

## FISCAL DECENTRALIZATION AND THE DEVELOPMENT OF THE DIGITAL ECONOMY

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### **Abstract**

*This paper provides insight into how fiscal decentralization supports the growth of the digital economy, highlighting how decentralized fiscal frameworks and the autonomy of local governments enable responsiveness to technological advancements, promote innovation, and foster public-private partnerships. The research methodology aligns with the paper's objectives and employs qualitative research, including descriptive analysis and an exploratory literature review on fiscal decentralization and the digital economy. By providing an understanding of this dynamic, the paper contributes to the literature that investigates local government fiscal performance.*

**Keywords:** *fiscal decentralization; digital economy; sustainable development; public-private partnership*

**JEL Classification:** H7; H83.

### **1. INTRODUCTION**

Fiscal decentralization has emerged as an effective governance strategy for reshaping the role of local governments, grounded in the principles of autonomy and subsidiarity. The stage of society, known as a knowledge society, is characterized by the advancement of the digital economy. Delegating fiscal powers and duties from the central government to subnational governments enables more adaptable, locally specific responses to economic challenges, especially as the digital economy gains prominence in society and is the future. The swift expansion of digital technologies has reshaped global economic, social,

and governance frameworks, and local governments should adapt their strategies, being target-oriented toward the development of a digital economy using all instruments, like public-private partnerships. Based on digital technologies, there is an increase in productivity, stimulating innovation, and opening new markets. In this context, local governments can be creative and innovative.

This paper offers insight into how fiscal decentralization supports the growth of the digital economy by being a partner in fostering innovation, research and development, enhancing public-private collaborations, and supporting all components of sustainable development (social, environmental, and economic). The digital economy can also serve as leverage for maintaining local government autonomy.

The paper is organized as follows: Section 2 provides a literature review on fiscal decentralization, local governments' competencies, and the digital economy. Section 3 presents the methodology, Section 4 discusses the results, and Section 5 presents the principal conclusions of the study.

## **2. LITERATURE REVIEW**

Research on fiscal decentralization emphasizes its effects on the efficiency, responsiveness, and fairness of subnational governance. Peterson (1995) argues that local governments should be responsible for developmental policies because local developments must be designed and implemented according to their own specific characteristics. Oates (1972) formulated the decentralization theorem, suggesting that decentralization enhances allocative efficiency by aligning public services with local preferences. This is based on the fact that local governments are closer to residents and better understand their needs and preferences compared to the central government, which is more distant. In this context, fiscal decentralization increases resource allocation efficiency and improves local performance. (Oates, 1972, 1993; Tiebout, 1956; Ezcurra and Pascual, 2008). In the era of a rapidly evolving digital economy, researchers and practitioners have noted that decentralized public systems can better adapt to swiftly changing technological environments (Shah, 2004; Martínez-Vázquez and McNab, 2003). Fiscal decentralization in European Union countries refers to the delegation of budgetary and fiscal responsibilities from the central government to local governments, allowing them to have greater control over their revenue and expenditures.

The digital economy literature emphasizes the importance of supportive policy environments in promoting innovation and entrepreneurship (OECD, 2019). Local governments in the EU, enabled by fiscal decentralization, can offer customized tax incentives and infrastructure investments. Additionally, through administrative decentralization, they can create regulatory frameworks that foster digital transformation. (Rodríguez-Pose and Gill, 2005). Nowadays, the digital economy is an evolving economic model that plays a crucial role in

promoting green innovation through externalities and economies (Qiu, Liu, and Wu, 2023). Fiscal decentralization plays a crucial role in shaping strategic decisions for providing economic incentives and investments in economic development. (Zhao, Shao and Ye, 2022; Liu *et al.*, 2024).

However, the risks of fiscal fragmentation and regional inequality remain salient (Bird and Vaillancourt, 2006). This duality, opportunity versus inequality, frames the core debate: whether fiscal decentralization can serve as an enabler of digital innovation while ensuring equity across regions.

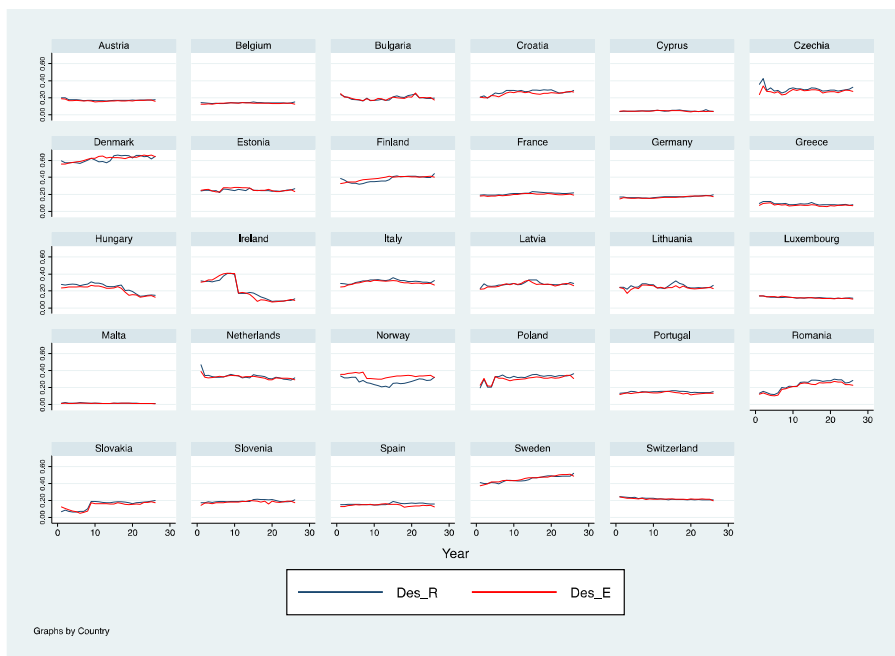
### **3. METHODOLOGY**

The research methodology aligns with the paper's objectives and employs qualitative research, including a descriptive analysis of the dynamic relationship between fiscal decentralization and the digital economy. Quantitatively, it draws upon cross-country datasets, such as the Eurostat (European Commission, 2025a), World Bank database (World Bank, 2025), the Digital Trust Index (2025), and the Digital Economy and Society Index Dashboard (European Commission, 2025b), to understand the status of the significant indicators regarding fiscal decentralization and digital economy performance. The indicators considered include revenue decentralization, expenditure decentralization, the Digital Economy and Society Index (DESI), and the Digital Trust Index, among others.

### **4. ANALYSIS**

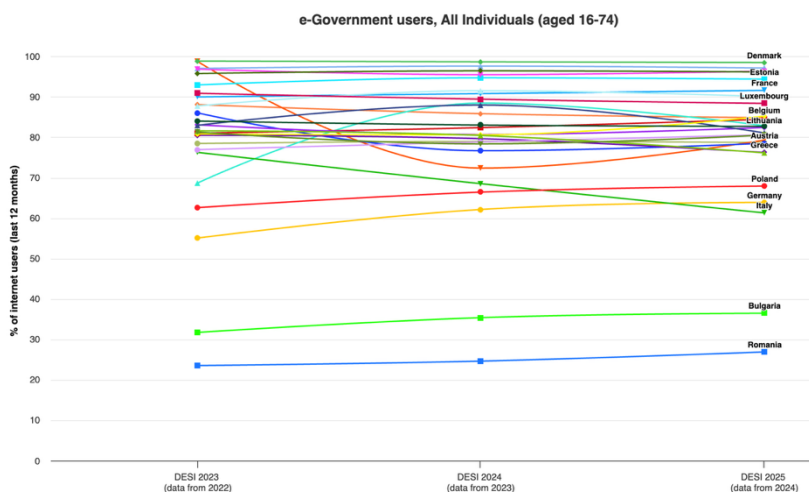
The fiscal decentralization status of European Union countries is defined by a few key indicators, with the primary ones being expenditure decentralization (the proportion of local public expenditure in total government expenditure) and revenue decentralization (the proportion of local public revenue in total government revenue).

According to Figure 1, Denmark is the most decentralized country, and it is also the most digitally advanced in public services (Figure 2). In general, Scandinavian countries, which are members of the European Union, have a high level of fiscal decentralization and a high level of digitalization in public services (Figure 3) based on the Digital Economy and Society Index (DESI) as a crucial indicator in shaping and guiding Europe's digital transformation. By integrating digital tools and data-driven decision-making, the public sector becomes more agile and responsive to society's needs, and one of the most important roles is at the local level. The digitalization of public services therefore acts as a bridge between citizens, businesses, and government, promoting a more connected, inclusive, and competitive digital economy.



Source: computed by authors using Stata 14.2, based on the EUROSTAT database (European Commission, 2025a)

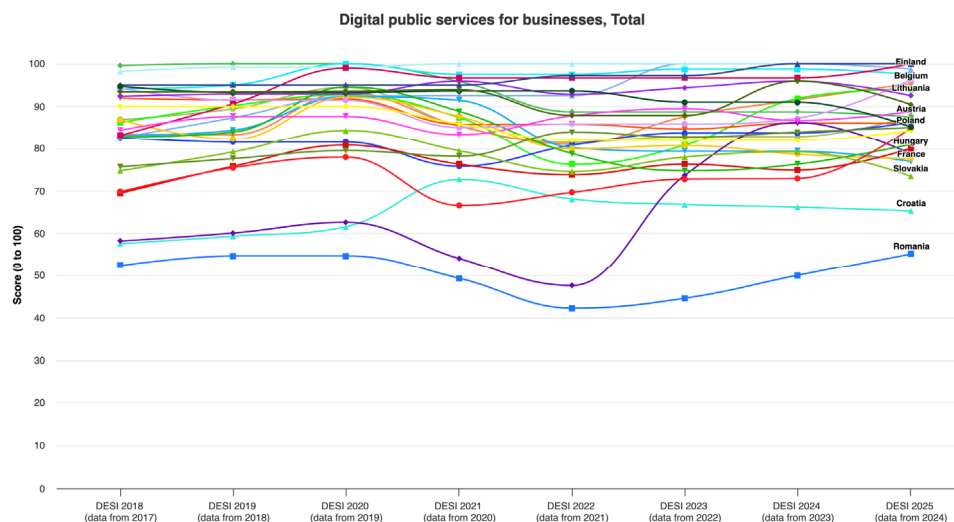
**Figure 1. Status of Fiscal Decentralization in the European Countries**



Source: The Digital Economy and Society Index (DESI) Dashboard (European Commission, 2025b)

**Figure 2. DESI Index – e-Government users in the EU**

Estonia presents a unique case, where local governments have worked with the central government to support e-governance infrastructure. Fiscal flexibility enabled municipalities to co-finance digital platforms, boosting Estonia's reputation as a leader in digital governance.

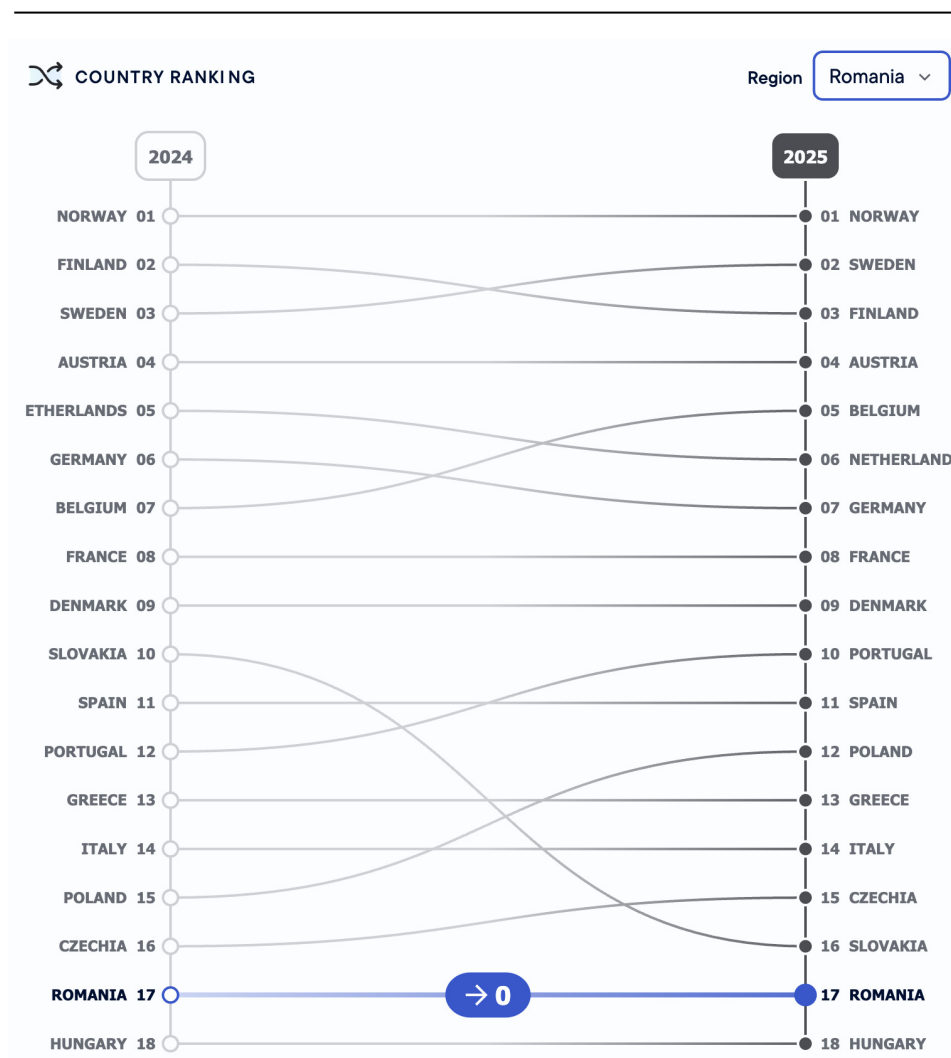


Source: The Digital Economy and Society Index (DESI) Dashboard (European Commission, 2025b)

**Figure 3. DESI Index – Digital public services for businesses in the EU**

Preliminary analysis and correlation suggest a positive correlation between higher levels of fiscal decentralization and indicators of digital economy performance. Countries with greater local control over revenues and expenditures tend to exhibit higher rates of digital public services.

The Digital Trust Index (2025) serves as a benchmark for evaluating the trustworthiness and inclusivity of European websites.

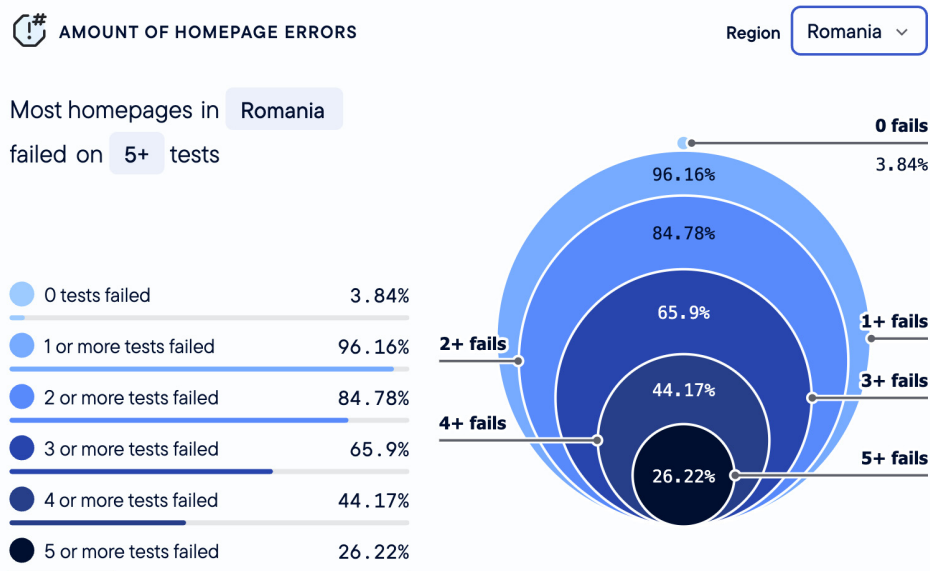


Source: The Digital Trust Index (2025)

**Figure 4. The Digital Trust Index country ranking**

According to Figure 4, Norway, Finland, and Sweden have the highest (least bad) scores, while Slovakia, Romania, and Hungary are the lowest. Belgium barely makes it into the top five.

The Digital Trust Index profile for Romania is presented in Figure 5.



Source: The Digital Trust Index (2025)

**Figure 5. The Digital Trust Index Romanian country ranking (in detail)**

The findings emphasize both the opportunities and challenges of fiscal decentralization in the digital economy. On one hand, decentralization gives local governments the freedom to encourage innovation, address community needs through policy, and develop digital ecosystems. On the other hand, unequal fiscal resources and institutional weaknesses can intensify disparities. Effective governance requires a balance between sufficient local independence to foster innovation and strong intergovernmental transfers to promote fairness. This suggests that fiscal decentralization should not be implemented in isolation, but rather integrated into a broader, multilevel governance framework, ensuring alignment between national strategies and local implementation.

## 5. CONCLUSION

The conclusion suggests that fiscal decentralization is a crucial tool for advancing the digital economy, enabling local governments to develop tailored policies, infrastructure investments, and regulatory frameworks. While decentralization enhances responsiveness and fosters innovation, it also poses the risk of regional inequality. Policymakers must therefore craft fiscal frameworks that balance local autonomy with mechanisms to support equity and inclusion. By

strengthening the link between fiscal governance and digital transformation, this study contributes to discussions on how states can leverage decentralization as a pathway to sustainable, innovative, and inclusive growth in the digital realm era.

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