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The Concept of Taxation Efficiency Benchmarks and Considerations

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Abstract. Taxation is the primary mechanism through which governments generate revenue to fund public services and maintain economic stability. Traditional concepts of fiscal efficiency focus on maximizing revenue while minimizing economic distortions and administrative costs. However, an exclusive emphasis on revenue, as illustrated by the Laffer Curve, may neglect the distributional consequences of tax policy. This study integrates a revenue-oriented perspective with measures of income inequality, using Lorenz curves and Gini coefficients to analyze Romania's income distribution from 2020 to 2024. The analysis highlights the trade-offs between revenue maximization and social equity, showing that improvements in tax collection efficiency do not automatically translate into equitable outcomes. Findings indicate that while targeted fiscal policies can optimize revenue, attention to income distribution is critical for achieving overall economic efficiency and fairness. The combined approach underscores the importance of designing tax systems that balance instrumental efficiency with equity considerations, providing a framework for policymakers to assess both fiscal and social outcomes.
Keywords: *tax efficiency, Laffer Curve, public revenue, fiscal pressure.*

Introduction

The concept of taxation efficiency is often interpreted in terms of the state's capacity to collect budget revenues and ensure taxpayer compliance. This instrumental approach treats taxation exclusively as a mechanism for maximizing public revenues. This paper analyzes the limitations of this perspective, discusses the role of the Laffer Curve in fiscal theory, and examines Romania's position relative to European Union member states through a comparative analysis of tax revenues as a percentage of GDP. The study highlights that fiscal efficiency must be assessed within a broader framework that includes budgetary sustainability, social equity, and the state's ability to finance essential public goods.

Taxation represents the primary mechanism through which governments secure the resources necessary for their functioning and provision of public services. In traditional economic theory, fiscal

efficiency is often defined by a system's ability to collect sufficient revenues with minimal economic distortions and low administrative costs.

This perspective attributes an exclusively instrumental value to taxation, where its main function is revenue generation. Within this context, the Laffer Curve becomes a central theoretical tool, proposing a relationship between tax rates and total tax revenues.

However, modern fiscal policy realities extend beyond this strictly technical framework, as taxation also influences income distribution, investments, social cohesion, and long-term economic stability.

The concept of efficiency in taxation often assumes a purely instrumental role of taxes, focusing on their capacity to generate government revenue rather than broader economic or social objectives. In this perspective, taxation is treated primarily as a mechanism for maximizing budgetary income and ensuring the strict fulfillment of fiscal obligations (Musgrave & Musgrave, 1989; Tanzi, 1992).

The Laffer Curve, introduced by Laffer (1974), exemplifies this approach by illustrating the relationship between tax rates and revenue, emphasizing only the first of these objectives—revenue maximization—without explicitly addressing considerations of economic efficiency or distributional equity. According to this framework, there exists a tax rate beyond which increasing rates actually reduce revenue, highlighting the instrumental nature of taxation as a tool for revenue optimization rather than a broader policy instrument for efficiency or welfare.

While the Laffer Curve emphasizes the revenue-maximizing aspect of taxation, it does not address the distributional consequences of tax policies. To evaluate the broader economic impact of taxation, it is essential to consider how revenue-raising instruments affect income distribution across different segments of the population. In this context, Lorenz curves provide a visual representation of cumulative income shares, illustrating how taxation and other fiscal policies influence inequality. The associated Gini coefficient quantifies the deviation from perfect equality, allowing policymakers to assess not only the revenue implications but also the social and economic efficiency of tax systems (Lorenz, 1905; Clementi, Gallegati, & Kaniadakis, 2016). By combining the revenue-focused perspective of the Laffer Curve with Lorenz-based measures of inequality, analysts can better understand the trade-offs between maximizing fiscal income and promoting a more equitable distribution of wealth. This integrated approach highlights that an exclusive focus on revenue can inadvertently exacerbate disparities, underscoring the importance of designing tax policies that balance instrumental efficiency with social equity.

1.1. Fiscal Efficiency as an Instrumental Value

In its classical interpretation, fiscal efficiency pursues two main objectives: maximizing budget revenues and ensuring effective tax compliance. A system is considered efficient if it generates large revenues with minimal administrative costs and high compliance levels.

However, this perspective neglects the redistributive and social effects of taxation. A tax system can be technically efficient yet exacerbate inequalities or underfund essential public services. Therefore, collection efficiency does not always equate to overall social welfare.

Formulated in the 1970s, the Laffer Curve suggests that there exists an optimal tax rate that maximizes tax revenues. At a 0% tax rate, revenues are zero, and at an extreme 100% rate, economic activity is discouraged, leading again to low revenues.

The model highlights that excessively high rates may reduce the tax base by discouraging work, investment, and compliance. However, the theory focuses solely on revenue dimensions and does not consider how revenues are used or their impact on development.

The concept of tax efficiency often focuses on the instrumental purpose of taxation, treating taxes primarily as a mechanism to generate government revenue while ensuring compliance with fiscal obligations (Musgrave & Musgrave, 1989; Tanzi, 1992). In this perspective, taxation is viewed less as a tool for promoting social welfare and more as an instrument for maximizing budgetary income.

The *Laffer Curve* (Laffer, 1974) exemplifies this revenue-centered approach. It illustrates that tax revenue initially rises as tax rates increase, but beyond a certain threshold—denoted t∗t^*t∗—further increases in the tax rate actually reduce total revenue. This phenomenon occurs because excessively high tax rates diminish the taxable base through behavioral responses, such as reduced labor supply or investment.

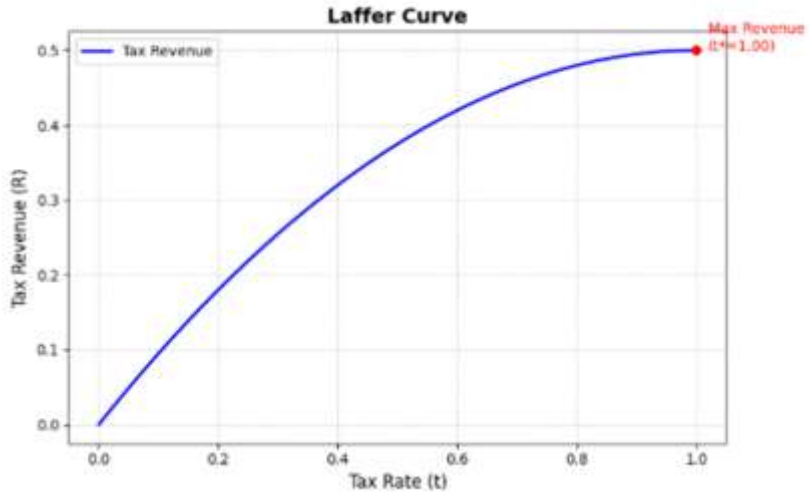
Mathematical Representation
A simple representation of the Laffer Curve is:

$$R(t) = t \cdot B(t)$$

Where:

- R(t)R(t)R(t) = total tax revenue as a function of the tax rate ttt
- ttt = statutory tax rate ($0 \leq t \leq 1$)
- B(t)B(t)B(t) = tax base (which depends on ttt; typically decreasing as ttt increases due to behavioral responses)

The revenue-maximizing tax rate t∗t^*t∗ is defined by the condition:



- Axă X: Tax Rate ttt (0–100%)
- Axă Y: Tax Revenue R(t)R(t)R(t)
- Curba albastră arată cum venitul fiscal crește, atinge un maxim (t∗t^*t∗) și apoi scade.
- Punctul roșu marchează Max Revenue cu t∗t^*t∗ (reprezentând rata de impozitare care maximizează veniturile).

While the Laffer framework emphasizes revenue maximization, it does not consider the distributional effects of taxation. To capture these effects, Lorenz curves and the Gini coefficient are widely used in economic analysis. Lorenz curves visualize the cumulative income share held by different segments of the population, while the Gini coefficient quantifies the degree of inequality (Lorenz, 1905; Clementi, Gallegati, & Kaniadakis, 2016). Integrating the revenue-focused perspective of the Laffer Curve with Lorenz-based measures allows analysts to evaluate both the instrumental efficiency and the equity impact of tax policies.

This approach underscores the trade-off between maximizing government revenue and promoting a more equitable income distribution, highlighting the importance of designing tax systems that balance fiscal, economic, and social objectives.

1.2. Empirical Interpretation of Lorenz Curve Patterns

Although detailed raw income distribution data (e.g., by decile) are not provided here, summary statistics and related interpretations allow us to reconstruct an approximate narrative of how the Lorenz curve would differ year by year:

In 2020–2021, with Gini values near 34, the Lorenz curve would have exhibited larger deviations from equality, with the bottom deciles receiving a relatively smaller share of total income.

By 2023, with the Gini subsequently reduced to around 31, the curve suggests greater income dispersion narrowing, whereby lower percentiles gained a slightly larger share relative to higher percentiles.

In 2024, with the Gini estimated near 28—the lowest in over a decade—the Lorenz curve likely shows the smallest gap from the line of equality within the 2020–2024 period, implying more equitable distribution than earlier in the decade.

In practical terms, these shifts reflect that the share of total income earned by the poorest segments of the population has increased modestly, while the richest segments accounted for a smaller share than in previous years. This trend is consistent with analyses noting growth in the middle class and reduced polarization between upper and lower income groups.

1.3. Discussions and results

Fiscal Revenue Collection in the European Union

A commonly used indicator to analyze fiscal pressure is the ratio of tax and social contribution revenues to GDP. Recent Eurostat data indicate that the average tax-to-GDP ratio in the EU was approximately 40.4% in 2024.

However, significant disparities exist among member states. Nordic and Western European countries exceed 45% of GDP, reflecting social models based on extensive public services, whereas Central and Eastern European states, including Romania, fall below the EU average

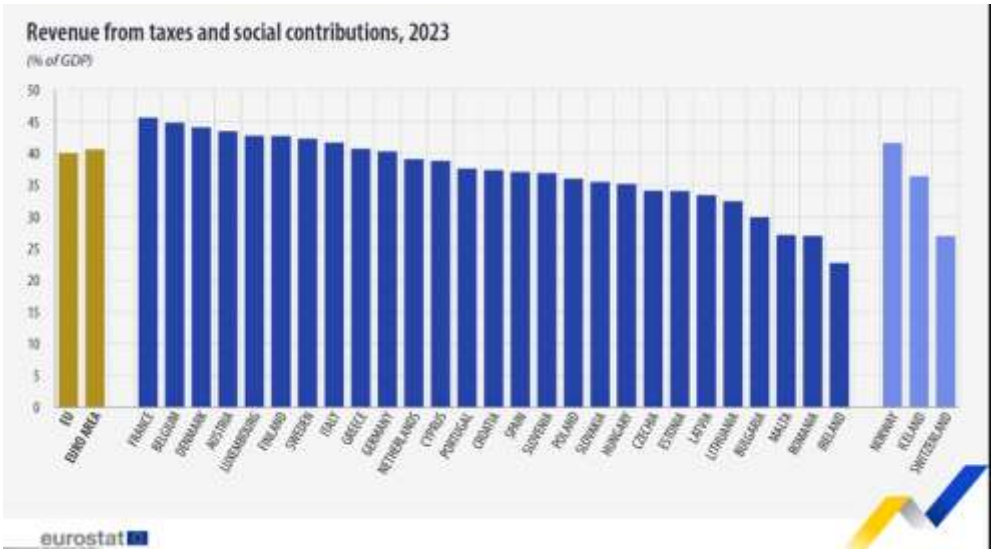
Romania recorded a tax revenue ratio of approximately 28.8% of GDP in 2024, placing it among the lowest in the EU and more than 11 percentage points below the European average

Country	**% of GDP**
Denmark	45.8
France	45.3
Belgium	45.1
Germany	41.9
Italy	41.7
Spain	39.0
Poland	34.0
Hungary	35.0
Bulgaria	31.5
Malta	29.3
Romania	**28.8**
Ireland	22.4
EU average	**40.4**

Date agregate Eurostat: în 2024, media UE pentru taxele și contribuțiile sociale ca procent din PIB a fost de 40.4%. România rămâne sub această medie și printre cele mai scăzute ponderi din UE

These differences reflect not only varying tax levels but also collection efficiency, the size of the informal economy, and tax structure. Romania relies more heavily on indirect taxes, which can have regressive effects on lower-income populations.

Figure 1. Comparison of Tax Revenue as a Percentage of GDP in EU Member States



Source: Eurostat Graph comparing tax revenue ratios across EU countries

The chart above illustrates the comparison between EU countries in terms of the share of tax revenues in GDP for 2024 — from the highest values (e.g. Denmark, France, Belgium) to the lowest (Ireland, Romania)

Conclusions

The Lorenz curve, together with the Gini coefficient and related indicators, offers a comprehensive framework for examining income distribution trends in Romania over the 2020–2024 period. Evidence from these years indicates a gradual reduction in inequality, reflected in the Lorenz curve's movement toward the line of perfect equality and in the decline of the Gini coefficient to some of its lowest values in recent years by 2024. Nevertheless, income and wealth remain strongly concentrated among high-income groups. Further research based on detailed household datasets, such as EU-SILC or national income surveys, would enhance future assessments of regional and socio-economic disparities across Romania.

Studies on inequality measurement show that fluctuations in the Gini coefficient mirror adjustments in the shape of the Lorenz curve, signaling redistribution among income groups. Clementi and colleagues emphasize that Lorenz dominance analysis is particularly valuable because identical Gini values may conceal important differences in distribution patterns, making scalar measures alone insufficient for comprehensive evaluation.

The situation observed in the Campania region illustrates a systemic form of environmental crime, conducted by organized networks that exploit regulatory weaknesses or corruption. Although Italian criminal legislation, supported by European regulatory frameworks, provides instruments to combat such offenses, their practical success depends on effective enforcement, strong cooperation among institutions, and improved investigative and prosecutorial capacity in environmental crime cases. Empirical research on Romania similarly indicates that wage income plays a decisive role in shaping inequality trends. Decomposition analyses conducted by Andrei and collaborators demonstrate that changes in labor income distribution exert a significant influence on overall inequality dynamics, consequently affecting the configuration of the Lorenz curve.

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