



**European Committee
of the Regions**

**Commission for
Natural Resources**

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The cost of non-rurality - preparing for a better urban-rural balance in EU funding



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QG-04-23-458-EN-N; ISBN: 978-92-895-2665-4; doi: 10.2863/969318

**This report was written by Jorge Núñez Ferrer, Tamás Kiss-Gálfalvi,
Doina Postica (CEPS), Izabela Marcinkowska and Karolina Zobel
(CASE)**

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1 Introduction

A balanced urban-rural policy is central to successful regional development efforts. There have been several definitions of what could constitute an urban-rural balance (or imbalance), yet measures of actual ‘costs of non-rurality’ remain elusive.

Since the Industrial Revolution, debates on this ‘balance’ centred on the shift from agricultural labour to industrial and service centres. This shift yielded economic growth but also production efficiencies in agriculture.

However, the shift to industry and services meant an accelerated agglomeration process of city populations, attracting a workforce from all sectors of the rural economy and leading to the loss of population and a process of ageing in a large percentage of rural areas. In turn, this led to a fall in public services, such as schools, medical facilities and public transport, due to the high costs in proportion to the population served.

Over time, many settlements lose viability and eventually the depopulation of rural areas reaches a point where the socio-economic net benefits of the shift are no longer assumed to be positive. There are increasing concerns emerging on the wider costs caused by the social, environmental and cultural decline in these areas on the one hand, and the mounting pressures from urban sprawl on the other.

The EU Treaties make it clear that strengthening economic, social and territorial cohesion is a key EU objective. Consequently, the Union devotes a considerable share of its budget to achieving this goal. Cohesion policy is the main vehicle to support lagging regions, while rural development *per se* seems firmly lodged in the realm of the Common Agricultural Policy (CAP).

Rural areas represent some 80 % of the EU's territory and 30 % of its population¹. They perform critical societal functions and provide a range of public goods. Rural renewable energy production, tourism, recreational activities and food production benefits urban areas as well. They are therefore instrumental for achieving some of the EU's headline ambitions – for instance the digital and green transitions. However, investments in rural areas are still perceived as less profitable, simply because the costs of providing these investments are larger per

¹ The EU rural vision, available [here](#)

capita compared to densely populated areas, and because the benefits of reducing their further decline are not accounted for, namely the associated social costs.

This report aims to contribute to the debate on EU rural development policy by presenting a methodology to understand the net costs and benefits of investing in rural areas to society as a whole. By doing so, it asks whether rural depopulation is just a rural problem or whether the consequences have a bearing on all of us, and in particular on urban areas.

This paper thus seeks to look at the trends and impacts of changes in rural areas on society, the economy in general and on urban centres. It explores two fundamental questions:

- How do we estimate the overall value of the costs and benefits of these developments?
- How do we improve policies that specifically concern rural areas?

Over the course of the 21st century, new technologies have the potential to change the urban-rural balance, in essence benefitting both. However, this is only possible if the dynamics and the key factors driving or reversing depopulation are well understood.

The report first analyses key trends and reviews studies on territorial development, identifying the drivers (Chapter 2). It then develops a concept of rural balance and the costs of imbalances (Chapter 3) to then identify a methodology to calculate the costs associated with rural decline (Chapter 4). Chapter 5 analyses the policy implications to draw conclusions (Chapter 6).

2 Review of trends and studies on territorial development of rural areas

To show the dynamics underlying rural decline, this chapter reviews demographic, economic and societal trends in rural regions. These trends constitute the basis for the ensuing discussion on the costs and benefits of investments. The chapter also identifies drivers of territorial development.

2.1 Key trends shaping rural areas

Most rural areas have been declining for decades due to the structure of modern economies being based on efficiencies of scale, fostering industrial agglomerations. Globalisation also caused increasing pressure on agriculture, food processing industries and other local cottage and SME enterprises. This led to accelerating changes in the balance between rural and urban areas and has deeply impacted the overall socio-economic fabric of regions.

Rural areas that have avoided decline are often on the periphery of agglomerations and integrated into urban and industrial centres. However, newer developments are influencing the changes in rural areas, even challenging decades-long trends – these are digitalisation, climate change and the energy transition. Addressing climate change, the need for renewable energy and new developments in digitalisation are opening new avenues for a potential new balance between urban and rural areas, first in peri-urban areas, but also beyond.

As the costs and benefits of changes in the rural areas are shifting, new urban-rural trends and balances are starting to become possible and policy has – and will have – a key role to play.

This report looks at the following key trends:

- Demographic change
- Regional economic performance
- Labour market dynamics

Analysing trends in the territorial development of rural areas is a challenging task since the data at the NUTS3 level approximating the phenomena are often missing. Moreover, the categorisation of regions is ever-changing, and there are also methodological challenges regarding official statistics published by Eurostat. This chapter lays the foundations for the analyses of trends shaping rural areas based on the existing available EU data, making use of the urban-rural typology. The typology distinguishes between:

- **predominantly urban regions**, NUTS 3-level regions where more than 80 % of the population live in [urban clusters](#)²;
- **intermediate regions**, NUTS 3-level regions where more than 50 % and up to 80 % of the population live in urban clusters;
- **predominantly rural regions**, NUTS 3-level regions where at least 50 % of the population live in [rural grid cells](#)³.

While not all the statistics are available within this categorisation, our analysis has also been supported by Eurostat regional data based on the degree of urbanisation (DEGURBA) classification⁴. Depending on the share of the local population living in the area, DEGURBA classifies Local Administrative Units (LAU) into three types:

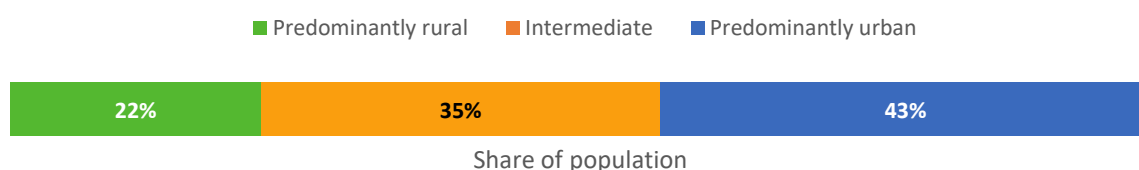
- **cities** (densely populated areas);
- **towns and suburbs** (intermediate density areas);
- **rural areas** (thinly populated areas).

Despite the differences in the category definitions, both databases identically approximate overall trends and changes happening in rural regions. Therefore, to present a holistic view of regional dynamics, the two categorisations are used interchangeably in this subchapter, depending on data availability.

2.1.1 Empirical data on trends

Just over a fifth (22 %) of territories are made up of predominantly urban regions, while 35 % are intermediate and 42 % are predominantly rural Figure 1. shows the distribution of population across these regions.

Figure 1. Share of population across the urban-rural typology (2021)



Source: Eurostat

² Eurostat defines territorial clusters types based on the population density contiguous grid cells of 1 km² with similar characteristics. For further details see [Eurostat](#).

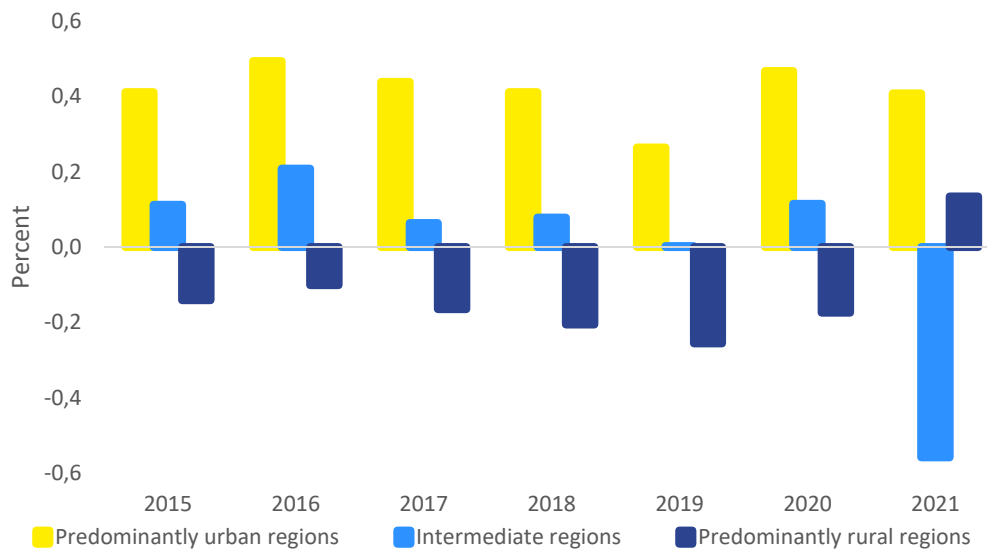
³ Methodology: urban-rural typology, available [here](#)

⁴ Eurostat defines the degree of urbanisation (DEGURBA) as a classification system that identifies the character of an area (i.e.; cities, towns and suburbs, rural areas). For further details see [Eurostat](#).

a. Demographic trends

During the last few years, we have continued to observe a gradual shrinking of the EU's rural population. Between 2015 and 2021, the population in rural regions decreased by 0.1 % on average each year. In contrast, intermediate regions have not experienced considerable change in their demographics, while predominantly urban regions exhibited a 0.4 % growth in their population on average each year (Figure 2Figure 1.).

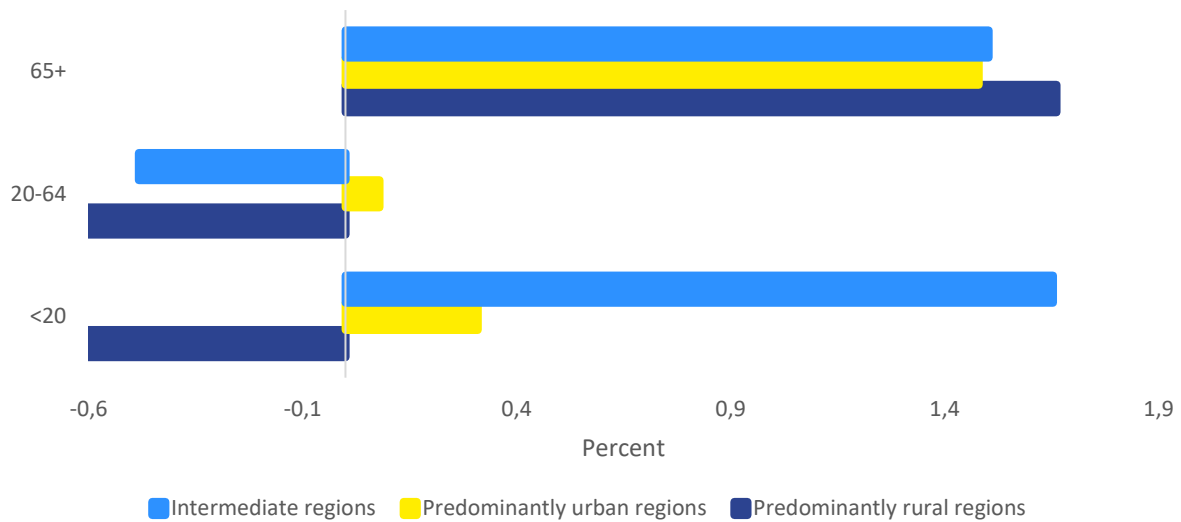
Figure 2 Population growth rate by urban-rural typology in the EU (2015-2021, %)



Source: own calculations based on Eurostat [TPS00001]

Ageing is another major trend that characterises demographic developments in rural regions. Between 2015 and 2021, the number of people aged 65+ increased by 1.6 %, while the number of people aged 20-64 decreased by 0.6 %. At the same time, the number of people under 20 also decreased (Figure 3.). When compared to other territory types, rural regions are most exposed to the consequences of ageing.

Figure 3. Average annual population change by age and urban-rural typology in the EU (2015-2020, %)

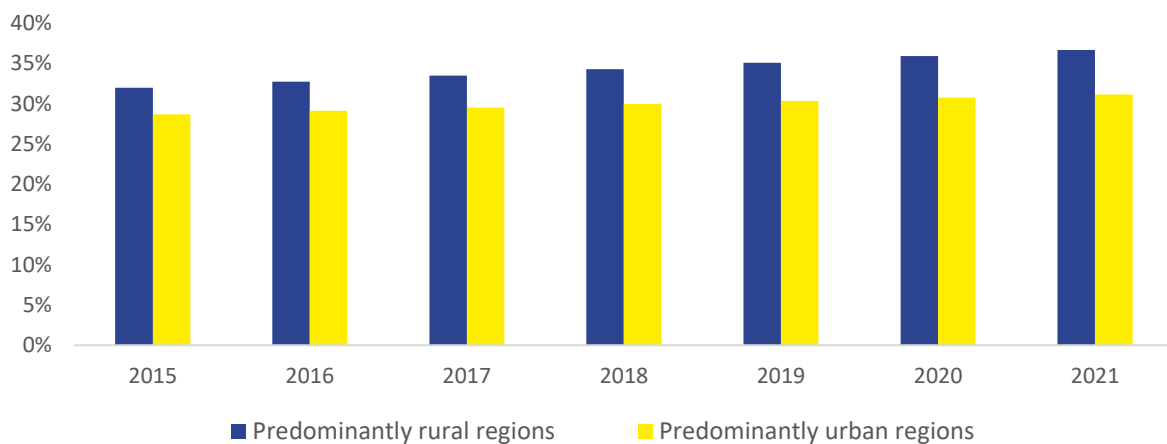


Source: own calculations based on Eurostat [urt_pjangrp3]

The regular outflow of younger people from rural areas, as well as the ageing of rural population naturally leads to a decrease in the labour force. This trend could constitute a risk for the future attractiveness of rural labour markets. With the share of people over 65 expected to reach 30 % in the whole of the EU by 2030, this trend could be stronger in rural areas. Indeed, between 2015-2021, the increase in this ratio in rural areas (5 %) was twice the observed figure in urban areas (Figure 4).

A shrinking labour force constitutes a significant barrier to the region's attractiveness for businesses, whereas the overall higher share of older people in society poses significant challenges for future social service structures, and implies a shift of public spending from services devoted to the younger cohorts towards services supporting the elderly (such as long-term care support, transport adaptation, and housing). Such a shift could further decrease the attractiveness of affected regions to younger generations.

Figure 4 Share of population 65+ over working age population in the EU (2015-2021, %)



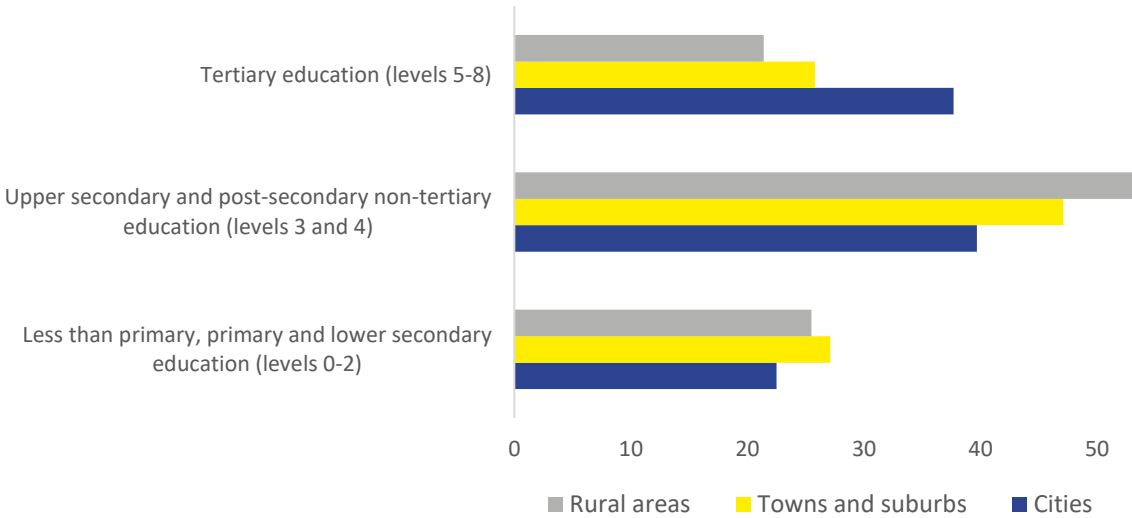
Source: own calculations based on Eurostat [urt_pjangrp3]

Older people living in rural areas are already impacted by social, economic and territorial challenges. Increasing medical care needs, coupled with shortages in access to health and social care services represent a key challenge (Augère-Granier and McEldowney, 2020). On the other hand, young people also face many barriers in rural regions, which affect their decisions to out-migrate to more densely populated urban areas.

One of the reasons for out-migration is the greater access to educational services in urban areas. An analysis of the educational attainment of individuals along urban-rural lines reveals that people in rural areas have comparable levels of education to their counterparts in towns and suburbs but are less educated when compared to the individuals living in cities (Figure 5). While in cities 37 % of people have a tertiary level of education, in rural areas this share stands at 21 % as of 2021. This number, despite its continued increase over the last decade, is still below the EU's target (40 % under the Europe 2020 Strategy) (My observatory, 2022).

When looking at educational attainment in cumulative terms, over 73 % of the rural population have at least upper-secondary education, which is the same as in towns and suburbs and is only 4 % lower than in cities.

Figure 5 Educational attainment by urban-rural typology in the EU in 2021, % (Age group 15-64)



Source: Eurostat [EDAT_LFS_9913]

Studies indicate that differences in educational attainment between rural-urban regions are associated with a regional gap in human capital formation (Gulieva et al., 2021). Urban areas, and in particular cities, have a comparative advantage in the production of human capital (van Maarseveen, 2021). Moreover, schools in rural areas often face problems that are uncommon in urbanised centres, like difficulties in recruiting qualified teachers, and a lack of adequate infrastructure. The high fixed cost of maintaining schools due to the smaller size of rural populations limits the choice of schools, educational programmes, after-school activities and societal support. Limited educational opportunities can be a critical driver behind the mobility of people from rural to more developed and densely populated areas. This problem is especially acute among those seeking tertiary education, confirming a pattern of ‘migration stream selectivity’⁵. (Weiss et al., 2022).

A quick look at the skills composition between urban-rural areas shows that the level of digital skills is the lowest among individuals living in rural areas (48 % had basic or above basic digital skills), whereas the comparable number is 55 % for towns and suburbs and 62 % for cities (Eurostat, 2019). This is a very relevant statistic since digitalisation is often perceived as an opportunity to develop⁶.

⁵ I.e. out-migrants are younger and more highly educated

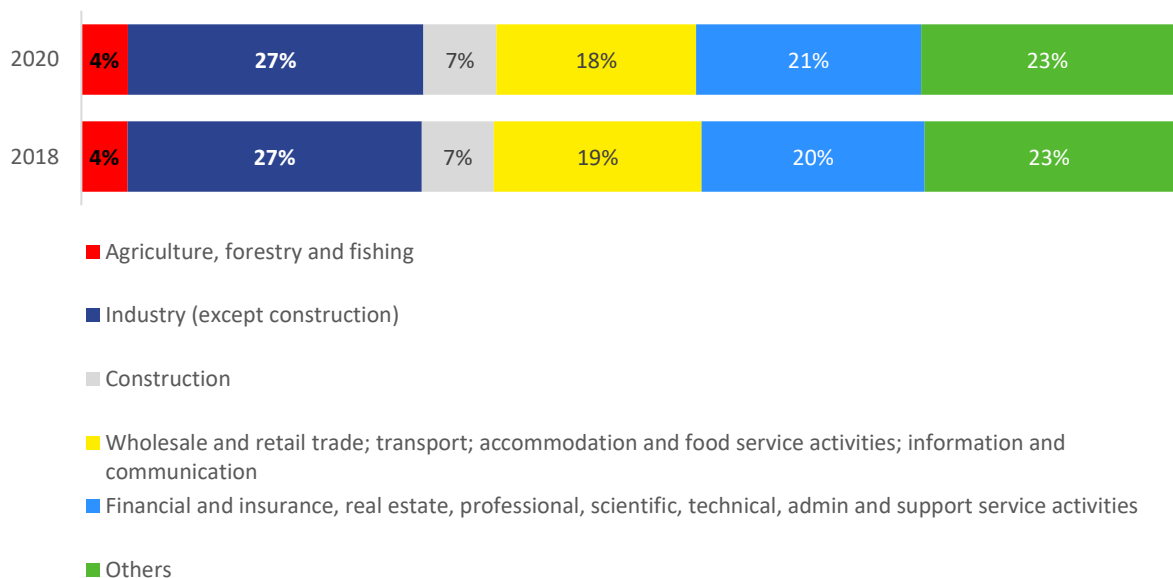
⁶ <https://www.fao.org/asiapacific/news/detail-events/en/c/1606709/>

b. Regional economic outcomes

In terms of economic development, in general, rural regions lag behind the national average economic growth rate. The share of rural areas in the EU GDP has been stable over the last few years. The largest chunk (around 50%) of the EU's GDP is generated in predominantly urban regions, while 33.7 % is generated in intermediate regions, leaving predominantly rural with only 16.3 % (Eurostat, 2022). Productivity per capita declines when moving from urban to rural areas. With a simple calculation based on the respective population data (see Figure 1), we can see that for each person the productivity is 116 %, 96 % and 74 % of the average per capita by territorial typology.

The tertiary (service) sector creates the most value added in predominantly rural areas. Financial and insurance activities, real estate activities, wholesale and retail trade, transport and accommodation constitute the largest chunk of rural economies. Agriculture, forestry and fishing activities made up only a modest 4 % of gross value added (GVA) in 2018-2020 (Figure 6). Nonetheless, between-country differences are visible along the East-West and North-South geographical dividing lines, with Southern and Eastern rural areas exhibiting higher shares of agricultural activities in their economic mix⁷.

Figure 6 Cumulative gross value added in basic prices by NACE in the EU in predominantly rural regions (2018-2020, %)



Source: Eurostat [NAMA_10R_3GVA_custom_5091142]

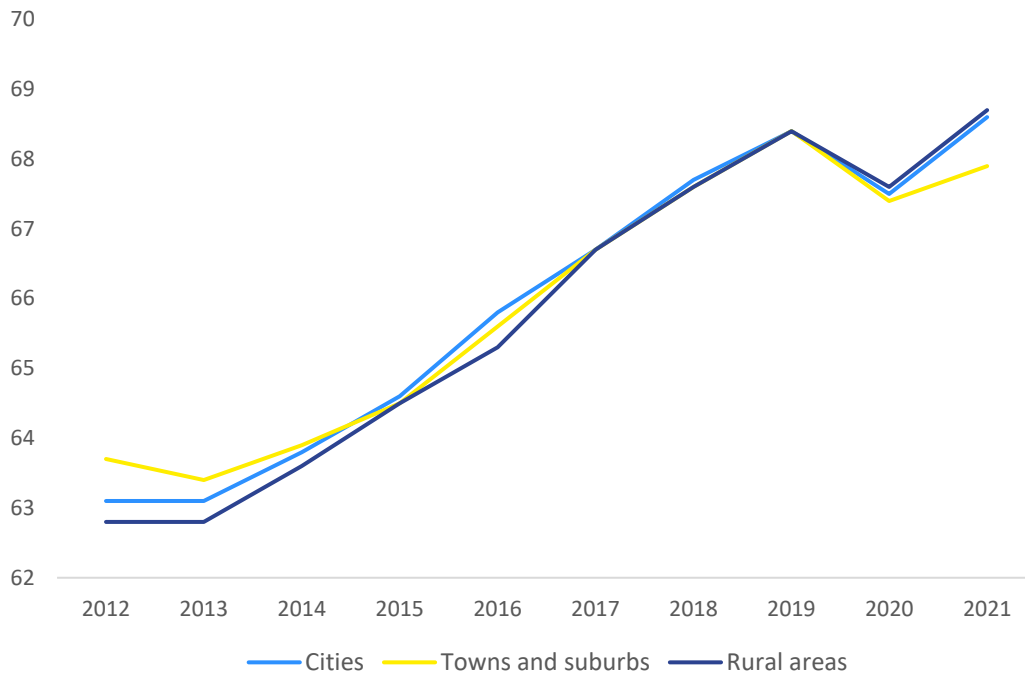
⁷ <https://ec.europa.eu/eurostat/documents/3217494/5726009/KS-HA-10-001-13-EN.PDF.pdf/5f478e16-1bd8-4b7d-b6a8-e8c936eacb78?t=1414775831000>

c. Regional labour market outcomes

At the EU level in 2021, the labour market activity rate was 78.5 %. The difference between cities and rural areas was 1.3 %, which is relatively modest overall. However, in rural areas, women are generally less economically active than men, leading to a larger gender labour market activity gap in these areas in comparison to others (Rural Europe, 2023). This range is 13 to 20 percentage points between women and men⁸.

Employment rate trends and size can be compared between different types of regions (Figure 7). While it was rising between 2013-2019, it fell during the Covid-19 pandemic but has started increasing again, with no particular difference between urban and rural regions.

Figure 7 Employment rate by the degree of urbanisation in the (2012-2021, %)

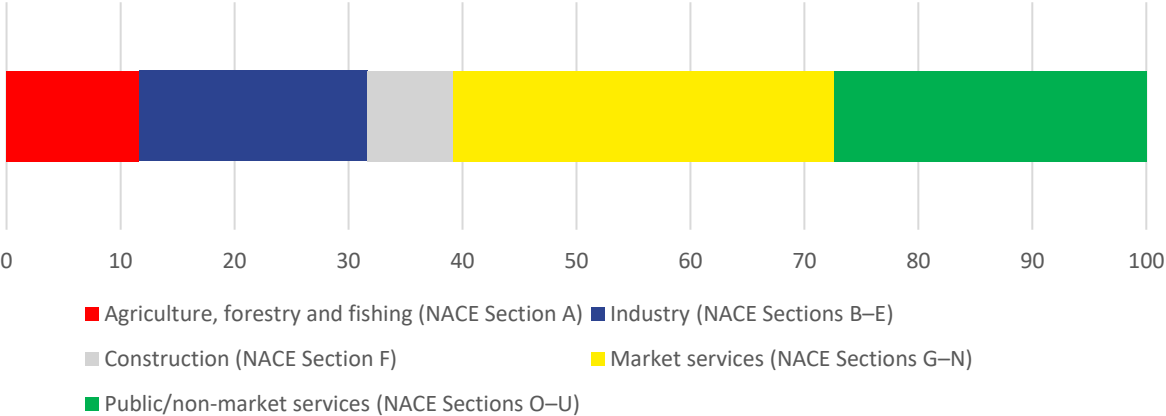


Source: Eurostat

Nevertheless, the situation of women in rural areas is worse when it comes to employment opportunities. They are more likely to be unemployed than men and are more likely than women in urban areas to work in informal employment. Limited access to public services related to childcare worsens their situation even more (Eurostat, 2023).

⁸ Based on [Eurostat data](#)

Figure 8 Employment by NACE in the EU in predominantly rural regions (2020, thousands)



Source: Eurostat, 2021

In 2020 almost half (45 %) of the whole EU working population was employed in predominantly urban regions, while the corresponding number is ~38 % for intermediate regions and 19 % for predominantly rural regions. In the predominantly rural regions, the highest share of employment is found in market services, followed by public non-market services, industry and agriculture (Figure 9). The composition of the employment by NACE sectors has remained unchanged since 2017.

2.2 Identifying development drivers for rural development

This section reviews the literature and available data to identify development drivers and existing evidence on the costs and benefits of investing in rural areas. Although our background research indicates a general scarcity of literature and data on this topic, some interesting results are nonetheless worth noting.

First, despite the lack of a common understanding of drivers for rural development, a few findings are worth mentioning. In 2018, the OECD identified 10 key drivers of rural change which are likely to impact the transformation of the countryside. These include *decentralised energy systems; cloud computing & the Internet of Things (IoT); driverless cars and drones; and digital connectivity*, among others (OECD, 2018). All these drivers are extremely dependent on technological progress and the process of digitalisation, lacking the 'social component'. Forleo et al. (2017) fill this gap and specify five broader categories of drivers for rural development:

1. Demographic drivers (sub-drivers include ageing, density, and housing, among others);
2. Natural drivers (i.e. protected areas, mobility);
3. Economic drivers (i.e. labour market, productive structure);
4. Socio-cultural drivers (i.e. education, vulnerability);
5. Agriculture, livestock and tourism (i.e. farm structure).

Similar drivers have been identified by the International Labour Office (ILO) and include *infrastructure; skilled people; innovative entrepreneurship; health security; employment; and social dialogue* (ILO, 2013) which indicates that these are key to ensuring the prompt transformation of rural areas. Social sustainability, inclusion, as well as cohesion also appear to be among the key conditions for a just transition at the local level (OECD, 2019). Along similar lines, the importance of the human component seems to be especially underlined by the EU institutions, which consider local inhabitants the main drivers for rural development. Hence, their knowledge should be leveraged for investment decisions (EESC, 2017). This principle forms the foundation of the LEADER method, which, for the last 30 years, has been involving citizens of EU rural areas in the development of their regions by creating Local Actions Groups (LAGs) and preparing and implementing concrete action plans. The LEADER approach was introduced under EU Member States' national and regional Rural Development Programmes

(RDPs), and co-financed from the European Agricultural Fund for Rural Development (EAFRD⁹);

There seems to be a consensus that successful investments in rural areas are those where:

1. *Public service needs of rural areas are addressed;*
2. *Governments invest in the promotion of rural innovations;*
3. *Investments are geared towards exploiting rural-urban linkages;*
4. *Investment priorities should be determined within the region* (OECD, 2006).

The Interreg Europe report (2019) points out that investments in rural infrastructure that combine 'innovation support networks such as clusters, human capital, capacity and community building; along with good governance and citizen involvement', are effective and hence bring systemic changes.

A similar approach is reflected in a strategic 'Long-term Vision for the EU's Rural Areas – Towards stronger, connected, resilient and prosperous rural areas by 2040' adopted in 2021 to safeguard rural areas by absorbing opportunities emerging from the twin transitions. Additionally, apart from financing multiple innovative projects that lead to such systemic changes while harnessing local knowledge and expertise (local policy co-design and co-development methods)¹⁰, the EU is particularly eager to ensure adequate rural talent management. In its Communication on 'Harnessing talent in Europe's regions' (EC, 2023), the Commission introduced concrete actions to promote and retain a skilled workforce in shrinking regions. Given its depopulation trends, among others, rural regions have been of special interest. Although multiple challenges were discussed throughout the Communication, numerous success stories on talent development programmes with the support of local policies were also presented. Even though the situation in different EU Member States is heterogeneous, the overall conclusion is that 'knowledge and skills are the true engines of the future economic growth', hence the regions that can absorb their local potential effectively will be those attracting the biggest number of investments.

Third, there is a lack of common understanding of factors leading to imbalances and 'tipping points' in rural settings. Challenges such as a shrinking or ageing population, land abandonment and declines in the effective usage of land, climate

⁹ See ENRD explanation on LEADER/CLLD, available [here](#)

¹⁰ I.e., recent Horizon projects: <https://cordis.europa.eu/article/id/428970-rural-innovation-developing-real-solutions-for-smart-and-resilient-rural-areas-in-europe>.

change and other environmental externalities, or loss of biodiversity are certainly to blame¹¹, yet these are not the only factors leading to rural decline.

Additionally, there is no consensus in the literature on what the key mistakes in rural investments are, especially regarding private endeavours. Nonetheless, the European Court of Auditors (ECA) has scrutinised the policy and highlighted that some investments in rural development should be considered unsuccessful. In a 2014 ECA report entitled 'Errors in rural development spending: what are the causes, and how are they being addressed?', the Court highlights that many mistakes in public investments in rural areas resulted from inefficient audits by controlling authorities in the Member States. But what is more damning, is the conclusion in their 2015 special report which pointed out that some of the public rural investments 'had achieved only limited value for money, as aid was not systematically directed towards the most cost-effective projects addressing the objectives set in the RDPs and there was insufficient information to demonstrate the success or otherwise of the measures' (ECA, 2015, p.7).

Unfortunately, the situation concerning the inefficiency of public rural investments has not changed much since. In 2022, ECA published another special report on the durability of EU-financed rural development investments, highlighting that these are far from being sustained, especially when it comes to diversification projects focused on promoting non-agricultural activities and new business models. By the time of the audit, a large part of these diversification investments financed in the 2007-2013 programming period ceased operations even in cases where a very high level of investment had been provided (ECA, 2022b). Hence, according to the ECA, the short durability of projects is one of the biggest weaknesses of public rural investments across the EU.

¹¹ See findings of the 'Polirural' project (Future Oriented Collaborative Policy Development for Rural Areas and People), available [here](#)

3 What is balanced urban-rural development and why is it needed?

This chapter defines what constitutes ‘**balanced urban-rural development**’ and the ‘**costs of non-rurality**’, i.e. estimating costs of imbalances.

Rapid urbanisation in several EU Member States and the ensuing population shift from rural areas towards urban centres are generally treated in economic literature as a necessity for generating growth and well-being. Numerous economic studies have analysed the shift of the labour force from agriculture to industrial centres, a move largely driven by higher economic opportunities in industrial and predominantly urban areas, leading to overall increases in growth, and sometimes even a win-win as agriculture itself became more efficient and capital-intensive. In the last two decades, however, the overly positive assessment of this trend has shifted. This raises the possibility that we are moving towards a lose-lose situation.

For instance, the rise of a ‘geography of discontent’ – dissatisfaction in territories experiencing a development trap that often manifests itself in a high number of votes for extreme political parties – has fuelled a debate about the need to support ‘left behind’ areas, often rural ones. At the same time, concerns have also increased about the negative impacts of urban sprawl and the questionable environmental record of territories that have lost population due to a lack of environmental land management.

Declining rural populations make many rural communities unsustainable. In turn, this eventually leads to reduced access to goods, creating a vicious circle of decline. Once inhabitants decide to leave areas due to falling living standards, the remaining population suffers from the further deprivation of goods and services, driving even more people to leave. Austerity measures during and after the financial crisis further cut public services.

Several studies have been assessing the costs associated with these changes¹², in particular their impact on the viability of rural communities. However, they generally fall short of the holistic assessment required, as the decline and shift of populations also create further negative spillovers on the rest of the economy, for example on urban areas that are usually at the receiving end of the influx of rural populations.

¹² See in particular examples referred to in section 4.2

The question that arises is whether the move of the population from rural to urban areas is causing an overall negative socio-economic impact on other regions and the overall economy. This has become even more relevant now that rural territories are seen as an important investment area for climate mitigation and adaptation measures. At the same time, new ‘rural development enablers’ due to technological change, notably through digitalisation and transport, may allow rural areas to thrive and become drivers of growth and wellbeing rather than only imposing ‘costs’ to the public purse and the economy, such as those referred to above.

3.1 Defining urban-rural balance

The topic of rural-urban balance is usually covered by regional studies that examine population distributions, economic activities, access to services and resource allocation. The difficulty of measuring what the urban-rural balance should be is the lack of a clear definition of what would constitute such a ‘balance’. The OECD has been increasingly focusing on rural development and has presented a few definitions of urban-rural balance and imbalance. Nonetheless, these lack a way of measuring the costs of a declining rural area on society as a whole. Rural development reports by the OECD were sporadic, but since 2020 a number of OECD Rural Policy Reviews and country reviews have been published.

One of the key publications is from 2020, namely a report on 'Rural Well-being' that sought to identify drivers for rural decline and missed opportunities to capitalise on the strengths of rural areas. It sought to deepen the understanding of rural areas to guide policymaking. The study described in considerable detail the factors that can mitigate rural decline and the opportunities to develop more resilient economies and looked to develop a governance framework. However, there is no systematic measure of the costs of rural decline if those actions are not undertaken. The implications, for e.g. urban areas, of such decline are not a focus of the study, although some interdependencies were presented. This, however, is generally done in terms of urban areas increasing in importance as a result of rural decline and less in facing negative impacts from the change. This is only indirectly addressed in terms of potential benefits for urban areas from more sustainable rural areas. What is less clear is how high the costs are of allowing rural areas to decline.

A questionable factor of these reports is the apparently presumed inevitability of decline. Keeping services in rural areas has generally been approached from the point of view of their cost – the more they decline, the higher the cost per capita, eventually leading to the discontinuation of services.

Of course, without access to (basic) services, rural areas decline. This is by no means unique – any area would decline and lose population without adequate infrastructure, services and employment opportunities. The more a territory is

disconnected, the more it declines. This is not due to a pull factor of better conditions in urban areas, but from a push factor due to a lack of rural opportunities. Thus, it is not only the better opportunities in other areas causing the shift but a policy failure that generates a negative loop.

Rural decline studies tend to ignore the impact of negative changes in rural areas on the rest of the economy and this can have perverse policy implications. Now that depopulation in certain areas has reached a critical level, with environmental, cultural and economic repercussions that have started to be felt beyond the rural areas themselves, there is more attention on the need to reverse the trend. Moreover, new climate adaptation and mitigation goals require the better use of the territories to generate the necessary goods and services for the future. The ‘costs of non-rurality’ are thus starting to be felt, even if not measured. This also means that there is very likely an underprovision of services in rural areas, i.e. savings on public services are less than the opportunity costs of promoting functional rural areas. The question is how we estimate the total socio-economic net costs of rural depopulation which may empirically justify a stronger active rural development policy.

Some studies are taking on this issue. González-González and Nogés (2019) do so by looking at the long-term effects of different transport infrastructures in rural areas. Yet, these studies still remain lopsided and focus on the costs of the services while there is also a need to look at holistic impacts on social exclusion, economic disparities, and environmental degradation in particular on the wider economy – including urban areas – as a consequence of the decline.

Today, with the low employment in agriculture in all regions, including the predominantly rural regions, there seems to be a growing perception that the rural-urban shift of the labour force has reached a tipping point leading to a lose-lose situation.

3.2 Developing a functional definition of the costs of non-rurality

It is not possible to define what balanced rural-urban development should be in quantifiable terms, making the identification of imbalances rather difficult or controversial. By extension, the same applies to any measure of the ‘costs of non-rurality’. For a measure to have solid policy relevance, it needs to be evidence-based rather than preference-driven. From a purely economic and analytical point of view, there are potential approaches which can indeed lead to identifying imbalances and costs.

The logic of the methodology is rather straightforward and is based on a practical deviation from Pareto efficiency¹³. Pareto efficiency implies that no further change in the equilibrium between two variables – in this case, rural and urban areas – can be made without having negative consequences for at least one of them. The changes could be due to several factors, such as population change or economic shifts.

However, this approach is too restrictive in terms of society's economic development. Changes happen and are to some extent tolerated if the benefits for society exceed the losses by one social group. This leads to a design of social policies that use the overall benefits to compensate or help the ‘losers’ from change. This is why the decline of the agricultural sector and shift of the workforce has not been questioned, as the benefits to society were considered higher than the negative impacts in the agricultural sector and rural areas.

Thus, the more politically realistic identification of a balance or equilibrium is one where changes in the relationship between rural and urban areas do not generate a socio-economic¹⁴ return that exceeds costs to one or both parties, i.e. the returns do not generate sufficient benefits that allow for the counterbalancing that the costs incurred.

This does not mean that the losing party will get compensated as this falls into the realm of political preferences. It does, however, allow for a policy debate on what is the best social policy choice. As there is no clear equilibrium point between rural and urban areas, studies need to determine the point in time to start an analysis of the drivers of change and the costs and measures increasing or decreasing imbalances from that point in time, i.e. the costs and benefits over the period. If a balance between the urban and rural areas is being sought, the choice of rural and urban areas requires careful consideration. Are changes between the

¹³ This is based on the theory developed by Vilfredo Pareto

¹⁴ The return can include valuations of environmental impacts

two related? An exodus from rural areas to the nearest urban area does not necessarily occur.

The analysis should also then incorporate the costs of not developing the potential of rural areas, which is a more difficult step. If the region offers specific benefits in terms of e.g. climate adaptation and mitigation, the lack of development of these options would need to be analysed, i.e. the opportunity costs of not reversing trends should be measured in relation to the costs of providing the necessary infrastructure and services.

Measuring costs and benefits is not a straightforward undertaking. While the scope of this study falls short of fulfilling the data and analytical needs of such a comprehensive assessment, it can form the basis of a first step to identifying different impacts that can be measured (i.e. quantified) and ultimately priced, either positively or negatively. The main challenges, as usual, are linked to the availability of sufficient data and avoiding misinterpreting correlations as causation.

As an example of the methodological and conceptual challenges, the abandonment of land and changes in population in towns by themselves do not have a clear value unless the assets left behind and impacts on the environment and social aspects are measured. But in this respect, most countries are far behind. Very few have developed balance sheets for the whole economy, as is the case in New Zealand, where estimations of the value of public, cultural and social assets are made to indicate the overall welfare and sustainability changes at regular intervals. This is a concept developed by the International Public Accounting Standards Board¹⁵, but has rarely been adopted by countries and even less by local authorities.

Chapter 4 develops methods to identify shifts in several socio-economic areas between rural and urban areas, such as population movements, socio-economic indicators, and natural resource indicators in rural areas, which can then be compared with changes in urban areas to measure the overall impacts.

¹⁵ www.ipsasb.org

4 The (opportunity) costs of rural decline and neglect

The analysis presented in Chapters 2 (especially in Section 2.2) and 3 allows for the creation of cost estimates of underinvestment and investment benefits in rural areas, as well as costs to urban areas.

4.1 Identifying policy impacts on the rural and urban balance, positive or negative

Changes between urban and rural areas are certainly driven by changing socio-economic conditions, but these are also affected by policy decisions. Policies to mitigate the negative impacts of population change in rural areas may be mistargeted or are simply overrun by much stronger policies causing this depopulation.

Policy coherence is important, which is the core final objective of performing such an analysis. It is important to analyse the consequences of policies that were implemented as a result of austerity measures, such as reduced services in rural areas. This is an aspect that has not been sufficiently researched due to the need for an interdisciplinary approach to rural areas instead of the present sectoral bias. In the same vein, the different dimensions of rural decline subject to policy interventions must be understood through a holistic analytical lens. As Chapter 2 demonstrated, the woes of rural territories are linked to complex phenomena where the underlying drivers exhibit a high level of interconnectedness. For instance, low access to basic infrastructure and services is a major cause for outward migration, which in turn further reduces the potential for the provision of these services through the failure to retain or attract professionals who could provide them. Conversely, economic concentration is generally associated with higher productivity, and therefore migration towards cities can create positive effects. Whether these positive externalities are in balance with the costs – investment in urban infrastructure and negative externalities of agglomeration – have been the subject of several studies, which focus on urban aspects¹⁶.

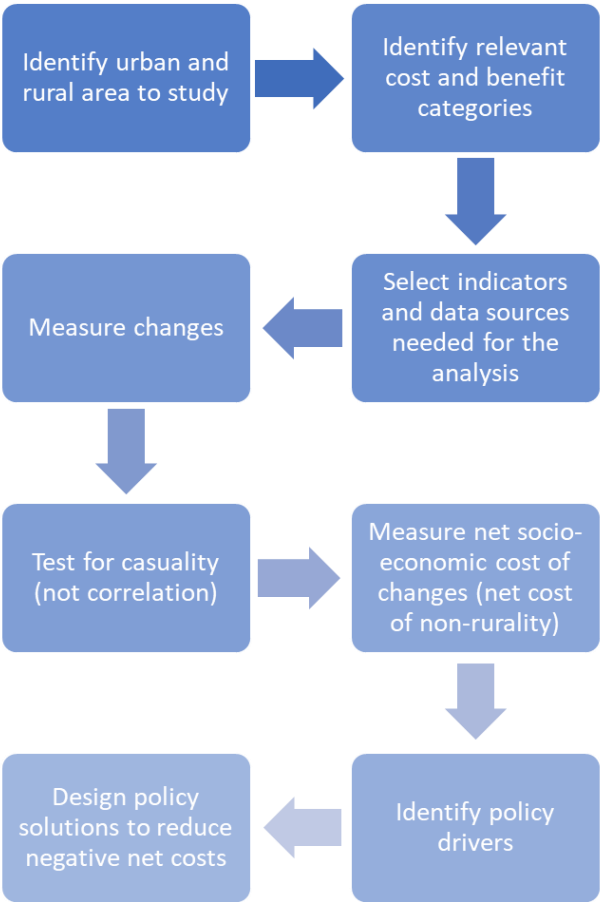
However, when a holistic angle (i.e. going beyond costs only to respective metropolitan areas) is taken, the costs of rural decline may well outstrip the net benefits derived from economic concentration. The difference between the two is defined for the purposes of this study as the **net cost of non-rurality**.

¹⁶ See among others Glaeser, 2010, Koenig (2011), Quigley, John M. (2008)

This report will only be able to pinpoint some aspects and propose further analyses needed, as the nexus between EU rural, regional and innovation policies, and the interrelations with national policies are complex. The ECA (2022b) report identifying a lack of appropriate policies for economic diversification with long-term viability already establishes a point of reference, even if the work needed has to look beyond EU rural development policy.

The figure below presents a basic schematic approach to identifying and estimating the costs and benefits of changes in the urban-rural balance, i.e. the net cost of non-rurality.

Figure 9 Basic schematic approach to measure the net costs and benefits of changes in the urban-rural balance



Source: own elaboration

The above approach allows for listing and quantifying the ‘costs’ of non-rurality but also for the benefits of an urban-rural balance that can be lost. The table below provides a list of categories that were identified by this study. The below categories are by no means to be taken as an exhaustive list. Instead, they point to some of the most important dimensions to examine in the context of the net cost of non-rurality and can form a starting point for further analysis.

While some of these effects can be applied to rural areas in general, some are specific to underinvestment in (balanced) urban-rural linkages.

Table 1 Indicative list of cost and benefit categories

Item	Explanation
Agglomeration effects	<p>While agglomeration has clear economic benefits, increasing density is associated with exponentially rising costs that are expected to outstrip benefits above a certain threshold¹⁷. Negative agglomeration effects include pollution, high rental/housing prices, and the inability to provide an adequate level of some public goods (e.g. infrastructure).</p> <p>In addition, the concentration of economic and employment opportunities can have a catalytic effect as a driver of rural exodus that further exacerbates territorial inequalities.</p>
Reduced social mobility and increasing inequality	<p>Rural decline is likely to increase inequality and reduce social mobility between urban and rural populations. Empirical literature generally indicates that rising inequality and low social mobility hurts economic growth. Although this could form an analytical dimension of its own, an important source of rising inequality is linked to the vicious circle of demographic decline and service provision referred to previously. A shrinking population results in insufficient manpower to adapt to or mitigate the repercussions of decline.</p>
Management of natural resources	<p>The costs for missed opportunities in terms of economies of scale can also apply to the management of natural resources. This could include, for instance, negative impacts of uncoordinated land-use management, landscape and environmental preservation, ecosystem services, etc.</p>
Economies of scale in the provision of public services	<p>A clear advantage of metropolitan areas is their relative economies of scale in the provision of public services. Providing access to, for instance, healthcare or education in sparsely populated areas is a problem on its own, with unit costs estimated to be considerably higher than in urban regions¹⁸.</p> <p>Moreover, an imbalance in urban-rural relations or a lack of coordination between functional areas can lead to missed opportunities in economies of scale in the provision of public goods.</p>
Reduction in quality of life	<p>Underinvestment in rural development can reduce the quality of life in rural areas through multiple channels. This includes reduced economic opportunities leading to lower employment rates or lack of access to some basic services. Lower quality of life can be associated with reduced labour productivity, further constraining the economic potential of lagging regions¹⁹.</p>

¹⁷ See, for instance, Koenig (2011)

¹⁸ See OECD and JRC (2021) Access and Cost of Education and Health Services

¹⁹ See, e.g. Oswald, Proto and Sgroi 2014 and Krekel, et al. (2019) "Employee Well-being, Productivity, and Firm Performance: Evidence and Case Studies." in [Global Happiness and Wellbeing Policy Report](#)

	The reduction in quality of life is an important impact of underinvestment on its own. However, other associated ‘costs’ can be identified, for instance the repercussions of the emergence of a ‘geography of discontent’.
Negative externalities of competition	Competition between urban and rural areas has a range of negative externalities, for instance zero-sum tax competition between municipalities vying for investments.
Negative impact on achieving EU objectives	Includes (among others): <ul style="list-style-type: none"> • Cohesion • Just transition • Twin transition: green (renewable energy, food) and digital • Social stability • Cultural preservation

Source: own elaboration

The methodological approach applied to quantify each of these items needs to be conceptualised separately. This is because there is considerable overlap between the scope of each item – an important but unsurprising caveat considering the interlinkages between the socio-economic factors driving change in both rural and urban areas.

Moreover, to derive a holistic assessment of the costs and benefits of change, it is important to keep in mind that **the analysis should not only focus on the negative dimensions – the costs – but also the benefits** that materialise (if any). Without understanding the drivers of change on both sides, it is impossible to derive sound conclusions for future policies.

It should be noted that the theoretical framework presented above clearly implies the need for a place-based analysis of local conditions. An uneven distribution of economic activity and employment across space can result from a long range of different factors. Conditions are not only difficult to compare between Member States but often exhibit within-country divergences that make aggregation impossible. Therefore a ‘non one-size-fits-all approach’ for the whole of the EU needs to be deployed.

The following chapter will focus on the highly complex repercussions of agglomeration economies and the linked (but separate) dimensions of urban-rural inequality. It will touch upon several of the other dimensions listed above and will provide a glimpse into the complexity of assessing the costs and benefits of non-rurality. An example of a more conceptually confined analysis – i.e. a dimension with a more clear-cut scope – is provided in Annex 2 on natural resource management.

4.2 Assessing the net cost: an example of agglomeration effects and inequality

As already referred to in Chapter 3, the reasons behind the concentration of human activities in a few urban centres have been studied for decades. **The theory on agglomeration economies** (Fujita and Thisse, 1995; Glaeser, 2010) highlights the role of centripetal forces stemming from the **positive externalities** and **economies of scale in production** generated by agglomerating economic activities. Agglomeration forces can be diverse but they act through a fall in transport costs, understood broadly to encompass the costs of exchanging goods, ideas and people (Glaeser, 2010). In the context of modern cities, agglomeration can be driven by **knowledge transfer and spillover**, and the accelerated flow and exchange of ideas coming from the spatial concentration of similar activities, occupations and workers¹.

Moreover, the greater density of people and companies can have additional positive effects on the labour market, by reducing friction related to information asymmetries and ensuring **better and faster matching between the labour supply and demand (labour pooling²⁰)** (Duranton and Puga, 2004). Additional localisation effects arise from the clustering of economic activities and the more integrated supply chain, which brings intermediate input producers and consumers closer together (Quigley, 2008).

Another positive output resulting from economic concentration is the higher potential for innovation. Because the presence of high value-added firms in urban areas creates higher competition and attracts highly skilled people, these can result in higher levels of research and development (R&D) spending and patenting. This in turn leads to increased productivity, innovation, and competitiveness, which can have positive spillover effects on the wider economy (Glaeser, 2010).

Although a positive relationship exists between urbanisation and economic agglomeration, with feedback effects between the two, this relationship is by no means straightforward and it has clear downsides. Some studies argue that a positive relationship holds until a certain peak, after which additional economic agglomeration can hurt economic growth by reducing profits (Henderson, 2000). Cities that suffer from urban over-concentration could be affected in their economic growth rates because of agglomeration diseconomies of scale – when costs and disadvantages that urban dwellers accumulate due to an increase in

²⁰ The labour pooling argument is closely linked to the existence of assortative matching (i.e. highly-skilled workers matching with more productive jobs) which is an effect reinforced by the size of the local labour market (Dauth et al., 2022). By alleviating the limits from distance and transport costs, the concentration of workers and firms increases the size of the local labour markets.

outputs produced (Wheeler, 2002). This is because production costs of goods and services per unit are higher beyond a certain size.

The second origin of agglomeration diseconomies – crowding and increased waiting times – results in burdened access to necessary tools or resources, and hence limited pricing power of various service providers who struggle with too many competitors and a lack of a skilled workforce. Densely populated cities are particularly vulnerable to such problems which can cause even a long-term lack of growth. These costs can be categorised as ‘congestion costs’, for instance, traffic and pollution, which typically emerge in ultra-high-density cities and tend to work against agglomeration forces. Other externalities include effects on house prices (also on the periphery of cities²¹). In 2021, the housing cost overburden – a situation in which households spend more than 40 % of their disposable income on housing costs – was higher in cities than in rural areas in all Member States except Bulgaria, Croatia, Latvia, Lithuania and Romania. That year, around 10.4 % of urban dwellers across the EU experienced a housing cost overburden, while the rate for EU citizens living in rural regions was 6.2 %²².

Other costs related to urban agglomeration include strong environmental pressures. In 2018, in 432 European cities (with a combined population of around 130 million inhabitants), the costs related to pollution and environmental pressure were as high as EUR 166 billion, hence in that year only, every urban dweller suffered a welfare loss of ca. EUR 1 250, or, in other terms - around 3.9 % of total income generated in urban areas was lost (direct and indirect health repercussions stemming predominately from poor air quality) (de Bruyn and de Vries, 2020). At the same time, nature conservation actions aimed at improving air quality in rural areas can lead to the spillover of rural (opportunity) costs given that the recreational value of 'cleaner and healthier' areas benefits not only its inhabitants (Thöne and Kreuter, 2020).

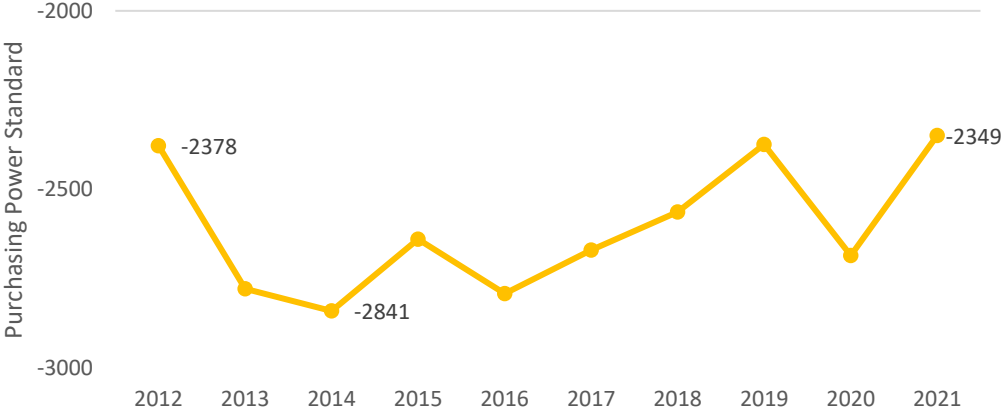
The above description only considers the cost-benefit balance between agglomeration economies and diseconomies in urban areas but does not consider the costs to society as a whole. Economic concentration per se should not necessarily lead to economic or political concerns unless it translates into spatial inequalities impacting welfare in specific territories. However, economic and employment opportunities linked to agglomeration economies often act as drivers of the rural exodus affecting urban-rural inequalities and spatial disparities.

²¹ Houses prices further include important issues related to taxation (property tax), urban policy and public good/services provision.

²² Eurostat, 'Housing cost overburden more prevalent in cities' available [here](#)

Inequality is a complex and multidimensional concept that refers to disparities in several areas such as income, education, and access to opportunities in general (see Section 2.1.). The persistence of the urban-rural inequality gap represents an overall risk for achieving EU economic and social convergence. Although in the EU income inequality decreased overall over the past decade, the income gap between urban and rural areas persists (see Figure below).

Figure 10 Income gap between urban and rural areas – 2010 -2021, in PPS EU27 2020.



Source: Own elaboration based on Eurostat.

An [OECD](#) study found that income inequality can have a sizeable negative impact on GDP growth. In addition, it suggests that lowering income inequality by reducing income disparities at the bottom of the distribution has a greater positive impact on economic performance than if the focus is on reducing inequality at the top of the income distribution. In the context of the rural-urban income gap, where the rural population is poorer on average, reducing the income gap between the two might in turn have a positive effect on GDP growth.

The econometric analysis conducted for this study indicates that an increase in the growth rate of the rural-urban income gap is associated with lower economic growth in the model. However, the effect is relatively small, and low data availability does not allow for sufficiently strong conclusions to be drawn based on these results (see Annex 1).

Other studies focusing on the impact of income inequality between rural and urban areas on economic growth derive mixed results. Some studies show that reducing the income gap between rural and urban areas had a positive effect on economic growth (Akramov and Yu, 2019), or that it can generate positive spillover effects on other areas of the economy (Fan et al.,2006), such as increased investment in infrastructure and improved productivity in rural areas. Other studies though have found no significant relationship between the two (Bucci and Marzano, 2019). Overall, it seems clear that further research is needed to better

understand how and through which transmission channels the rural-urban income gap affects economic growth.

Other, non-financial costs of inequality between urban and rural areas can also have considerable repercussions. For instance, the ‘geography of discontent’ already referred to in Chapter 3 is likely to yield further political instability and anti-EU sentiment (see Dijkstra et al., 2020).

4.3 Policy implications

The above analysis implies a potential negative net cost of non-rurality. This means that rural development policy should no longer be considered a ‘social’ cost to be incurred to maintain rural areas due to political preference. It is time to consider that rural development may be an integral part of a modern growth strategy that correctly confronts the net costs to the net benefits of intervention. The result also may be a reform of the policy approach and priorities in terms of investment areas and coordination between sectors with a wider territorial approach. It would require deeper coordination between rural, regional and urban policies taking a territorial rather than sectoral approach.

Over the past few decades, a considerable amount of literature has emerged debating how rural decline could be effectively reversed. This section takes note of the main highlights from this literature, which reflect the findings of the preceding chapters, and notably in section 2.2 on the development drivers, but do not incorporate the wider social costs and benefits. Several studies offer a calculation of specific costs for providing particular services, education and infrastructure. However, as argued by this study, the wider costs and benefits for society would better justify action (or inaction) due to the net costs and benefits. A first observation is linked to the vicious cycle of demographic decline and service provision repeated across the preceding sections. To counteract this trend, investments in the provision of public services are needed. Such investments could incur considerable costs. For instance, given the scarcity of entities providing education, costs per student are significantly higher in rural regions than in urban areas. A joint study by the OECD and the European Commission’s Joint Research Centre (JRC) found that ‘the difference in annual cost per student between cities and sparse rural areas is about EUR 650 and EUR 681 per primary and secondary school student, respectively²³’ (OECD and JRC, 2021). The situation is similar for health care services. The question that remains to be answered is whether the economic benefits to provide schooling and to train locals to develop the required skills in areas such as environmental management, renewable energy and other digital businesses exceed these costs.

²³ In the EU 27 and the UK

Infrastructure investments are still needed to reduce rural areas' negative accessibility costs. These mostly include transport and connectivity (i.e. internet access), which can be helpful not only for promoting telework and the provision of e-services but also for connectivity needs, e.g. for high-tech precision agriculture (Matthews, 2019, p.79).

A vehicle for developing higher value-added activities in rural economies is supporting entrepreneurship. To boost ecosystems of support services, the opening of accelerators targeting non-agricultural sectors or the provision of flexible finance for rural SMEs could be helpful (European Network for Rural Development, 2017, pp.29-33).

In this respect, support for boosting innovation in rural areas and creating pioneering products and processes is key. Integrated within the dominant discourse of green and digital transitions, such a boost can promote the exchange of knowledge and cooperation between different groups of stakeholders²⁴. In particular, social innovation can play a prominent role as it is believed to enhance not only innovative but also just rural transition and regeneration (European Network for Rural Development, 2017, p.9). The Bureau of European Policy Advisors defines this concept as: 'innovations that are social in both their ends and their means. [They are] new ideas (products, services and models) that simultaneously meet social needs (more effectively than alternatives) and create new social relationships or collaborations' (Hubert, 2010, p.7).

Different rural regions benefit from diverse factor endowments. For instance, some exhibit a high potential for developing a tourism industry and visitor economy i.e. farms, eco-tourism, ski resorts, and boating (Interreg Europe, 2020, p.15.). EU support for capacity building to develop territorial visions and strategies is key regardless of whether a place-based policy or a more horizontal intervention²⁵ is needed to exploit different areas' potential. In addition, expert advisory services can help through guidance on investment plans or marketing strategies to local authorities and/or enterprises.

There is a need to further support rural communities in protecting the environment and the coordinated management of the natural resources surrounding them. This could be done by improving and expanding specific programmes such as LEADER that e.g. link agriculture with climate and environment-oriented targets and objectives (Matthews, 2019, p.79). However, the rather small share of employment and value-added of agriculture calls for a much wider (i.e. central) attention to non-agricultural activities and the role and coordination of other funds

²⁴ See e.g. the [European Startup Village Forum](#)

²⁵ For a broader discussion on the value of place-based policies vs. horizontal interventions, see World Bank (2022) Place, Productivity and Prosperity.

need to be reviewed. Local communities need to be engaged in this process and provided with the means (not only financial) to achieve shared goals. These will significantly increase their community ownership of just transition-oriented endeavours (Huguenot-Noel & Vaquero Piñeiro, 2022, p.29.). Of course, the lessons learned from previous programmes need to be integrated. The ECA's concerns about programmes lacking long-term impacts and failing to address rural development objectives need to be taken seriously.

Box 1 presents a case study from Spain, a country where tackling rural depopulation has become a high policy priority. The important aspect of the Spanish case is that rural depopulation is being addressed by mainstream programmes and through the Recovery and Resilience Facility (RRF), including many aspects that the EU's rural development policy does not cover. It shows how rural depopulation and development needs go far beyond the agriculture and forestry focus of the EU's rural development funds.

Box 1 Case study 1: Spain

Asturias and Castilla y León are among the Spanish Autonomous Communities most affected by the loss of population: more than 85 % of their municipalities had a smaller population in 2020 than they had in 1996. Extremadura and Aragón are the next two most affected, with a high percentage of municipalities that have seen their populations decrease²⁶. A new political group was founded to speak up for depopulated rural Spain: **España Vacuada**²⁷.

Siembra de Emprendimiento Innovador y Solidaridad (SEIS, *Sowing Innovative Entrepreneurship and Solidarity*)²⁸ is a project that aims to tackle depopulation and the challenges of the 21st century in the region of Aragón by promoting initiatives at the local level for innovative, concrete and specific entrepreneurship, appropriate for the local geographic-economic-social-industrial situation. Its strategy is to create innovative local entrepreneurship, through a **process of awareness, mobilisation and socio-economic transformation**, which would materialise in the creation of a permanent virtual R&D&I locally (municipality/county), regardless of the political-economic situation.

Recently, on 21 February 2023, the government launched study grants worth EUR 2.52 billion, a large part of which is earmarked for residence grants, which will allow many students from 'emptied Spain' (*España vaciada*) to study in the provincial capitals, where the universities are located. The aid will benefit

²⁶ Data and statistics on 'emptied Spain' available [here](#)

²⁷ See official website [here](#)

²⁸ See more details [here](#)

families in rural areas, whose children usually have to travel and live in other (faraway) cities to be able to study²⁹.

Another example of responding to rural challenges by using European funds was the establishment of the regulatory basis (Royal Decree 1234/2018) for granting subsidies to local entities for the financing of employment, self-employment and collective entrepreneurship projects, aimed at facing the demographic challenges in the municipalities within the Youth Employment Operational Programme of the European Social Fund. The projects sought to increase the employability and entrepreneurship of young people, who are going to live (or already live) in depopulated areas of less or equal to 5 000 inhabitants.

²⁹ See details [here](#)

5 Are the EU rural development and related EU policies fit for purpose?

Whether EU rural development policies are fit for purpose has been the subject of heated debate and scrutiny (see e.g. the ECA reports referenced above). This rather generic question is, for the purposes of this report, operationalised through the understanding of the investment needs emerging from the previous chapter. The question is then whether the setup sufficiently reflects the practical implications of the assessment of the net costs of non-rurality conducted above. The rationale for EU support to rural areas can largely be derived from the Treaty-based obligation that the Union should aim to reduce economic, social and territorial disparities³⁰. A considerable share of EU financial resources is therefore directed towards reducing inequality between regions. This applies to both urban and rural areas and predominantly focuses on investments with long-term impacts. The EU supports the cohesion objective through the use of multiple funds – mostly through cohesion policy funds, but also through other sources, such as programmes undertaken by the European Investment Bank (EIB). Due to the multiple crises in the last two decades, the EU regional and rural development programmes also offer response to crises, for instance to regions affected by the industrial and energy transition or those exposed to severe natural disasters or other socio-economic shocks. The role of these policies as crisis response tools is part of a deeper debate on the function of the policy itself.

It is important to point out that rural development needs go far beyond the objectives of the EU's rural development policy, which was developed as the second pillar of the Common Agricultural Policy. It is a policy primarily designed as a redress to concerns of rapid job loss in the agricultural sector that was taking place at the time of its introduction. It has increased in importance over the years and its share within the CAP budget has increased from the initial 10 % between 2000-2006 to 25 % over the following periods. The targets are set by national and local authorities that design their own multi-annual rural development programmes (RDPs) based on the European 'menu of measures'³¹.

Given the multisectoral needs to address rural decline and the fact that agriculture constitutes a small share of the overall employment and sectoral contribution of rural economies, it is important to reconsider the link of this policy to cohesion

³⁰ Article 3 (3) TEU

³¹ This marks a greater flexibility compared to the first pillar of CAP, which is made up of payments to farmers and market support measures

policy, ensuring proper complementarity and coherence. Rather than developing overlapping measures to those of the EU's regional policy, there is a need for much deeper integration of both, as rural areas are within the territorial scope of regional plans. Support for agricultural and forestry activities may be important, but that needs to be accompanied by measures tackling the decline of other sectors and developing high value-added activities. Close alignment of policies is necessary (ÖIR, CCRI and ADE, 2020).

For the 2021-2027 multiannual perspective, EAFRD has a total budget of EUR 95.51 billion, (of which EUR 8.07 billion under NGEU³²). Looking at the other major EU funding source for rural economies, some EUR 56 billion³³ was invested in rural areas through cohesion policy in 2014-2020, representing close to a quarter of all territorial investments under the Structural Funds³⁴. While in cities the funds were mostly spent on innovative projects, especially those tackling decarbonisation, the data indicate that in rural areas purely infrastructural projects formed a significant share of the portfolio. These are mainly focused on transport, followed by environmental actions. This implies a heavy focus on accessibility and connectivity as means of overcoming rural disadvantages at the expense of a comprehensive development strategy, building on the potential to tap into unique local assets. Several investments for the RRF will also affect rural development, but the allocation to rural areas is in many programmes hard to assess. This indicates that support for economic diversification, for instance through innovation, is likely too limited across EU programmes (EP, 2020). Although the exact numbers of planned cohesion policy and recovery and resilience actions for rural areas in the new MFF are yet unknown, rural regions are supported with significant investments targeting integrated development and the green economy and digitalisation reflecting key objectives³⁵. However, the focus on urban areas seems to have been carried over from the previous programming period, while the specific targeting of rural investments through priorities seems to be of secondary importance³⁶.

³² See information page on EAFRD, available [here](#)

³³ EUR 33 billion EU investment without national contributions

³⁴ Cohesion Policy supporting rural areas and communities, available [here](#); More than 69% of the planned Cohesion Policy funds targeting rural areas come from the European Regional and Development Fund (ERDF), followed by the European Social Fund (ESF) (18%) and the Cohesion Fund (CF) (13%) according to Cohesion data, available [here](#)

³⁵ Cohesion Open Data Platform, available [here](#); Questions and Answers on the EU Cohesion policy legislative package 2021-2027, available [here](#)

³⁶ See EP (2020) EU Cohesion Policy in non-urban areas, available [here](#); however a more up-to-date analysis would be needed looking more specifically at the Partnership Agreements concluded

Over the 2014-2020 programming period, the EAFRD was brought together with cohesion policy funds under the Common Provisions Regulation, with the aim of ensuring greater policy coherence between cohesion policy and rural development. However, parallel implementation structures and a lack of programme integration hindered the ability to fully leverage synergies (EP, 2020). In the current period, rural development has once again been left to operate independently from other EU territorial instruments, likely hampering complementarity.

This dissociation of funding streams aiming to achieve separate goals creates a fragmented funding landscape for rural development. The focus on infrastructure and agriculture, while both relevant and critical interventions as demonstrated by successive studies, seems to miss the underlying fundamental investment needs listed under Section 4.3. It also does not reflect rural employment opportunities in the services (private and public) and industry sectors. This setup, therefore, seems to contradict the purpose of EU interventions to foster cohesion. It results in failures in the distribution of resources and opportunities and effectively leads to further youth and brain drain in rural areas (EESC, 2022). But the problem goes beyond rural development policy itself. Both cohesion and rural development policies have an insufficient focus on catering to investment needs in human capital and fostering local entrepreneurship.

A case study from Czechia reveals how a different investment focus and the coordinated use of various funding sources can more effectively assist the development of rural areas (Box 2).

Box 2 Case study 2: Czechia

Czech rural areas are experiencing a similar trajectory to other European rural areas, struggling with depopulation and ageing. Evidence points to the pull factor of the mass industrialisation of urban areas rather than agricultural abandonment as the main reason for depopulation. It is a consequence of the insufficient number of high-quality, well-paid employment opportunities in sectors other than agriculture rather than the insufficient number of agricultural jobs (Vaishar and Pavlů, 2018). Studies (e.g. Kupkova et al, 2020) indicate that instead of further investment in agriculture, increasing rural innovativeness and competitiveness is required to counteract this trend.

Rural areas overwhelmingly use EU funds for infrastructure projects, showing the inconsistency between the real needs of rural regions, and the funding priorities. The lack of investment in research and innovation in rural areas is seen as the main reason behind underdevelopment compared to urban areas.

Overall, while the funds address some of the rural challenges, such as pollution, unsustainable agriculture, and the better provision of services, they remain ineffective when it comes to the fundamental challenges linked to depopulation, ageing, brain drain, and migration (CCRE CERM, 2021).

Going against this overall trend, some Czech rural regions (e.g. Moravia) exhibit population growth, which can to some extent be attributed to a different investment focus in strengthening sectors other than agriculture (Vaishar et al., 2020). For instance, the South Moravian Innovation Centre was set up in 2012 with the aim of building regional innovation ecosystems (connecting businesses, research centres, and local and regional governments). During 2014-2020, European Social Fund was used to provide capacity building to support the implementation of Smart Specialisation, while the concept of 'Smart Villages' was promoted through CAP funds. These initiatives were supported through local smart strategies, the Regional Development Strategy of the Czech Republic 2021+ and the Ministry of Regional Development. South Moravia's Regional Development Agency has welcomed the introduction of smart solutions through the provision of professional assistance for their development.

Within the setup described above, the Commission's long-term vision for rural areas (see Chapter 2.2) outlines the multi-dimensional nature of rural development. It is enriched by concrete suggestions and recommendations for rural revival. However, it was published in 2021 when the current MFF was already in place, effectively preventing a considerable overhaul of the funding landscape available for rural development.

Besides the funding streams, how rural areas are considered in the design of EU policies deserves to be briefly mentioned. The concept of 'rural proofing' has gained increasing traction in discussions since its introduction by the 2016 Cork Declaration. It refers to a systematic analysis of the impacts of policy initiatives on rural areas, taking into account their specific circumstances. The Better Regulation Agenda – the Commission's regulatory framework for designing and reviewing EU policies – has recently incorporated the concept. It now provides guidance for Territorial Impact Assessments, which help assess impacts based on specific regional characteristics. To date, however, it has not yet been systematically integrated into the policymaking process³⁷. This conclusion is naturally highly relevant for both funding instruments that are not intended to support regional convergence, but also other EU interventions not linked to investments.

³⁷ For a more detailed discussion see Gaugitsch et al. (2022) Rural proofing – a foresight framework for resilient rural communities, available [here](#)

6 Conclusions: towards a balanced approach to EU rural-urban development policy

As the analysis conducted for this report demonstrates, striving for a balanced approach to urban-rural development and for mitigating the impacts of rural decline are critical. This is because the repercussions of failing to do so go beyond the specific geographical boundaries of rural regions and affect the whole of the EU economy and political sphere.

The analysis above constitutes a first attempt to look at these costs from a holistic angle. The lack of evidence or – in some cases – even the clear conceptualisation of some of the dimensions affected constitute clear barriers to a more precise and targeted formulation of policies addressing rural territories. A clear understanding of the ‘net costs of non-rurality’ can go a long way to supporting this process.

Therefore, an important conclusion of the study is that more data and research is needed to understand the opportunity costs of rural decline, looking at the whole of the economy, not only at the area itself.

Another conclusion is linked to the need to root rural development policies in a more holistic conceptual model of the need for territorial development.

Understanding not only the implications of rural decline on the territories directly affected by it, but also on urban areas should be at the centre of this theoretical development lens. The discussion on ‘places left behind’, the geography of discontent or rising inequality between urban-rural areas cannot be understood as merely pertaining to the realm of rural development, but as issues hindering overall societal progress.

The literature, among which a whole range of studies by the Court of Auditors, points to a need to ensure more value for investments in rural areas. While the findings of this study do not draw strong conclusions on the reasons behind such long-standing challenges, more conceptual clarity and evidence are needed to understand how rural investments could yield better and more sustainable results, including non-monetary ones.

An important underlying premise of this report is that **rural development policies should not be designed to artificially maintain some activities and populations based on social preferences.** Instead, investments should be designed through the identification of the costs and benefits of current trends, allowing for win-win situations to emerge. Estimating these costs and benefits is a necessity for cost-effective answers yielding overall socio-economic returns. In

this respect, our analysis of investment needs to counter decline and the review of the EU policy mix for rural development, notably of investment policies, points to a lack of sufficiently targeted interventions and structural challenges in implementation. Rural development funding is focused either on investments linked to the agricultural sector or on the development of infrastructure. While both remain relevant, this leaves an **insufficient margin to intervene in areas that would be more conducive to addressing the plight of rural territories experiencing decline.**

Investment in the provision of services, entrepreneurship, innovation and the coordinated management of resources – as highlighted by section 4.3 – would require more attention. Nonetheless, due to the different factor endowments and challenges faced by rural areas, a one-size-fits-all approach is hardly applicable, calling for a more targeted rural development policy to replace the currently fragmented setup.

In designing and implementing EU funding instruments, applying the holistic angle of this study implies close coordination between the various streams made available to rural areas. The impact of having rural development (notably the EAFRD) separated from cohesion policy funds and lodged in the realm of CAP over the 2021-27 programming period is still to be seen. In addition to the above, and as shown at the outset of this report, the fact that only a relatively small share of the value added and employment opportunities in rural economies are generated through agriculture calls for thorough coordination with other funding instruments (importantly cohesion policy funds and the RRF) to leverage the full potential of the EU budget in supporting rural economies. This is especially important as new and emerging technologies have the potential to transform rural areas for the better.

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Annex 1: Methodology for the econometric analysis

To empirically estimate the impact of the income gap between rural and urban areas on economic growth we estimate the following linear model:

$$\ln Y_{i,T} - \ln Y_{i,t} = \alpha + \beta \ln Y_{i,t} + \gamma \text{Incgap}_{i,t} + dX_{i,t} + m_i + m_t + \varepsilon_{i,t}$$

Where i denotes a particular country, (T, t) is a time interval of 4 years, and the GDP per capita 4-year growth rate $(\ln Y_{i,T} - \ln Y_{i,t})$ is a function of its initial value $(\ln Y_{i,t})$ to control for convergence, the income gap growth rate $(\gamma \text{Incgap}_{i,t})$ and a vector of additional control variables proxying human and physical capital and demography $(dX_{i,t})$.

Because the estimated coefficients can be biased due to idiosyncratic shocks and country-specific characteristics, using panel data we control for time and country fixed effects $(m_i + m_t)$. Because of data availability, the balanced panel data includes 19 EU countries and growth rates over two time periods (2017-2014 and 2020-2017). The estimation is exploited through the Generalised Method of Moments (GMM). Table 2 summarises the results.

Table 2: The rural-urban income gap -growth link in the EU.

GDP per capita growth	(1)	(2)	(3)
GDP per capita (ln)	0.007*** (0.0003)	0.007*** (0.002)	-0.482*** (0.075)
Income gap growth rate	-0.002* (0.001)	-0.002 (0.002)	-0.005*** (0.002)
Demographic growth rate		-0.299 (1.206)	-0.031 (1.011)
Educ. Primary			0.064*** (0.011)
Educ. Secondary			0.061*** (0.008)
Educ. Tertiary			0.046*** (0.013)
Agriculture (value added)			0.0002 (0.004)
Industry (value added)			0.021* (0.012)
Observations	38	38	38
Country Fixed Effects	YES	YES	YES
Time Fixed Effects	YES	YES	YES

Robust standard errors are in parentheses

*** $p < .01$, ** $p < .05$, * $p < .1$

Note: The primary, secondary and tertiary education attainment level control for the human capital endowment in rural areas. The employment rate in agriculture and industry

(excluding construction) in rural areas, proxy and control for the physical capital. The data adopted for the analysis is from Eurostat.

According to the results, a higher level of rural-urban income gap is associated with low economic growth. The effect, however, is rather small. This could be due to a variety of reasons, such as the existence of high regional/territorial variability that does not emerge in country-level data, and the need to control for additional factors that might determine the rural-urban income gap.

Further robustness checks and model specifications are needed to account for the existence of the “too many instruments” problem and ensure that the model is well-defined.

Annex 2: Costs and benefits associated with natural resource management

Besides the price tag associated with agglomeration, inequality and political instability, the costs of underinvestment in the management of natural resources in rural areas are also considerable. Studies have shown that better natural resource management in rural areas can generate significant economic benefits. For instance, the EU's Natura 2000 network of protected areas could generate between EUR 200 and EUR 300 billion in benefits over the next 50 years through improved ecosystem services, enhanced biodiversity, and increased eco-tourism and recreation³⁸. The loss of biodiversity and ecosystem services due to land-use change, fragmentation, and degradation across the EU could result in annual economic costs of up to EUR 50 billion. On the other hand, it is estimated that investment in nature restoration can generate between EUR 8 and EUR 38 in economic value for every EUR 1 spent on ecosystem services, food security, climate resilience and mitigation, and human health³⁹. To maintain the supply of ecosystem services at 2010 levels, an estimated 2.2 % of agricultural land in Europe must be restored annually under current trends in land use change toward non-natural habitat (e.g., urbanisation⁴⁰).

³⁸ https://ec.europa.eu/environment/nature/natura2000/financing/docs/ENV-12-018_LR_Final1.pdf

³⁹ https://ec.europa.eu/commission/presscorner/detail/en/ip_22_3746

⁴⁰ https://www.unccd.int/sites/default/files/2018-06/16.%20Ecological%2BRestoration_N_D_Crossmann.pdf

EN

ISBN 978-92-895-2665-4
doi:10.2863/969318

QG-04-23-458-EN-N



Publications Office
of the European Union



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