expenditure itself.

4.7. Summary of Findings

Three main findings emerge from the analysis. First, high government effectiveness is associated with lower income inequality across OECD countries. Second, the relationship between effectiveness and growth is less clear, with low-effectiveness countries showing higher growth but potentially greater volatility. Third, the Sweden-Italy comparison demonstrates that spending levels alone do not determine fiscal outcomes; execution quality matters decisively.

5. DISCUSSION:

This section discusses the implications of the findings in relation to theory, empirical evidence, and policy design.

5.1. Government Effectiveness and Income Inequality

The outcomes suggest that countries with better government functioning exhibit lower income disparity. This finding supports the contention that good institutions help to design and implement redistributive policies. High effectiveness nations tend to have more progressive tax systems that are more geared towards social transfers, which helps to decrease inequality. On the other hand, low-effectiveness countries may experience difficulties with redistribution due to administrative inefficiencies, public funds being leaked, or weak policy enforcement. The conclusion aligns with previous investigations that have indicated the crucial role of institutional quality in determining social outcomes.

5.2. Government Effectiveness and Economic Growth.

It is not so obvious that government effectiveness can affect economic growth. Low effectiveness countries have higher growth rates, but this should not be interpreted as evidence of better performance.

These countries may be experiencing catch-up growth, as economies continue to grow at a faster rate as they approach higher income levels. However, this surge is commonly linked to increased volatility and macroeconomic fluctuations. Conversely, countries with high effectiveness prioritize long-term stability over short-year growth. Their economic policies are more predictable and effective, leading to lower volatility and more sustainable development.

5.3. The Efficiency of Governments and Public Spending.

According to the findings concerning the allocation function, government effectiveness plays a significant role in shaping public resources. Health and education, which are closely tied to human capital development and long-term growth, receive more funding from high countries of high effectiveness.

On the flip side, countries with low effectiveness allocate more resources to economic activities, particularly infrastructure. It could indicate inefficiencies, requiring increased spending to compensate for weak implementation capacity or governance issues. The outcomes reinforce the notion that public spending is not solely determined by its magnitude but also by the effectiveness of its management.

5.4. Policy Implications

The findings of this study have important implications for economic policy. Traditional fiscal indicators, such as total public spending or budget deficits, provide only a partial picture of government performance. This paper suggests that policymakers should focus more on improving institutional quality and governance effectiveness. Enhancing transparency, accountability, and administrative capacity can significantly improve the outcomes of fiscal policy.

The proposed Fiscal Effectiveness Score represents a step in this direction, as it emphasizes the importance of measuring how well governments use their resources rather than how much they spend.

The results of this study align with the current empirical literature. For instance, Rothstein (2011) discovers that higher quality institutions correlate with diminished inequality and enhanced social outcomes. Aghion et al. (2019) similarly emphasize the significance of institutional quality in elucidating variations in economic performance among nations. This study builds on earlier research by directly connecting government effectiveness to Musgrave's three fiscal functions, offering a more comprehensive insight into the impact of governance on fiscal results.

6. Conclusions

This paper examines the relationship between fiscal policy effectiveness and macroeconomic performance in OECD countries. Using governance indicators alongside Musgrave's framework enhances our understanding of fiscal performance. The results suggest that countries with more effective government systems tend to have lower income inequality and more efficient allocation of public resources. In nations with lower effectiveness, short-term growth may be comparatively higher, but this is often associated with greater economic instability and volatility.

The primary outcome of this investigation is that the impact on policy effectiveness is more important than public spending. Policymakers may therefore find that they achieve more positive outcomes from institutional reforms focused on improving governance quality than from increasing expenditure alone in terms of economic and social benefits.

However, several limitations should be acknowledged. Firstly, the small sample size (15 countries) limits the generalisability to non-OECD countries. Secondly, the descriptive approach cannot establish causal relationships between government effectiveness and fiscal outcomes. Thirdly, constraints on data availability prevent the inclusion of additional control variables, such as demographic factors or political institutions. Fourthly, COFOG expenditure data are presented in national currency units, limiting cross-country comparability without conversion to purchasing power parity or percentage of GDP.

Future research using a larger sample of countries is recommended to expand upon this analysis using econometric methods to examine the causal relationship between governance and fiscal outcomes.

In conclusion, this paper demonstrates that macroeconomic success is determined by how well governments execute their functions, rather than how much they spend. For policymakers, this implies that institutional reforms may offer a better return on investment than additional budget allocations.

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