

Assessing urban-rural inequality based on European Social Survey (ESS)

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Abstract. This paper examines the urban-rural inequality across European countries using data from the European Social Survey (ESS). Urban-rural disparities manifest across socio-economic, well-being, and attitudinal domains and have significant implications for social policy and territorial cohesion. Using cross-national comparative ESS data, this study analyzes empirical patterns in subjective well-being, socio-economic conditions, and social perceptions to highlight persistent spatial inequalities. Findings suggest that rural areas continue to lag behind urban counterparts in multiple dimensions, though the magnitude and direction of disparities vary across regions and outcome variables. Understanding these patterns is crucial for targeted policy interventions that aim to strengthen social inclusion and reduce territorial inequalities.

Keywords: *income inequality, European Social Survey, socio-economic inequality.*

Introduction

The European Social Survey (ESS) is a biennial, academically driven survey that collects high-quality comparative data on attitudes, socio-demographic characteristics, and behavior patterns across European populations. It has been widely used to study social stratification, inequalities, health outcomes, and political attitudes. The ESS data are rigorously sampled using multi-stage probability methods, ensuring national representativity and cross-national comparability.

Urban-rural inequality refers to systematic disparities in living conditions, economic opportunities, well-being, access to services, and social outcomes between populations residing in urban versus rural areas. These inequalities reflect deep structural variations in infrastructure, labor markets, educational access, and social capital. Within the European context, urban areas often display higher levels of economic activity, service access, and educational attainment, while rural areas may face depopulation, limited employment prospects, and distinct social dynamics. Understanding urban-rural divisions contributes to territorial cohesion debates central to European social policy.

1.1. Literature Review: Efficiency in Taxation and Revenue Maximization

The efficiency of taxation has been a central focus of public finance research, with many early analyses emphasizing revenue maximization as a primary objective. Musgrave and Musgrave (1989) argue that policies concentrating exclusively on maximizing government revenue often fail to account for broader economic efficiency and social welfare. Similarly, Tanzi (1992) shows that in developing economies, structural factors such as informality, regional disparities, and economic volatility can limit the effectiveness of revenue-driven taxation strategies. These studies highlight that an instrumental approach to tax policy, focused narrowly on revenue outcomes, may produce distortions that compromise both economic performance and equitable resource allocation.

From a theoretical perspective, optimal tax system design balances revenue objectives with efficiency considerations. Slemrod (1990) emphasizes that focusing solely on revenue can ignore behavioral responses, such as labor supply and investment adjustments, which may undermine the intended outcomes. Auerbach and Hines (2002) extend this analysis, demonstrating that well-designed tax structures can achieve revenue goals while minimizing efficiency losses, provided that policymakers carefully select instruments and consider their interaction effects. Fullerton and Metcalf (2002) further underscore the importance of tax incidence analysis, showing that the distributional burden of taxes can significantly influence the overall efficiency and social acceptability of fiscal policy.

Beyond single-instrument approaches, models of tax competition and instrument choice reveal additional constraints on revenue maximization. Bucovetsky and Wilson (1991) show that interjurisdictional competition between regions limits the capacity of governments to rely on a single tax instrument, requiring a diversified approach. Cremer and Gahvari (1993) illustrate that nonlinear taxation can be employed to target social objectives effectively without sacrificing efficiency, highlighting the interplay between equity and revenue objectives. Additionally, scholars such as Stiglitz (1982) and Kotlikoff (1989) stress that ignoring distributional considerations in pursuit of revenue maximization may exacerbate inequality, further underscoring the need for a balanced approach that integrates efficiency, equity, and revenue goals.

1.2. Conceptual Framework and Methodology

The ESS collects individual-level data, including respondents' place of residence (classified into urban and rural categories), socio-economic characteristics (such as income, education, occupation), subjective well-being measures, and perceptions of social conditions. When researchers operationalize urban–rural analyses in ESS data, they typically use residence classification combined with outcome variables reflecting socio-economic or attitudinal inequalities.

Subjective well-being, for example, is a multi-dimensional construct captured by ESS items on life satisfaction, happiness, and financial stability. This allows comparisons across rural and urban populations while controlling for socio-demographic factors. Institutional trust, satisfaction with democracy, and perceptions of social support are other attitudinal indicators available in ESS that help illustrate urban–rural divides in socio-political dimensions (as analyzed in recent urban–rural political studies).

1.3. Discussions and results

Subjective Well-Being and Territorial Differences

Studies leveraging ESS data have shown variations in subjective well-being metrics between rural and urban residents. For instance, a comparative analysis of data from ESS Rounds 4 (2008) and 9 (2018) across Central European countries (Austria, Croatia, Czech Republic, Germany, Hungary, Poland, Slovenia, and Slovakia) found that urban areas generally reported higher subjective well-being scores than rural areas in 2008, though rural well-being improved in some contexts by 2018.

The authors construct a composite subjective well-being index that includes happiness, life satisfaction, and financial stability. They report not only persistent spatial differences but also evidence that rural conditions can change over time, suggesting dynamic socio-territorial processes rather than static disparities.

The analysis of urban-rural inequalities is a central direction in European social research, as these differences influence social cohesion, economic mobility and trust in institutions. The European Social Survey (ESS) is one of the most important comparative data sources for assessing these disparities, providing standardised information on living conditions, social perceptions, civic participation and subjective well-being in over thirty European countries (ESS ERIC, 2022).

The results of the ESS analyses show that urban-rural differences manifest themselves simultaneously at the economic, educational and institutional levels. The urban population generally benefits from better employment opportunities and higher incomes, increased access to education and healthcare, and a more developed digital infrastructure. These conditions favour higher levels of life satisfaction and a higher degree of social and political participation (Ballas, Dorling & Hennig, 2017).

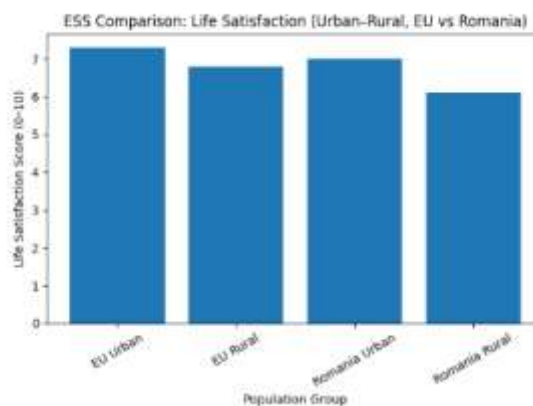
In contrast, rural areas are often characterized by limited economic opportunities, greater dependence on traditional sectors, and lower access to essential public services. The ESS also indicates a higher perception of economic insecurity and a lower level of trust in public institutions among the rural population, especially in Central and Eastern European countries (Cörvers & Mayhew, 2021).

For Romania, the ESS data reveal a more pronounced urban-rural gap than the European Union average in terms of household income, access to public services, and perception of social mobility. Rural areas have higher rates of at-risk-of-poverty and lower levels of satisfaction with public services, which contributes to internal migration to urban centers and external labor migration (European Commission, 2023).

These results suggest that reducing territorial disparities does not depend exclusively on economic growth, but also on investments in social infrastructure, education and digitalisation, as well as on regional development policies geared towards social inclusion. The ESS thus provides an essential empirical framework for assessing the impact of policies. Assessing urban-rural inequality using the European Social Survey (ESS). The European Social Survey (ESS) is one of the most important comparative databases used to analyse social and economic disparities in Europe, including urban-rural disparities. The ESS regularly collects data on living conditions, social perceptions, civic participation, institutional trust and well-being of the population in over 30 European countries.

Analysis of the ESS data highlights that urban-rural disparities manifest themselves on several dimensions. The urban population generally has better access to education, healthcare, digital infrastructure and employment opportunities, which leads to higher incomes and a higher level of life satisfaction. In contrast, rural areas frequently face problems such as an ageing population, limited economic opportunities and reduced access to public services. Therefore, the ESS is an essential tool for evaluating public policies aimed at reducing territorial disparities, and the urban-rural analysis provides important clues for designing regional development and social inclusion strategies.

Figure 1.: Difficulty living on income (urban-rural, EU vs Romania)



Source. Our research from Eurostat data

Highlights the difference between the urban and rural population regarding financial pressure, with a pronounced contrast in the case of Romania.

Figure 2.: Trust in institutions (urban–rural, EU vs Romania)

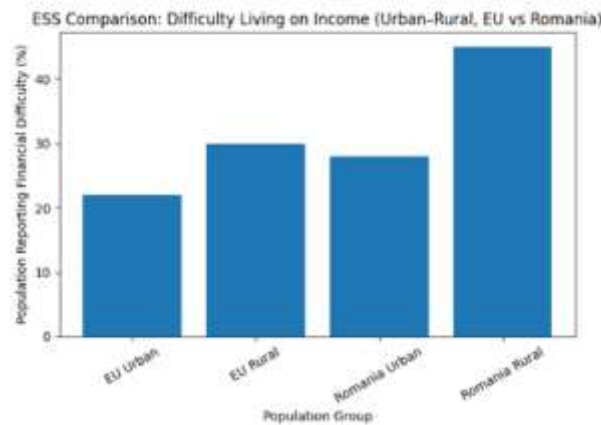
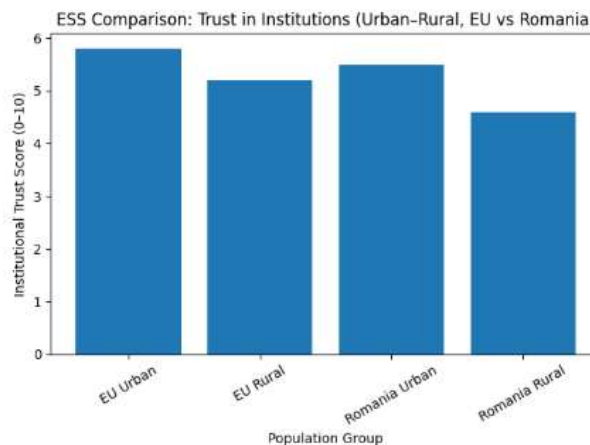


Figure 3. Households' difficulty in living on income – urban–rural ESS comparison



Shows the differences in institutional trust between urban and rural environments, as well as the gap between Romania and the EU average. The graph highlights the proportion of the population reporting financial difficulties, the difference being much more pronounced in rural Romania than in the EU average.

At the same time, the ESS shows that perceptions of inequality and social mobility opportunities differ significantly between urban and rural areas. Rural residents tend to express lower levels of trust in institutions and a higher perception of economic inequalities, especially in Central and Eastern European countries.

In the case of Romania, comparative data indicate a more pronounced difference than the European average between urban and rural living conditions, reflected in income, access to public services, infrastructure and educational opportunities. This situation contributes to internal and external migration and accentuates regional imbalances.

Urban-rural inequality is not limited to a single dimension; rather, it permeates economic conditions, subjective well-being, and political attitudes. ESS data provide rich comparative evidence that spatial residence is associated with differentiated lived experiences across Europe.

Policy discussions often focus on economic disparities, such as access to employment and infrastructure. Eurofound reports confirm that rural residents often have poorer access to public services and higher perceptions of institutional disregard than urban residents, reinforcing a social and spatial

divide. When combined with ESS evidence on subjective well-being and political attitudes, these findings point towards multi-layered inequality patterns.

Notably, ESS data and analyzes show that while urban advantage persists, rural improvement is possible, and the degree of inequality varies by context and over time. This temporal and spatial variation underlines the importance of regionally tailored policy interventions.

Conclusions

The This paper illustrates how ESS data can be used to evaluate urban–rural inequalities across Europe. The evidence suggests that *urban–rural disparities are significant and multi-dimensional*, affecting well-being, socio-economic opportunities, and political perceptions. However, the magnitude and direction of these inequalities can vary across countries, outcome variables, and over time. For policymakers, these patterns highlight the need for nuanced, place-based strategies that address both urban disadvantages (e.g., housing affordability pressures) and rural vulnerabilities (e.g., limited service access and economic opportunities). Finally, the importance of considering inequality and redistribution alongside revenue objectives has been emphasized in several studies. Stiglitz (1982) and Kotlikoff (1989) argue that an exclusive focus on revenue maximization may exacerbate disparities and reduce the overall welfare of the population. These perspectives suggest that efficient tax policy requires a *balanced approach*—one that integrates revenue, efficiency, and equity considerations rather than relying solely on instrumental maximization.

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