

ESCAPE

European **S**hrinking Rural Areas: Challenges, **A**ctions and **P**erspectives for Territorial Governance

Applied Research

Final Report – Annex 4
Case Study Synthesis Report

Annex 4

This applied research activity is conducted within the framework of the ESPON 2020 Cooperation Programme.

The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.

This delivery does not necessarily reflect the opinion of the members of the ESPON 2020 Monitoring Committee.

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Acknowledgements

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Contact: info@espon.eu

ISBN: 978-2-919795-70-3

Final Report – Annex 4

Case Study Synthesis Report

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European Shrinking Rural Areas:
Challenges, Actions and Perspectives for
Territorial Governance

Version 21/12/2020

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Abbreviations

A	Active
BG	Bulgaria
CEE	Central and Eastern Europe
CS	Case Study
DE	Germany
EC	European Commission
e.g.	For example
EL	Greece
ES	Spain
ESPON	European Territorial Observatory Network
EU	European Union
ESCAPE	European Shrinking Rural Areas Challenges, Actions and Perspectives for Territorial Governance
ESPON	European Spatial Planning Observation Network
FI	Finland
G	Globalisation
GDP	Gross Domestic Product
GP	General Practitioner
HR	Croatia
HU	Hungary
inhab./km ²	Inhabitants per squared kilometre
ISCED	International Standard Classification of Education
L	Legacy
LAU	Local Administrative Unit
NGO	Non-Governmental Organisation
NUTS	Nomenclature of Territorial Units for Statistics
OECD	Organisation for Economic Co-operation and Development
PL	Poland
SGI	Service of General Interest
U	Urbanisation

1 Introduction

Case studies played important and multiple roles in ESCAPE project. On the one hand, they helped better understanding of the phenomenon through eight examples of diverse socio-economic processes linked to shrinkage. On the other hand, case studies have delivered a wide range of empirical evidence to subsequent project tasks. At this end, research outputs have helped (i) understanding stakeholders' perceptions on population decline (Task 2a), (ii) shed light on governance frameworks and practices (Task 3a), uncovered coping strategies, intervention logics of policy tools (Task 3b), revealed locally seen future pathways and related approaches to actions (on a scale from mitigation to adaptation), and finally, assessed relevance and applicability of EU-Macro Scale policy goals (Tasks 2a and 3c). Commonly agreed methodological guidelines, and a standard report template ensured a balanced and consistent delivery of research outputs. This report provides comparative analysis of patterns, contexts (3.1–3.2) and evolution of rural shrinkage (3.3).

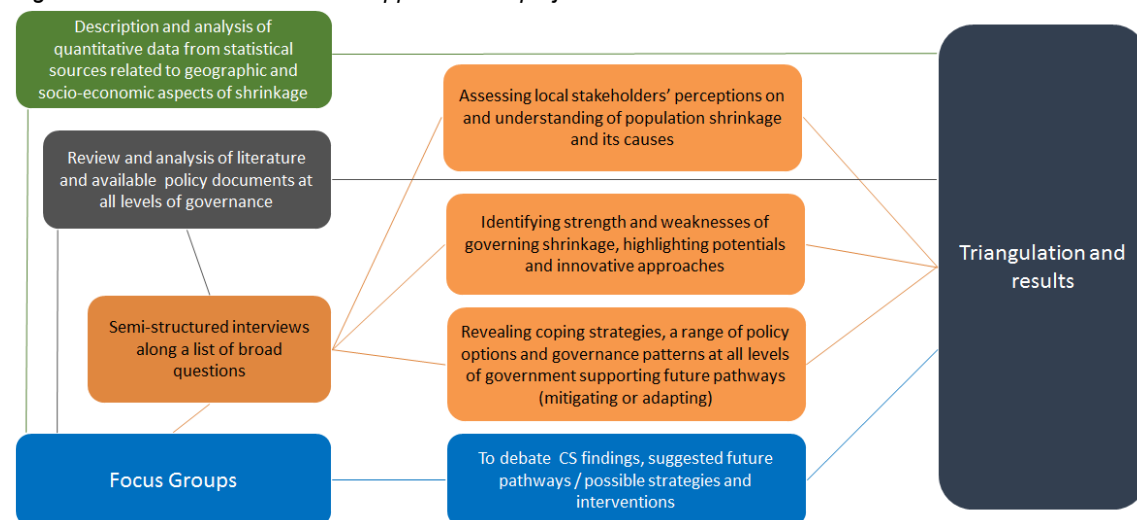
2 Prior steps to case study work

2.1 Setting up methodology

Mixed methods were applied for case study work in the ESCAPE project whose components provide adequate methodological tools to explore current views of main stakeholders. Mixed methods approach is particularly useful in case of spatial studies since they reflect the increasing complexities of spatial development (Figure 1). The concept covers not only a variety of methodologies, but allows for shifts across scales as well. The strengths of qualitative techniques derive from their exploratory power permitting an in-depth understanding of a particular phenomenon (shrinkage in our case) and flexible adaptation to idiosyncratic situations and individuals.

CS Partners have been provided with a detailed guidelines for empirical research in order to assure the congruence of the research and reporting process in the different CS areas. The two key documents, methodological guidelines and the applied research report template are attached as Appendix 1 and Appendix 2 to this report.

Figure 1: Mixed methods' toolkits applied in the project



2.2 Selection of case studies

The choice of CS areas in ESPON ESCAPE research aimed at representing a diversity of rural regions facing shrinkage. This goal was followed from the early stage of the project when CS countries and partners and subcontractors for case study work had been chosen. The selection of case study countries (Germany, Bulgaria, Croatia, Finland, Greece, Hungary, Poland and Spain) reflected both diversity and the occurrences/weight of rural shrinkage in European macro-regions (ESPON, 2017).

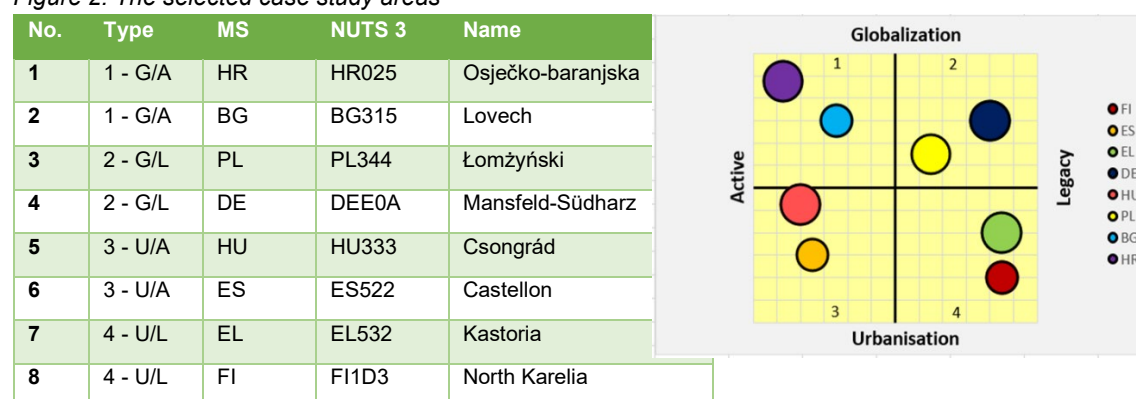
The primary criterion of CS selection was to ensure a balanced representation of problem areas and thematic challenges, causes and consequences of and strategies towards shrink-

age through case study areas. A cross-tabulation highlighting two dimensions of rural depopulation was used for this purpose.

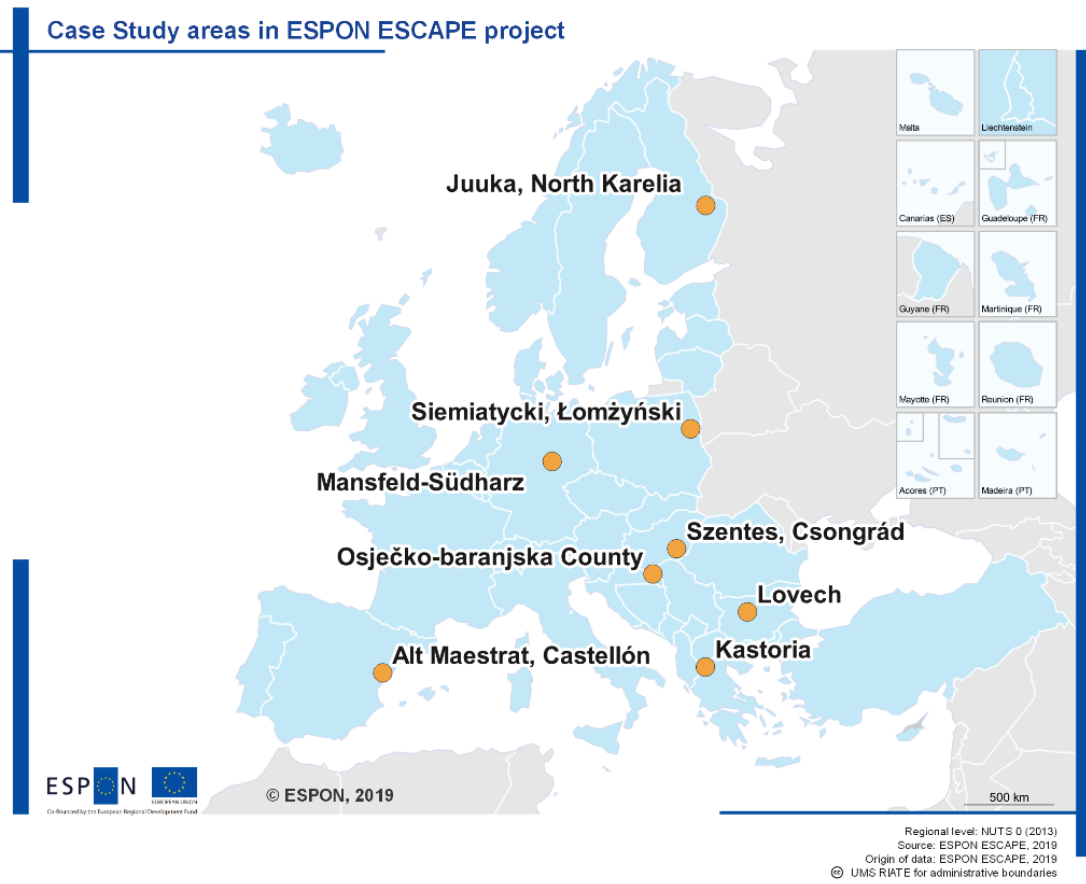
- *The axis of Active vs Legacy Shrinkage* referred both to the temporal dimension of shrinkage, and the relative weight of natural change and migration. Active shrinkage means a currently intense depopulation driven by outmigration, while legacy shrinkage a delayed effect of former waves of outmigration, resulting in a “top heavy” age structure, low birth rates and high death rates.
- *The axis of Globalization vs Urbanisation* related to the main directions of outmigration. Globalization affects CEE accession countries more, where labour force left in large numbers towards Western European labour markets after the 2000s rounds of EU accession. The urbanisation effect refers to domestic outmigration, predominantly from rural areas to regional and national centres.

On the basis of the above cross-tabulation, eight case study areas were selected from 24 candidates in two steps, providing an equal distribution between the quadrants (G/A, G/L, U/A, U/L types) and the target countries. In a final check, further aspects were taken into consideration, such as Eurostat’s Rural-Urban typology, mountains, islands, and inner periphery classification, economic dynamism (measured through indicators as GDP per capita position change compared to the EU average), the weight of population change (natural change vs. migration) and, ESCAPE’s own typology of simple shrinkage. All of these typologies underpinned a diversity among the proposed case study areas (Figure 2, Map 1).

Figure 2: The selected case study areas



Map 1: The Eight Case Study Areas



3 Patterns and Contexts of Rural Shrinkage across Europe

3.1 Brief Introduction to the Case Study Areas

In this section we provide some basic comparisons between the case study areas, based on CS report's desk research and interviews conducted in national and local (regional) scales. Key features of each of the case study areas are presented in short "pen-portraits" in Copus et al. [Final Report (Chapter 5.4)].

As far as territorial scale is concerned, case study areas range from municipal to regional (NUTS 3 levels) with the district level (LAU 1) being most common. If municipal level is addressed, such as in the Greek and the Finnish cases, the concerned municipalities are relatively large brought about by mergers of formerly independent communes. In terms of the OECD/Eurostat urban- rural classification all the CS areas analysed are in predominantly rural regions, close to a city, except for the Spanish and Hungarian areas, which are in intermediate regions.

3.2 Diagnosis

Demographic shrinking

Regarding population change, all CS areas present a population decrease which is markedly higher than their respective national trends (Figure 3). We observe shrinking rates ranging from a 5.3% decrease in Kastoria (Greece) to a 34% in Juuka (Finland). In some CS areas, this trend is contrary to a demographic increase at national level (very marked in Finland, Spain but also in Greece and Germany) - in the other cases population decrease also occurs at country level due to out-migration and low birth rates (Bulgaria, Croatia, Hungary and Poland).

All CS areas (except Kastoria, in Greece) show a continuous long-term population decline (Figure 4). Despite having the decline in common, historical and contextual factors also play a key role in CS population evolution. In the CS areas from Eastern Europe, the 1990s political changes transitional crisis generally resulted in increased out-migration. For instance, in Mansfeld-Südharz the reduction of population was particularly strong in the first two decades after the unification of Germany and is slightly less severe over the most recent years (a characteristic pattern in many Eastern-German areas). In Poland (similar to other Eastern European countries) out-migration was stronger during 1990s-2000s, however in Łomża CS area out-migration has continued to be relatively high. In the case of Osječko-baranjska, in Croatia, the dramatic effect of the Croatian War of Independence exacerbated those trends (as the CS area started to loose population in 1991 in line with national depopulation trends lasting until now). In the case of Lovech (in Bulgaria), the second "opening of the borders"

during 2000s linked to EU accession, reinforced by the 2008 financial crisis has clearly favoured a sustained long-term out-migration during past decades. In contrast, in Szentes (in Hungary) population decrease intensified later, during the 2000s and seems to continue at a similar rate. On the non-eastern areas, Alt Maestrat (in Spain) and Kastoria (in Greece) have temporarily experienced a reduction in shrinking intensity due to in-migration (in Spain during the 2000s and in Greece during the 1990s) although in both cases population decline intensified importantly after the 2008 financial crisis. In comparison, the Finish CS area shows a very high and continuous shrinking during the 1990-2017 period.

Figure 3: Population change between 1990-2017 (CS area and country) 1

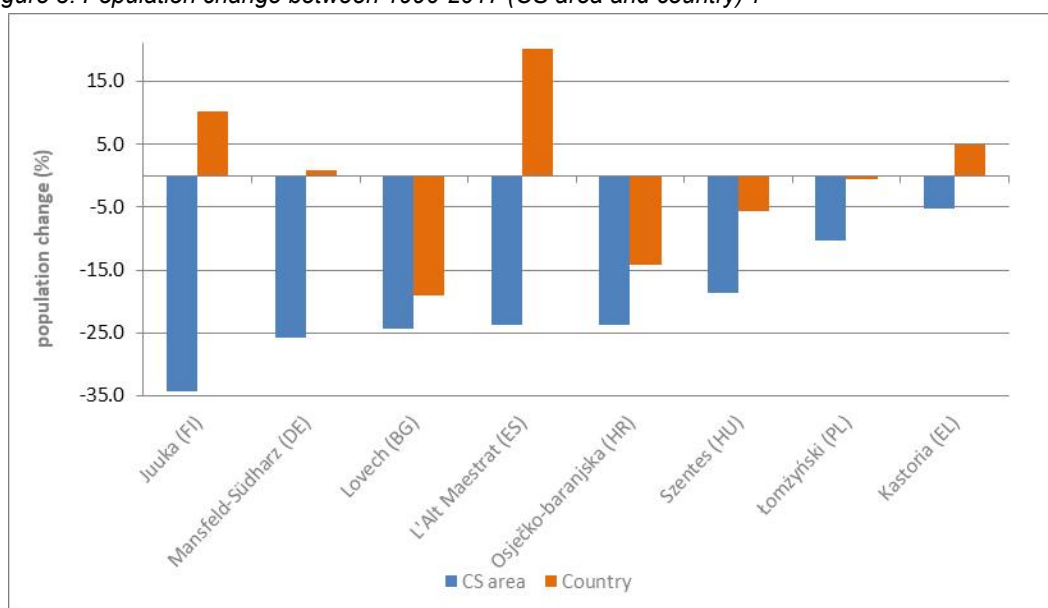
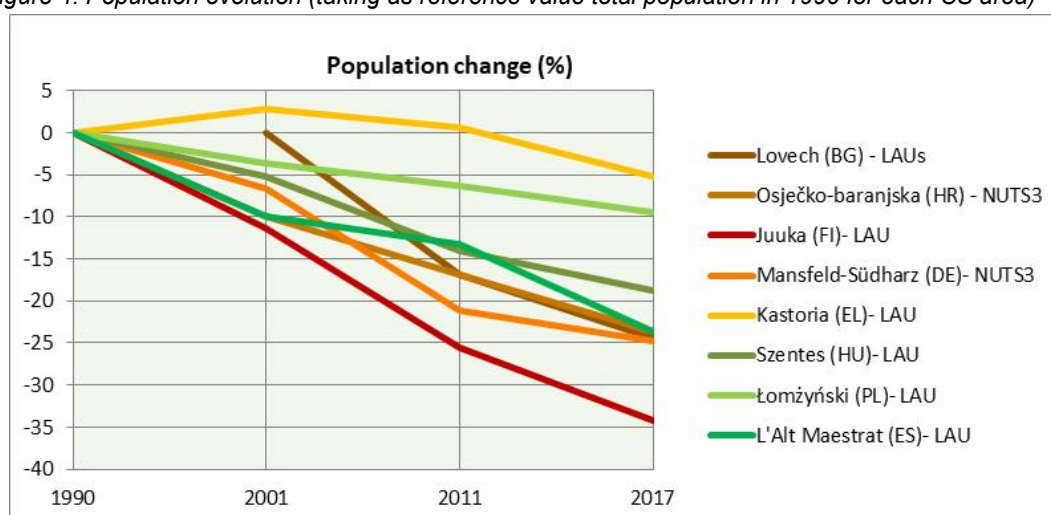


Figure 4: Population evolution (taking as reference value total population in 1990 for each CS area)



¹ In the case of Bulgaria, population change refers to 2001-2017 period.

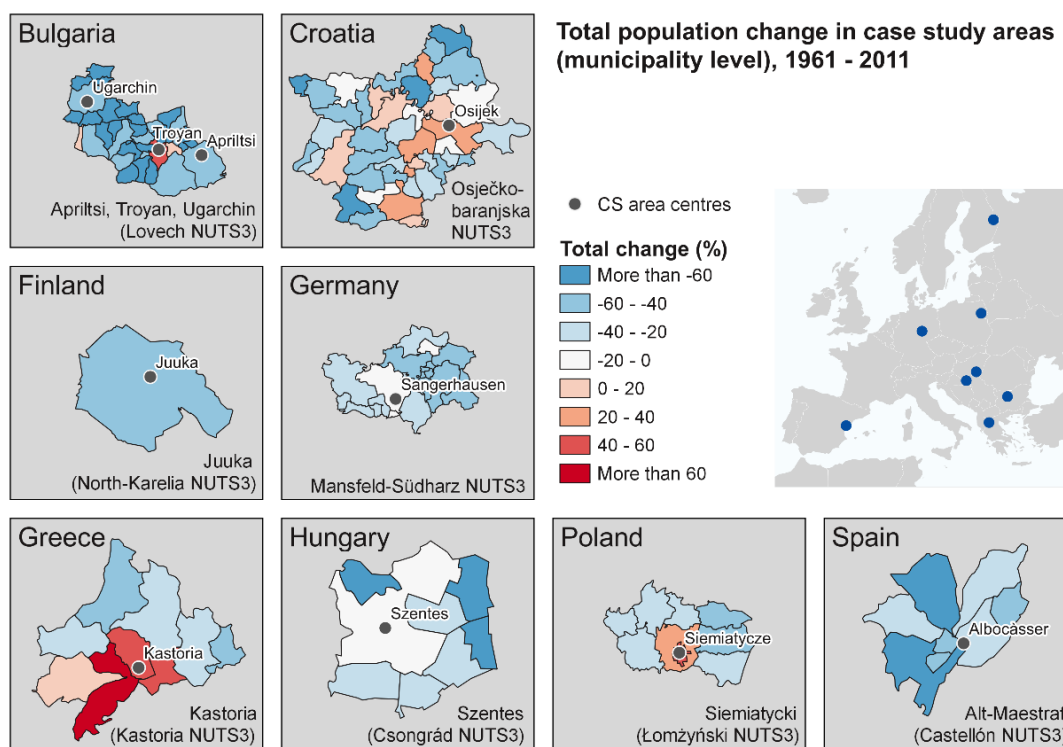
Population density has been steadily decreasing in all CS areas since the 1990s, reflecting population shrinking. Although it shows considerable variation between CS areas, ranging from 3.2 (in Finish CS area) to 96.5 inhab/km² (in the German one), in every case the CS area exhibits a density significantly below their national and regional context.

Demographic shrinking patterns at CS level

When looking at population figures at LAU level, we can also discover that behind a general demographic shrinkage trend, different spatial patterns appear².

If we focus on the degree of population loss (Map 2) we can observe that in some CS areas shrinking shows rather heterogeneous patterns within the CS areas, as in nearly all CS areas, some towns exert a pull-out effect on the neighbouring municipalities (or shrink at a slower pace). Kastoria municipality (in Greece) is the clearest example of it, where the concentration of services around the town of Kastoria has contributed to a marked population increase, while the mountainous area in the north municipality experiences a severe population decrease (which explains the CS area's lower aggregated shrinking trend).

Map 2: Total population change in case study areas (LAU2 level), 1961-2011

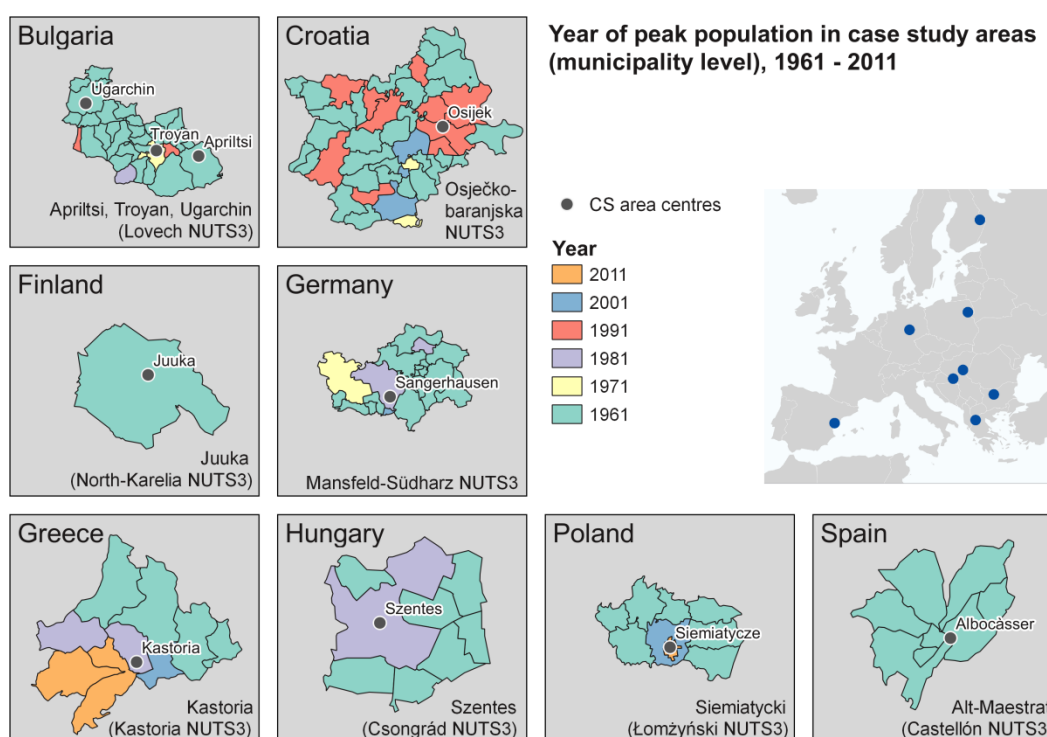


² In order to do so a historical population dataset from 1961 to 2011 by Eurostat was used, for more detail see Piras et al. 2020 [Annex 2].

Something similar occurs in Bulgarian, Croatian and Polish cases, while in the German, Hungarian and Spanish ones shrinking occurs across all settlements of the CS areas, although it is generally less prominent in larger towns.

If we focus on the timing of the population loss, the map of the year of peak population (Map 3) reveals an interesting pattern of shrinkage processes. In general, most of the municipalities that have experienced the strongest degree of population decrease (Map 2) also show a peak of the population in 1961. These LAUs have faced a more or less continued population loss since then (Map 3). This is related to rural-urban migration processes to larger economic hubs, as it happened in Finnish and Spanish CS areas or move of the average village population to more dynamic towns and villages within the CS areas

Map 3: Year of peak population in case study areas (LAU2 level), 1961-2011

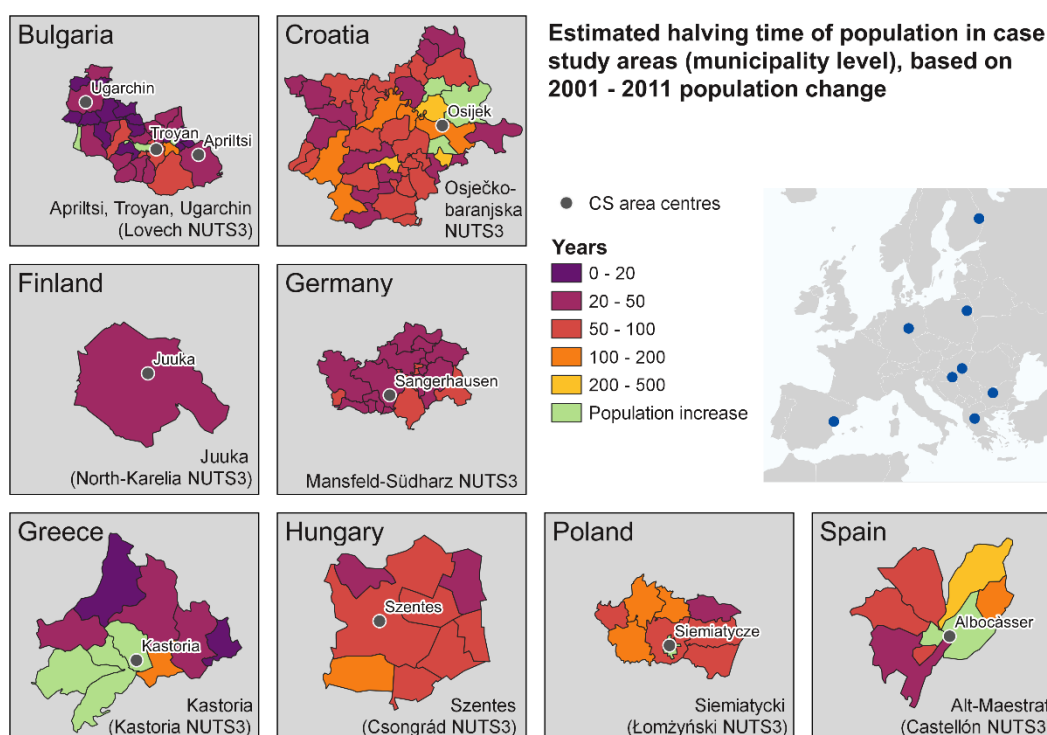


These more 'dynamic poles' that attracted the population of small villages and farmsteads of CS areas during the 1960s and 1970s started to decline with a couple of decades delay. For instance: in post-socialist case study areas the 1971 or 1981 peaks of population (in Bulgarian, German and Hungarian CS areas) reflect weakening of rural centres as early as the 1970s and 1980s, that is, already prior to the transition. In the Polish CS area decline of the rural centre started much later, after the millennium in the centre's surroundings and in 2011 in the town of Siemiatycze. This is probable attributable to the less dramatic structural change in Poland in sharp contrast with the shocking experience of breaking up of large-scale farms including their industrial branches in Bulgaria, Germany and Hungary. These data also indi-

cate that the several rounds of EU accession (in 2004, 2007 and then in 2013) accelerated the loss off population in post-socialist rural areas as a consequence of intensive outflow to domestic urban centres and to the West. Impact of historical events is clearly seen in most Croatian ‘population poles’ where the peak appears in 1991 (right before the Croatian War of Independence). Population peaks in the Greek CS are explained by the already mentioned pull-out effect of the town of Kastoria.

Projecting future population trends by the simple forward extrapolation of measured rates of current (and past) shrinkage (the halving time of population³) also reveals **the intensity of shrinkage** in the selected CS areas. The most seriously (and homogeneously) affected LAUs are found in the Bulgarian, German and Greek CS areas, while Polish, Hungarian and Croatian CS areas show a less intense shrinking. In Croatian Greek and Spanish Cs areas the projections show a population increase for the more dynamic ‘population poles’. Notwithstanding that, in the Spanish and Greek case, the available data does not allow to integrate the strong impact that the 2008 economic crisis had on population dynamics.

Map 4: Estimated halving time of population in case study areas (LAU2 level), based in 2001-2011 population change



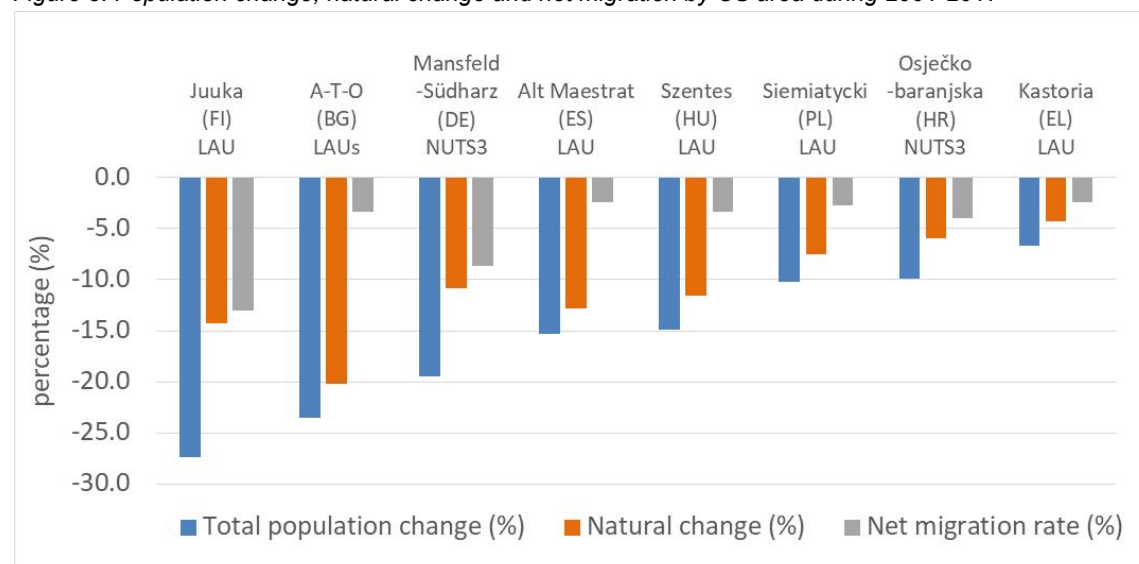
³ Base on the rate of population loss over the 2001-2011 period, the halving time was estimated. The halving time is an estimation of time needed, at this rate, to halve the population.

Ageing and Out-migration as drivers of shrinkage

Looking at the causes of population change we appreciate a combination of negative net migration and natural population decrease in all CS areas. As it is explained below, both “active” (driven by current out-migration) and “legacy” shrinkage seem to be inextricably intertwined and reinforcing each other. For instance, “active” out-migration of young and “working age” population exacerbates the already severe ageing processes (e.g. Juuka and Mansfeld-Südharz are paradigmatic examples of it). In addition, ageing populations with generally lower socio-economic dynamism also favour higher and selective out-migration, feeding a vicious circle of increased ageing.

In the past two decades (2001-2017) the intensity of out-migration in CS areas ranged from 2.4% (in Alt Maestrat – Spain and Kastoria - Greece) to 13% (in Juuka - Finland) (Figure 5). Out-migration values are noticeably high in Juuka (Finland) and Mansfeld-Südharz (Germany). In both cases, out-migration was higher in the 1990s-2000s and appears to have decreased in the past decade. On the contrary, in the Spanish CS high in-migration during 2000-2008 masks the higher out-migration values experienced after 2008 financial crisis (6.9% of population change). In addition, out-migration in CS areas contrasts remarkably with positive national migration balances in Finland, Spain and Germany and, although in a less prominent manner, in Hungary and Greece.

Figure 5: Population change, natural change and net migration by CS area during 2001-2017



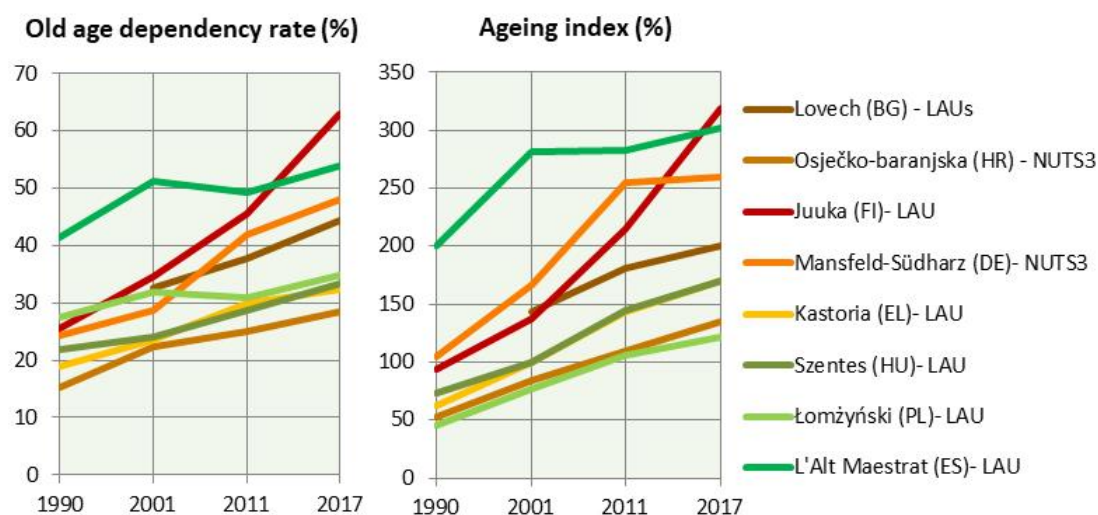
Source: National Statistical Offices

When looking at long-term population dynamics, it becomes evident that in most CS areas current out-migration plays a secondary role on explaining population shrinkage. What is important, however, is the selectivity of outmigration: negative migration balance continues to be particularly high among the educated/skilled citizens. In addition, the impact of past out-migration in demographic processes through “legacy” effects is strong. As a result natural

population change has been continuously negative since 1990s in all CS areas. Natural decrease ranges from 20.2% in Lovech (Bulgaria) to 4.3% In Kastoria (Greece) (Figure 5, 2001-2017).

The direct results of population loss have also impacted age structure. Furthermore, ageing has intensified over-time in all CS areas. Those demographic changes have implications for age group divisions, above all leading to reduced shares of young population. The *ageing index* (population over-65s as compared to children under 15) shows more than 75% increase in six CS areas (Finland, Germany, Spain, Hungary, Croatia and Poland) (Figure 6). The value is almost exploding in Finish, German and Spanish CS areas (surpassing the level of 250! As a result, the population over-65s is 2.5-3 times higher than children under 15). When comparing to national trends, it is noticeable that many CS areas (Spain, Finland, Germany, Bulgaria and Hungary) show ageing indexes remarkably higher than national ones (Figure 7). In the remaining cases the increase seems to be aligned with a general increase in life expectancy. When looking at the *old-age dependency rate* (population over-65s as compared to working age population, 15-64 y.o.) trends are also skyrocketing. In Finish and Spanish cases, an index over 50% means that every old-aged person in the case study area is ‘dependent’ on less than two working age individuals. This ageing of CS areas population structure could be viewed not just as a threat but also as an opportunity for local employment linked to the unattended demand for elder care.

Figure 6: Old age dependency rate and Ageing index evolution by CS area

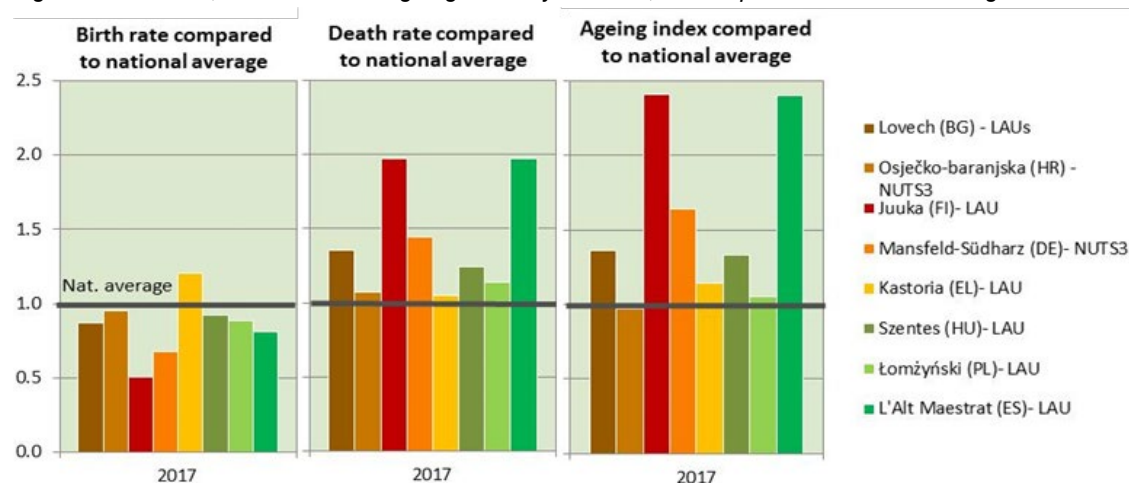


Source: National Statistical Offices

The “working age migration”, mostly of people in their reproductive years, has naturally led to fertility and birth rate’s decline during 1990-2017 in most CS areas (especially during the 1990s), as a result of male and female migration to bigger cities or abroad, where their socio-economic prospects improve. This is reflected in the age and gender structure of the population in CS areas. Most CS areas show significantly lower birth rates than national averages

and, in some, cases also considerably higher death rates, due to ageing (Figure 7). In Mansfeld-Südharz (Germany), the very high “out-flow” of young (18-35) and skilled persons and the impact of higher out-migration of young female (students and labour force) has resulted in a “lack” of women in the fertile age groups and had observable impacts on ageing and low birth rates. In Lovech (Bulgaria), migration and lagging economic conditions have led to feelings of austerity and have lowered fertility rates of the population (in contrast with a growing fertility rate in Bulgaria) and led to a decrease in birth rates (although with less intensity).

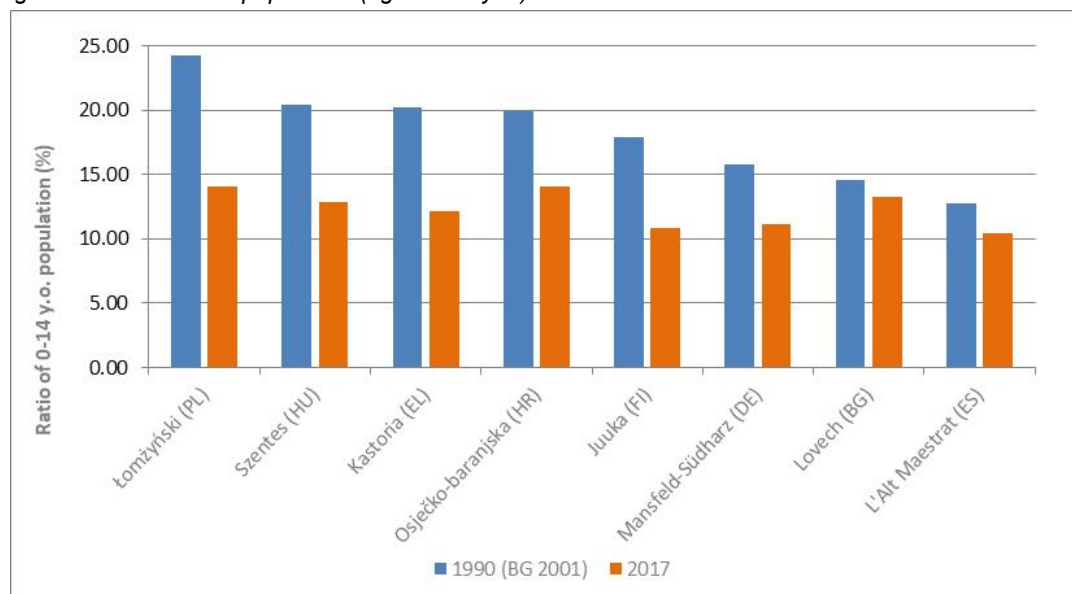
Figure 7: Birth rate, death rate and ageing index by CS area, as compared to national average



Source: National Statistical Offices

As a result, between 1990 and 2017 the share of child population decreased in all CS areas (Figure 8). Half of the CS areas experienced higher child population ratios than national trends in the 1990s (Croatia, Greece, Hungary and Poland), however in 2017 they all have converged to a relatively similar child population percentage. Finish and Spanish CSs show values extremely lower than national averages (0.67 and 0.63 times national levels respectively, in 2017) although in all CS areas (except Croatia) the value is low from a national perspective. Except in Alt Maestrat (Spain) and Lovech (Bulgaria) the decrease in that period is higher than national decrease of children. In Alt Maestrat (Spain) it is related to the very low values already experienced in the 1990 (resulting from earlier rural exodus waves occurring since the 1920s, also reflected in very large ageing already in the 1990s as shown in Figure 6).

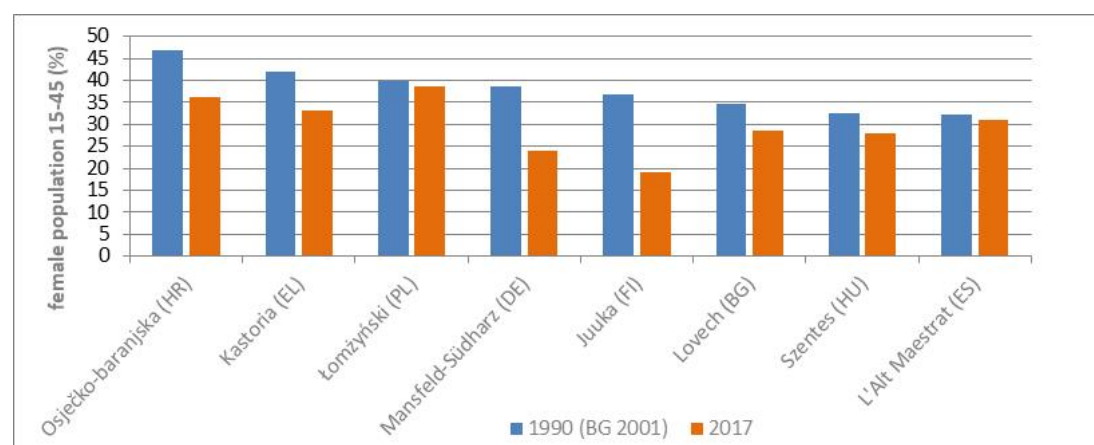
Figure 8: Ratio of child population (aged 0-14 y.o.) in 1990 and 2017



Shrinking, gender and masculinisation

Masculinisation is a process resulting in a demographic imbalance consisting of a higher deficit of women in shrinking rural areas, as compared to men, especially in young and middle age groups. The trend is usually attributed to higher women out-migration resulting from inequalities in working (commuting) opportunities and social conditions (intensified in rural areas), especially for women having family-related responsibilities (child, elderly or dependent care duties). Rural out-migration, has usually been explained by the lower availability of 'female' jobs in rural areas (Hunt, 1965; Little, 1990; Whatmore 1991), the comparatively higher social benefits of urban employees as compared to agrarian workers (Alm's, Haugen, 1991) and the higher rate of female qualification, associated to upward social mobility (Camarero, 2005). Urban areas offer generally to women not only higher quality of employment but also higher social recognition, autonomy and career development perspectives. In addition, with regards to reproductive responsibilities, urban areas provide more facilities to reconciliation of work and family life (e.g. education, health and commercial services) while rural areas offer informal and neighbourhood networks. Camarero and Sampedro (2008) also highlight the importance of gender and qualification for choosing out-migrating or commuting strategies to access labour markets outside rural areas.

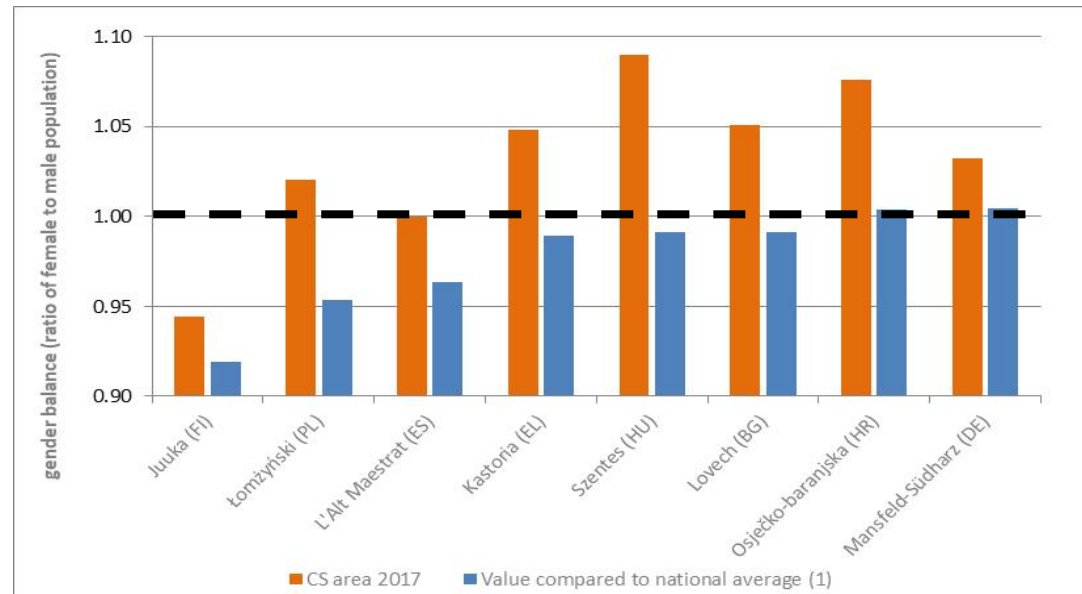
Figure 9: Ratio of female population in productive age (15-45 y.o.) in 1990 and 2017



In our CS areas, the evolution of the ratio of working female population in reproductive age (Figure 9) makes apparent several facts. A decrease of women occurs in all CS areas between 1990 and 2017 and is very high in Juuka and Mansfeld-Südharz (17.8% and 14.6% respectively, more than 2 times of the national decrease). In the Finish case, it results in important gender imbalance (94 women per 100 men, which is particularly pronounced in the working age group of 15-64 years of age, 87 women per 100 men) (Figure 10). CS areas in Croatia, Greece, Bulgaria and Hungary, experience also an observable decrease in rate of working female population which is fairly aligned with national trends. In contrast, Polish and Spanish cases show lower than national decrease in the proportion of women which might be explained by the departing lower values which tend to approach national averages.

However, the impact of shrinkage on gender is more complex. The findings with respect to gender balance, or more specifically, trends in the ratio of female to male population, vary significantly between countries. In Finish, Polish and Spanish cases the cleavage with national balance is remarkable (Figure 10). The gender balance in Juuka is characterised by an overrepresentation of males (linked to the difficulty for well-educated women to find a job). In the German and Croatian cases, however, although the already mentioned decrease in working-age women, a closer look at gender balance indicator, shows that although the proportion of women to men decreased between 1990 and 2017, the trend seems to follow general national evolution. In Bulgarian CS area, higher woman out-migration results from a higher availability of jobs 'for men' (in agriculture and forestry), as if one family member in unemployed families are forced to leave due to low salaries.

Figure 10: Gender balance in 2017, compared to national levels



3.3 Complex shrinkage and broader contexts

3.3.1 Complex shrinkage

Population shrinkage is not inevitably coupled with economic decline, but unfavourable demographic processes can be both causes and consequences of various socio-economic challenges of an area.

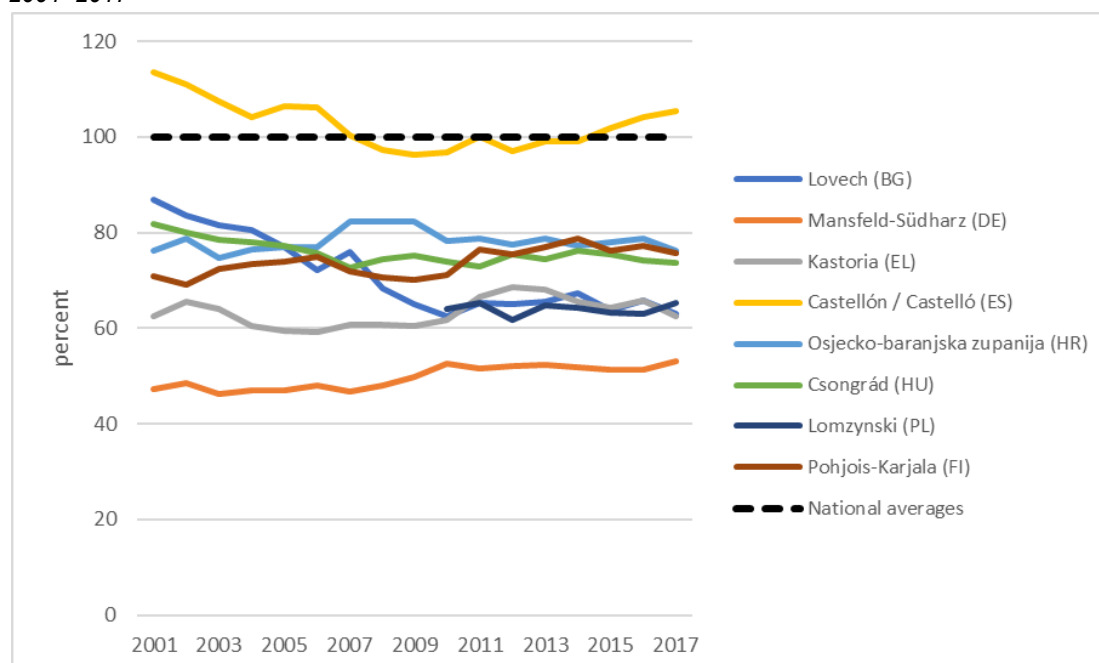
Economic production, level of economic development and its change over time

Regarding economic production and considering GDP per capita, the broad regions (NUTS 3 units) of all case study areas represent European rural or intermediate regions with medium (Castellón – Spain, North-Karelia – Finland and Mansfeld-Südharz – Germany) and low income (all others). From a national point of view, these areas might be viewed as structurally disadvantaged, except for Castellón (Spain), whose GDP per capita value exceeds the national average (Figure 11).

Economic trends of these regions in the 2000–2010s show both converging and diverging pathways compared to national tendencies across the investigated countries. During this period, only the North-Karelian NUTS 3 area (including Juuka) and Mansfeld-Südharz (Germany) approached to the national average, considering GDP per capita, Osječko-baranjska (Croatia) and Kastoria (Greece) seemed to stagnate from this point of view, while the other CS regions showed lagging tendencies. The period of the financial and economic crisis from 2008 to 2011 indicated sharp turning points of these areas from the point of view of economic production: in the case of Osječko-baranjska (Croatia) and Kastoria (Greece) the upward

trend has been broken, while in the case of Lovech (Bulgaria) divergence from national tendencies has intensified.

Figure 11: Change of GDP per capita compared to national averages (100%) in CS regions (NUTS 3), 2001–2017



Signs and potential roots of economic decline in the studied regions

Economic lagging position and trends have different roots in the studied areas. In most of the CS areas from Eastern Europe, it is mainly related to transitional crisis of the 1990s, which led to immediate recession accompanied by a severe rise of unemployment and a decrease of economic outputs as a consequence of collapsing economic structures and trade connections. In certain Eastern CS regions, these shocks were intensified by such dramatic events as Balkan Wars in the case of the Croatian county Osječko-baranjska or the Reunification of Germany for Mansfeld-Südharz which is located in the area of the former German Democratic Republic.

In general, weaker rural economies in all studied areas had difficulties in adapting to the changing dynamics and demands of the globalised markets and therefore were unable to retain population in the context of virtually unlimited movements of past decades. This challenge of economic adaptation has been more acute in regions with mono-industry or a few dominant activities, which has collapsed or started to decline and lost determinant role, for instance copper mining in Mansfeld-Südharz (Germany), soapstone mining and processing in Juuka (Finland), fur industry in Kastoria (Greece), textile industry in Alt Maestrat (Spain) or agriculture in almost all cases.

Economic turning points related to the financial crisis of the late 2000s also intensified the temporary or definitive decline of formerly determinant economic branches, for instance in the Finnish or even more in the Spanish case, where small industries, such as construction or different service sectors were heavily damaged by the impact of the crisis. Otherwise, Spanish observations also indicate that the primary sector seemed to be less affected during this period. An extreme example of dependence on international markets is related to the Greek case. In Kastoria, fur industry, the almost exclusively export-oriented sector was severely hit by the trade embargo of the EU against Russia during the last 10 years which led to further decline regarding this economic activity.

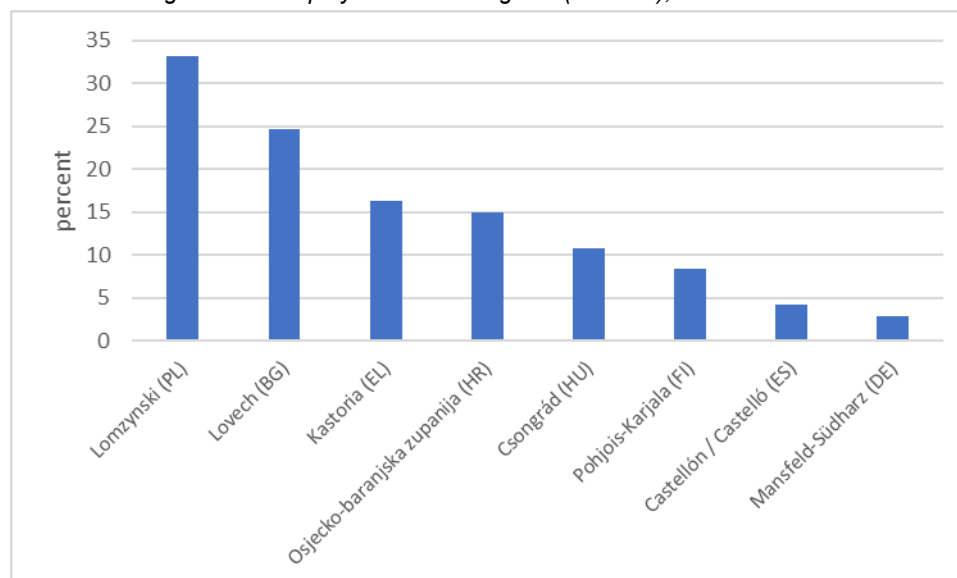
The past economic crisis hit not only rural economies, but could influence negatively the obtainable income of households, which, for example in the Greek case has been continuously decreasing since 2008–2009. In contrast with Kastoria, in the Szentes case (Hungary), although the level of gross taxable income per inhabitant still does not reach the Hungarian average, it has continuously and significantly increased during the analysed period (between 2001 and 2017).

Economic profiles, dominant sectors and the change of economic structures in relation to shrinkage

Despite their decline, primary industries (agriculture, forestry), processing industry and manufacturing still have a significant role in economies of case study areas. Agricultural enterprises could preserve their share between 2001 and 2017 among other business units, for example in Szentes (Hungary) and Mansfeld-Südharz (Germany). In other CS areas, e.g. in Łomżyński subregion (Poland), this ratio is decreasing, but still very high. In the Polish case it is mainly a result of a restructuring process in agriculture, with increasing concentration of agricultural holdings. In contrast with other cases, the ratio of agricultural enterprises has been growing in Alt Maestrat (Spain) due to the reduction of the industrial and service companies and above all, the decline of building sector which was hit more seriously by the economic crisis.

While its contribution to local economies is usually relatively low, agricultural production is still important from the viewpoint of employment opportunities in every case (10–20% share in total employment), except for Mansfeld-Südharz (Germany). Agricultural employment could also be significant regarding the broader surroundings (NUTS 3 units) of the studied districts and municipalities (Figure 12).

Figure 12: Share of agricultural employment in CS regions (NUTS 3), 2017



Besides primary activities, CS regions are usually more industrialised compared to national averages regarding their role in employment, especially Lovech, the wider (NUTS 3) surroundings of the Bulgarian CS area (over 30% of employed persons). The only exception is Łomżyński (Poland) due to the very high agricultural employment share. Industrial employment share is usually more or less equal with the proportion of enterprises of industrial or construction profile in all CS areas.

This ratio of business units in the secondary sector is generally steady in the studied areas in the past 1–2 decades, with the exception of the crisis-related reduction which is reported from Alt Maestrat (Spain). In CS areas from post-socialist countries, structural changes related to the transition to market economy led to the decline of former socialist industrial enterprises. Industrial development among the new conditions was a goal to achieve for these regions, e.g. in Mansfeld-Südharz (Germany), where space for estates for new industries and businesses was provided by municipalities, but many of these remained underutilized during the studied period.

While the biggest part of enterprises is related to various service activities in CS areas too, their share among other economic branches and their employment capacity is slightly below national averages due to the more considerable agricultural and industrial profile of these regions. Within CS areas the role of public services (public administration, social security etc.) in employment is usually significant within the service sector, for instance in the Bulgarian, the Finnish, the Hungarian and the Polish case.

Entrepreneurial activity and the structure of enterprises

Processes related to entrepreneurship in CS areas also show challenges exacerbated by demographic and complex shrinking processes. Entrepreneurial indicators cannot be directly compared among case study regions due to differences in national registration principles. Nevertheless, comparisons with regards national performance in entrepreneurship might express the position of these areas. The number of enterprises per 1000 persons (compared to national averages) is almost uniformly and evenly low in the studied regions, which is a constant trend over the past 10 years (Table 1). The only exceptions are Juuka (Finland) and Kastoria (Greece), in the latter case small agricultural business units raise this number above the Greek average.

Table 1: Number of enterprises per 1000 persons and value compared to national averages in CS regions (LAU or NUTS 3), 2011–2017

Indicator	Country	CS Area	Level	2011		2017	
Number of enterprises per 1000 persons	Bulgaria	Lovech	NUTS 3	38.5	0.8	43.5	0.8
	Croatia	Osječko-baranjska	NUTS 3	13.6	0.5	18.0	0.6
	Finland	Juuka	LAU	73.5	1.0	94.2	1.3
	Germany	Mansfeld-Südharz	NUTS 3	37.8	0.8	37.2	0.8
	Greece	Kastoria	NUTS 3			217.8	1.7
	Hungary	Szentes	LAU	55.2	0.8	58.4	0.8
	Poland	Łomżyński	NUTS 3	66.0	0.7	72.2	0.6
	Spain	L'Alt Maestrat	LAU	62.0	0.9	68.8	1.0

The number of enterprises and trends related to entrepreneurship in CS areas are almost solely related to the activity of small-sized enterprises, since the number and share of middle-sized (or even larger) enterprises is usually small and tended to decrease during the analysed period. In the case of CS areas from former socialist countries bigger companies used to have a dominant role in local employment in the pre-transition era. Due to privatisation, closing down and the decline of these factories during the process of transition to market economy, many of these enterprises have lost their employment capacity significantly or entirely (e.g. agricultural cooperatives in Szentes – Hungary, different business units in Osječko-baranjska – Croatia) or were even liquidated (copper mines in Mansfeld-Südharz – Germany, various industrial enterprises in Lovech – Bulgaria). In other CS regions the decrease of larger companies is mainly related to the decline of formerly determinant industries (soapstone mining and processing in Juuka – Finland, textile sector in Alt Maestrat – Spain). Small and micro enterprises today are almost exclusive in every CS areas (with a share of 99–100%).

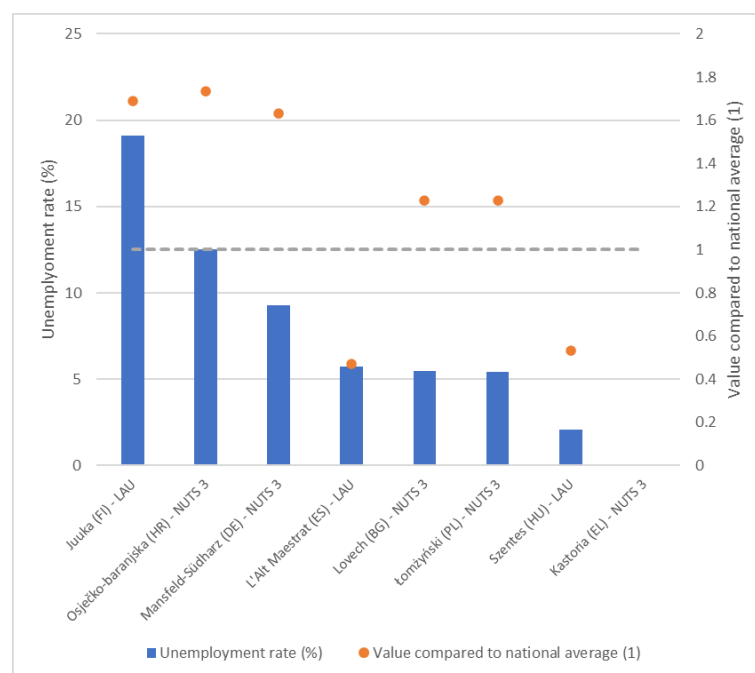
Since SMEs have limited investment capacities and job offers, therefore job diversity is a remarkable matter of shortage everywhere. This is often reported (as in the Bulgarian case) as a perpetuating cycle which has enclosed its grip upon the local potentials – the lack of

investments has caused the evaporation of the working force and the lack of a working force has hindered the potential for attracting investments. This process has been also intensified by the 2008 economic crisis resulting in low investment rates and delays in technological adaptation, for instance in Kastoria (Greece). Family-run businesses there (but also e.g. in Mansfeld-Südharz – Germany) often struggle to maintain their activities due to the inadequate management and marketing knowledge or the missing successors.

Labour market participation, availability of working force with regards age structure and shrinkage processes

The ratio of working age population has significantly decreased in the past decades in the CS regions. This is not only due to aging processes, but the studied areas all have witnessed age-selective migration, which led mostly young (and more educated) inhabitants of these areas to earn a better living elsewhere. But not just aging process and outmigration contributed to the decrease of population, potentially active for participating at the labour market. Examples from the Finnish case study, Juuka, show, that lay-offs accompanying the decline of an industry (soapstone in this case) also led to a high number of early retirements.

Figure 13: Unemployment rate and value compared to national average in CS areas (LAU or NUTS 3), 2017



Unemployment rates are not explicitly high across the CS areas in terms of absolute numbers, except for Osječko-Baranjska (Croatia), Juuka (Finland) and Mansfeld-Südharz (Germany). Nevertheless, the position of CS areas compared to national averages is rather unfavourable, except for Szentes (Hungary) and Alt Maestrat (Spain) (Figure 13). Unemployment

might imply different challenges in the studied areas. Economically shocking events like the transition to market-economies for post-socialist countries or the financial crisis in 2008 accompanied by the sudden hike of unemployment in many cases. These events often led to the rise of structural and long-term unemployment (even among the youth population), which could cause difficulties in entering the labour market even throughout generations – as it was reported in Mansfeld-Südharz (Germany).

From another viewpoint (e.g. business entities), unemployment is not always the biggest challenge related to labour market participation. There could be many vacancies, but businesses often find difficult to fill them with adequately skilled employees, due to a general lack of qualified labour force in place – due to selective outmigration, mismatch between the educational and the economic profile of the region etc. This issue is reported from Finland, Bulgaria and Croatia to Germany and Greece and it might create serious constraints to development. In other cases, like in Szentes (Hungary), the share of unemployed persons with low educational attainment (ISCED0-2) is typically low. This characteristic might be related to the economic profile of the case study area offering mainly low-skill (and low-pay) jobs (horticulture, agro-industry, basic production etc.).

3.3.2 Broader contexts and indicators

Beyond direct economic aspects of shrinkage, the phenomenon is strongly related to broader socio-economic processes accompanied or triggered by demographic and economic change.

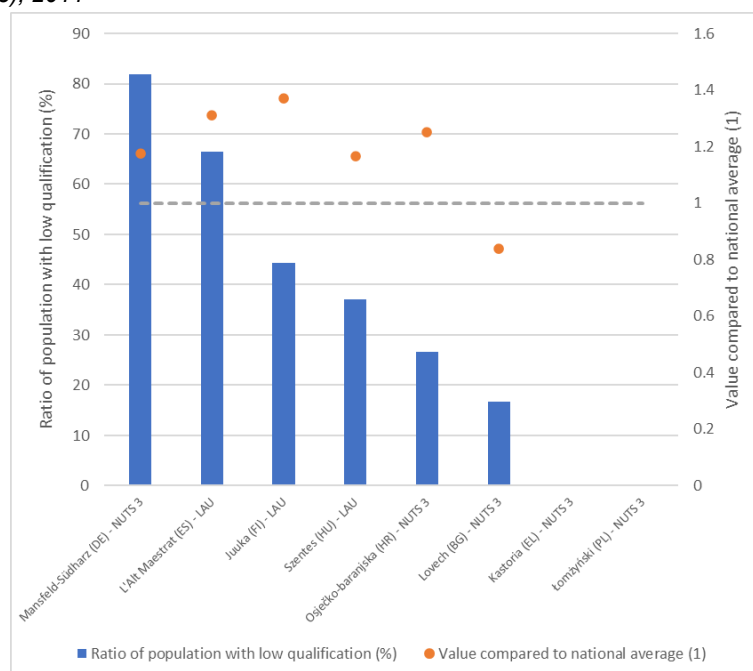
Educational attainment, shrinkage and its relation to labour market participation

The lack of qualified working force is partly related to selective outmigration generated by educational motives. Most of the studied areas lack sufficient opportunities for higher education and jobs meeting aspirations of highly trained labour force, which push the youth and educated to study and work elsewhere. Vocational training and special educational services for groups at-risk-of early school leaving are also often absent from these regions. Another related issue is that, inadequate educational (and living) opportunities could discourage families when planning to move in an area or having a child, as one of the main aspects of decision (as it was reported for instance in the Finnish or the Greek case). For those of the youth who pursue studies in higher education and already left their place of residence due to educational motives return is often not a reasonable alternative, as it was shown by the Croatian case study.

Nevertheless, educational attainment features have significantly improved over time in the studied regions. Despite progress, the qualification of people residing in shrinking rural regions constantly lags behind national averages (Figure 14). These ratios of population with low qualification even more underpin the low level of integration into knowledge systems.

Another challenge, that even possessing higher educational attainment does not mean better opportunities in succeeding in the labour market under any circumstances. Finnish examples show that for well-educated women it is difficult to find a job in the CS area (Juuka) or other similar municipalities, which might significantly influence choices of young families in leaving or remaining in / moving to these regions.

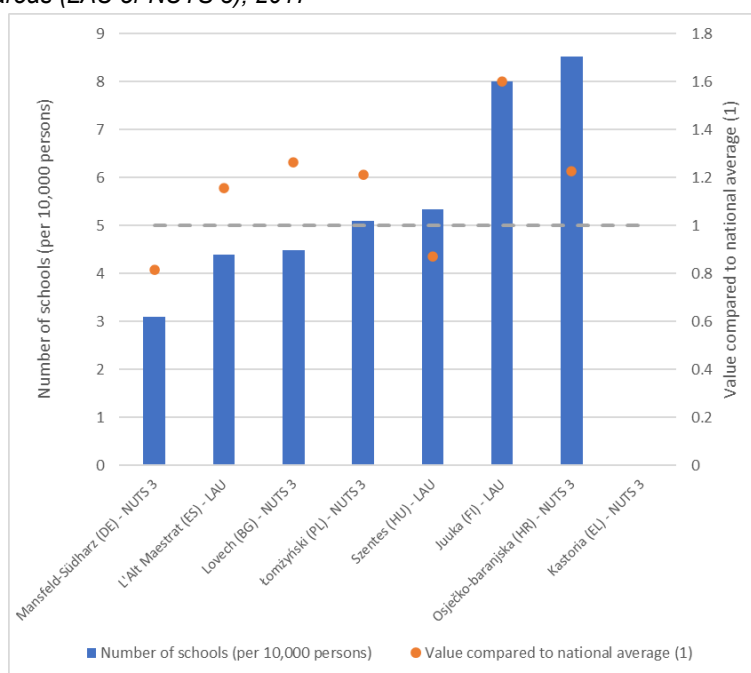
Figure 14: Ratio of population with low qualification and value compared to national average in CS areas (LAU or NUTS 3), 2011



The current state of educational infrastructure and its decline along with economic-demographic shrinkage

Due to permanent outmigration and natural demographic causes, the number of children enrolled in kindergartens and schools has decreased over the past decades in all the Case Study areas. This led to closing down or amalgamating many kindergartens and schools, for instance in Juuka (Finland), Szentes (Hungary), Łomżyński (Poland), Mansfeld-Südharz (Germany) or in Apriltsi-Troyan-Ougarchin (Bulgaria). Nevertheless, the closure of kindergartens and schools in these regions follows the fall of the number of children enrolled in these institutions with a delay. Due to this, the relative number of these institutions (per 10,000 persons) is usually still above the national averages – except for Mansfeld-Südharz (Germany) and Szentes (Hungary) (Figure 15).

Figure 15: Number of schools (primary+secondary) per 10,000 persons and value compared to national average in CS areas (LAU or NUTS 3), 2017



Besides depopulation tendencies, austerity measures and financial considerations also drive the closure of schools or the reorganization of local school systems (e.g. in the Bulgarian or the Finnish case). This affects settlements of case study areas in an unequal way. Schools were either simply closed down (e.g. in Szentes – Hungary) or amalgamated (Bulgarian CS municipalities, Mansfeld-Südharz in Germany) with the redistribution of students within the remaining schools. Thus, smaller village schools have slowly disappeared in most studied areas, and mainly larger villages, small towns and municipal centres could keep their education institutions. Nowadays in Alt Maestrat (Spain) or Juuka (Finland) a notable share of local students even have to travel to a neighbouring county or municipality each day, which, regarding transport connections, travel times and fares could rise a challenge for their families. For instance, in Juuka, this situation is attempted to be resolved by building a new school property in the municipal centre, which might improve the accessibility for students from remote parts of the municipality. Building new educational institutions (kindergartens and schools) is also considered in the case of Osječko-baranjska (Croatia).

Issues of health care infrastructure and problems generated by shrinking processes

Regarding another important domain of SGI, the provision of health and social care services become more and more important within the studied areas due to the accelerated ageing of the population. At the same time there is a general decrease of service units and a lack of staff compared to national averages, except for Osječko-baranjska (Croatia) and Lovech

NUTS 3 (Bulgaria), regarding the number of general practitioners. On the one hand, the lack of medical expertise is caused by the emigration of qualified medical personnel to urban centres or abroad. On the other hand, many general practitioners (GPs) leave the public sector in order to work in private institutions (both causes were reported from Bulgaria). In addition, the substitution or finding a successor in case of retirements could raise a problem too, as it was reported in the case of Mansfeld-Südharz (Germany). The aging of GP personnel is also a challenge in Hungary: e.g. there is a notable number of vacant general practitioners' district in Szentes CS area (Hungary), which is mainly related to that cause and in Spain there is a high turnover of staff (linked to the lack of public career incentives to serve in remote areas) reducing service quality.

Not only the lower availability of health care personnel or institutions could raise an issue in the studied cases. Especially the access to these services could show up as a difficulty, for instance in the Greek or the Polish case. Health services are often centralised and only available in bigger settlements of the CS areas, as in Alt Maestrat (Spain) or in Mansfeld-Südharz (Germany). Reorganization attempts also affect health care services in the studied regions. In Juuka (Finland), these formerly independently provided services has now been transferred to a regional joint municipal authority in the NUTS 3 region (North Karelia) due to financial considerations. While in Bulgaria, due to a structural change most of the health care services became provided by the private sector, which led to the rise of health care expenses for the population. In the Bulgarian case a mistrust in health services and examples of corruption practices (and mismanagement of public funds in health care) were also presented.

Other problems related to SGI with regards complex shrinkage

Not only public service-provision is problematic in shrinking rural regions, a general lack of opportunities for cultural activities and shopping is also characteristic. Moreover, services of good-quality in education, health care, public administration are scarcely available, e.g. in the case the Bulgarian CS municipalities, Alt Maestrat (Spain) or Kastoria (Greece). In the Finnish case it was also reported that certain central service providers (e.g. Kela, the Social Insurance Institution of Finland) delivered only limited services in the studied municipality.

The missing development of service infrastructures also raise a challenge for population of these areas, like in the case of the Bulgarian CS LAU units, where one of the main problems is bad water infrastructure and another one is an unreliable electrical infrastructure. Budget cuts and austerity measures might also afflict institutions from the studied regions, for instance in Juuka (Finland), the police station was closed down a few years ago due to that.

Available services in CS areas are often significantly concentrated in urban parts of the studied regions, like in the case of Kastoria (Greece) or Szentes (Hungary). In the latter case, the central town covers a wide spectrum, while larger municipalities in its vicinity also provide a

fair amount of services of general interest, whilst in smaller villages, all kinds of services have tended to disappear since the 1990s. Service-provision in shrinking rural regions necessarily depends on demand, which is shrinking rapidly by undermining capabilities to run services by agents either public or private. In Juuka (Finland) for example, where basic municipal services are still provided (day care, basic education to high school level, elderly care, library, sports, youth services etc.) right-sizing the service infrastructure is a repeatedly emerging matter.

Problems related to accessibility, telecommunication and transport in CS areas

The insufficient availability of (good-quality) services in shrinking rural areas generates a significant need for adequate level of transport infrastructure and provision of public transport services. At the same time, the studied regions are often located in peripheral areas within their country, far from the capital, regional centres and other hubs of the economy, with multiple problems of accessibility, especially for instance in the Bulgarian, the Spanish, the Polish and the Greek cases. Thus, accessibility is widely considered by CS authors as an essential factor impacting shrinkage.

Nevertheless, basic road and transport connections are not unfavourable in every case. In the past years (or decades) newly finished motorways provided an opportunity of better connectivity towards other regions, for instance in Mansfeld-Südharz (Germany), Kastoria (Greece) or in Osječko-baranjska (Croatia). Further motorway developments are under implementation in Lovech (Bulgaria) or in the vicinity of Szentes (Hungary). Besides the development of high-speed road connections, the maintenance and improvement of local road network is often neglected like in the Greek or the Polish cases.

The condition of public transport is also often unfavourable in the studied areas. Regarding the availability of railway connection, the situation is especially disadvantaged in municipalities studied in Lovech (Bulgaria), Alt Maestrat (Spain) or in Kastoria (Greece), whose areas entirely lack railway network. Other modes of public transport are also poor in many cases. Transport connections often only exist between major settlements of CS areas (and towards regional centres from there), smaller residential areas might be connected with these centres by on-demand bus service, for instance in Alt Maestrat (Spain). These connections (emphasized e.g. in the Finnish or the Spanish case) are also infrequent. This raises difficulties for residents in commuting and finding jobs outside the actual localities, and also makes a dependence on private transport, with a consequent increase in the cost of living.

Regarding online services, opportunities of case study areas are not favourable, since usually fewer households have broadband access to the internet than the national average, e.g. in Szentes (Hungary), Mansfeld-Südharz (Germany), Łomżyński (Poland). In other cases, like in the Croatian or Greek CS areas, the availability of broadband access is more favourable. There are also significant differences considering broadband coverage within CS areas, for

example in Alt Maestrat (Spain) or in Juuka (Finland), where smaller settlements have some drawbacks in this sense. Nevertheless, in the Finnish case, mobile networks and mobile data connections are much more improved than elsewhere among the studied areas.

The significance of access to broadband networks and the importance of digital services are often mentioned in case studies. Digitisation of administrative procedures (e-administration) has progressed significantly in the past years, for instance in Alt Maestrat (Spain), while the widespread digital illiteracy (especially among elderly population) could limit the general use of such services. These connections (or the lack of them) are also considered as essential from the viewpoint of remote working (e.g. in Juuka – Finland, Alt Maestrat – Spain, Szentes - Hungary or Łomżyński – Poland), which might be a viable adaptation strategy of labour market participation in these shrinking rural areas.

Processes in the housing market

Processes in the housing market also reflect on the demographic and economic challenges experienced in CS areas. In several cases, the role of construction in local economy is weak and the number and share of newly-built dwellings are very low (compared to the national level), for instance in the studied Bulgarian municipalities, in Mansfeld-Südharz (Germany), Łomżyński (Poland) or Szentes (Hungary). As a consequence, rental prices might be relatively high, like in Szentes, which further reduces population-retaining capabilities of such localities. Alt Maestrat from Spain has an exceptional position in this sense, since here the percentage of new detached houses is remarkable. This might also be explained by the importance that the building sector had in the regional economy before the 2008 crisis.

The role of NGOs in shrinking rural areas

The presence of NGOs is usually similar to national averages or slightly lower in the studied regions. Nonetheless, lively and comparatively large civic sector is reported for example from Juuka (Finland) or Osječko-baranjska (Croatia). There are also differences within the studied areas, e.g. in Alt Maestrat (Spain), where the available modest associativism and cultural offer almost exclusively characterises the main centres of the area.

In this way, NGOs often have only a limited impact on the studied territories. Nevertheless, civic organisations and municipal associations in the Finnish, the Hungarian or the Greek cases might have significant roles in enhancing local culture and community life. Besides this role, NGOs could also contribute to the promotion of well-being of families, for instance in Juuka (Finland). Basically, only a few associations are relevant to the economic development – as reported from the Greek case. Otherwise, NGOs might play a significant role both in

adaptation and mitigation (and combined) coping strategies by bringing new ideas and concepts of development into shrinking rural areas (as mentioned in the Croatian case study).

3.4 Triggers of shrinkage

3.4.1 Contextual factors

Starting with geographic contexts as important factors underlying shrinkage, *peripherization* needs to be highlighted, which sets considerable limitations in nearly all CS areas. In most cases, it is linked to locational disadvantage caused by remoteness, that is long distance from urban centres or confined accessibility (Siemiatycki (PL), Szentes (HU), Mansfeld-Südharz (DE), Juuka (FI)). Poor connectivity might be exacerbated by geographical features, such as mountainous characteristics of the area in Kastoria (EL), Alt Maestrat (ES), and partly in Lovech (BG). Relative proximity of wealthier urban areas producing a pull-out effect of the population can also contribute to generating inner-peripherality with ever weakening economic and human potentials Szentes (HU), Mansfeld-Südharz (DE), Alt Maestrat (ES) and Lovech (BG).

Except Bulgarian and Hungarian cases, all the CS areas experience some degree of “border effect”. Siemiatycki (PL), became peripheral due to the shift of Poland's borders after World War II and is now an EU-border, Mansfeld-Südharz (DE) still experiences challenges for being a border area, and Osječko-baranjska (HR) lost much of its gravitational influence and previous connections with Serbia after 1991. Kastoria (EL) is a gateway to Albania and other Balkan countries, and Juuka (FI), although located in an EU-border region, experiences a relatively low interaction with Russia due to its long distance from the border.

Poor accessibility or current and past border effects are factors hindering economic development of the concerned regions and confirm their peripheral character.

Shrinkage might also be accompanied by reduced access to provision of basic services, either due to deficits in accessibility or in quality, and not only in rugged or mountainous landscapes but in most CS areas. Out-migration also results in loss of basic services in most CS areas: health care, education, social assistance, banking, transport and other important infrastructure and cultural facilities tend to close down if demand of clientele is shrinking dramatically. The issue of elderly care services is also of particular importance considering the heavily aged populations. In addition, the disappearing of basic retail and commodities shops is widely experienced in CS areas. In some cases, reduction of services associated with shrinkage has been also aggravated by austerity policies (Finland, Greece, Spain, Hungary and Germany). Thinning service infrastructure and the resulting lower quality of life can hardly help retaining and attracting residents.

Despite commonalities, the degree and nuances of shrinking services vary widely from one CS area to the other. As an example, in Poland, the poor condition of medical care is an important problem and it is related to the limited capacity of local governments to provide them.

In Bulgaria, many schools closed down for the decreasing number of pupils, which fuelled family out-migration for educational reasons especially of non-Roma population in villages where Roma pupils dominate the classrooms. This is signalling a great degree of ethnic segregation both in the local community and in school. By contrast, in Juuka there is a problem of oversized service infrastructure and need for right-sizing to adapt to the shrinking population. In the Croatian CS area the effects of shrinking are not overly noticeable (due to the quite developed status in pre-1990 period but also of the fact that EU funds are used to support building of new services, especially educational) although railway services are decreasing while travelling time is increasing.

3.4.2 Triggers of rural shrinkage

Rural-urban flows, peripherization

Rural areas have generally been affected by out-migration in the past mainly for three reasons: in search of industrial jobs in cities, unemployment as a result of mechanisation in agriculture and forestry and in search of better educational opportunities. During 1950s and 1960s urbanisation developed rapidly fuelled by industrialisation and urban lifestyles inducing intensive outflow from rural areas. Rural outflow was even more intensive in Eastern Europe where forced industrialisation was launched by the Communist regimes, and was accompanied by a strong push-effect of collectivisation of the peasant property (and confiscation of manorial estates) in a number of countries represented by Bulgaria and Hungary in our sample. Economic and regional development models have largely favoured investments in the fields of industry and services in urban areas, while rural areas remained on the margins of national and regional development plans and investments which have increased territorial imbalances and peripherization.

The Greek and Spanish CSs are the clearest examples of such territorial imbalances where economic concentration of activities in urban areas (in the coastal areas in Spain, and in the S-shaped axis Athens-Patras-Thessaloniki-Kavala) contributes to economic marginalization of rural areas. Furthermore, the proximity of both CS areas to 'wealthy' regions is a factor actively contributing to urbanisation while legacy effects of previous out-migration also contribute to shrinkage of rural areas to a large degree.

Radical political shift in Eastern European Countries

There are also some more subtle similarities of process, which are often driven by macro-regional contexts and shared histories. As it was mentioned in Chapter 5.3., during the years

of transition collapse of socialist economies led to de-industrialization and high unemployment in all eastern CS areas. The sudden and extended loss of agricultural jobs was also a universal pattern in Eastern Europe. More recently, globalised migration movements across Europe, accelerated by EU accession is playing a key role in Croatian and Bulgarian territories, and to a lesser extent in the Hungarian, Polish and East German CS areas. The scale of the transition crisis exacerbated by impact of the Global Financial Crisis The legacy of massive out-migration at the beginning of the 1990s is still identifiable among the causes of rural shrinkage in these countries.

Globalised processes

Globalised processes such as work-related out-migration are contributing to the currently intense depopulation in Eastern Europe in high numbers (mainly youth) towards Western European labour markets, accelerated by new rounds of EU accession. This factor is playing a key role in Croatian and Bulgarian rural territories, and to a lesser extent in the Hungarian, Polish and East German CS areas. In Poland, labour-related migration was high right after the fall of State Socialism, also in East Germany, where the highest wave of population drain was taking place right after unification; the legacy of massive outmigration at the beginning of the 1990s is still identifiable among the causes of rural shrinkage in these countries.

In Croatia, although rural- urban migration was an important cause of shrinkage in the rural part of the CS area since 1991, the entrance to the EU (2011-2013) resulted in 52,284 people leaving Osječko-baranjska (16% of the population left abroad during 2011-2017). In Bulgaria, pre-accession (2001) and accession (2007) to the EU accelerated out-migration; so did the 2008 economic crisis. In both countries youth out-migration is driven by a search of better job opportunities abroad. However, in Bulgaria it is relatively common for working-age population that they work temporarily abroad (6-9 months) then they rely on unemployment benefit of the host country (that can be twice as much as local wages) but spend it at home while they return for a break of approx. half a year duration.

Migration and economic crises

The CS areas in Greece and Spain received workers settling in rural areas (1990s in Greece and in Spain during the 2000s) reverting rural shrinkage until 2008, when migrants left due to the harsh impact of the Global Financial Crisis.

In Greece, emigration during late 1960s-1970s entailed strong demographic impact in the CS area. However, during 1980s-1990s the inflow of seasonal farm and construction workers from Balkan and African countries reverted the trends and contributed to attenuate rural

shrinkage. In the Greek CS area, close to the Albanian border, in 2010 the immigrants that had settled there in 1990s moved back to Albania or other countries all over the World. During the 2000s the Spanish CS area showed a fairly similar trend (receiving migrants from South America, North Africa and Eastern European countries) which reduced negative migration during the 2000s until 2010 due to the Global Financial Crisis (specially, due to the collapse of the building sector).

Hungary was also one of the countries hit hardest by the Global Financial Crisis in Europe, therefore the trend of emigration started to rise steeply in 2008-2011 fuelled by the opening labour-market gates in the West.

3.4.3 Long-term demographic and economic trends

The permanent decrease on birth rates is a factor contributing to shrinkage in all CS areas, coupled with ageing exacerbated by earlier out-migration processes with a lower importance of legacy effects in the Croatian, Bulgarian, and Hungarian CSs. Both factors reduce the potential for natural population increase in the future in CS areas.

Some of the CS areas are located in regions lagging behind in their regional contexts (Polish, Bulgarian and German cases are the most clear examples,) and experience average lower income due to this reason. The high share of agriculture in most CS areas offering generally lower salaries and more demanding working conditions is also one of the important causes underlying shrinkage. In such contexts, future prospects for youngest population are hindered by the increasing unprofitability of agriculture and the seemingly limited economic alternatives in CS areas.

Industrial decline, especially if an area is dependent on one single industry, has also hit Eastern CS areas hardly, but the remaining cases also suffer from a low level of diversification of the industrial sector. The strong dependency on one-sided industry is relevant in several CSs: soapstone in Juuka (Finland), copper mining in Mansfeld-Südharz (Germany), fur in Kastoria (Greece) and textile in Alt Maestrat (Spain) making CS areas very vulnerable to industrial decline. In addition, industries have also failed to restructure towards a 'knowledge-economy' (e.g. Szentes). Most CS areas also experience a low level of entrepreneurship and few business networks in some cases where attractive and well-paid jobs disappeared.

Salaries are generally lower in rural than in urban areas, and this is a decisive factor contributing to population decrease, mainly for highly-skilled workers and professionals. In some CS areas labour market is biased and offer low-skilled jobs (Hungary, Spain and Bulgaria), while in others the demand for highly-skilled labour is not covered due to strong migration of the educated/skilled young people (Germany).

All those different shortcomings occur in a cumulative manner through reduced opportunities for younger people, limited employment possibilities in terms of diverse jobs, and low salaries which are closely related. Those pushing factors, together with the attraction of 'better' living

conditions of urban areas and in many cases a negative 'self-image' of the rural area (Bulgaria, Germany, Spain) converge in processes of mostly work-related and education driven selective youth migration (with very low levels of return), and gender imbalances due to above-percentage of woman migration (as mentioned in chapter 3.1). The resulting vicious circle of lower and poorly qualified work-force and the lack of young people is a painful consequence of overall shrinkage which deprives peripheral rural areas from adequate human and social capital and poses a key problem to deal with.

3.5 Unfolding pathways (models) of rural shrinkage

When highlighting main features, causes and triggers of rural shrinkage two dominant macro-scale processes shaping two pathways of change have been identified. The first one has impacted dominantly Northern and Southern CS areas, where a permanent process of *peripherization* was taking place due to repeated rounds of population outflow from rural to urban (or metropolitan or coastal) areas resulting in a dramatic population decline and distorted age structures. In Eastern Europe, *peripherization was accompanied by historical cataclysms*. Peripherization (including inner-peripherization) in the first model was caused primarily *by the geographical position* of the concerned areas (located in "edges", in mountainous or border areas, etc.) that induced out-migration and a negative demographic spiral. Clearest examples of are provided by the Finnish and Spanish cases. The second model of rural restructuring leading to rural shrinkage and marginalisation could be characterised *as a series of disruption*, which started after WW II with a radical political shift in Eastern Europe. Forced *industrialisation* of the 1950s and 1960s induced almost immediately high waves of outmigration from rural areas in each Eastern CS countries. The push was even stronger and selective in countries where industrialisation was coupled with *hard-line collectivisation* of the peasant property and establishment of large-scale collective farms (Hungary, Bulgaria).

The two pathways are illustrated by the below figures:

Figure 16: Northern and Southern (Western) model of rural shrinkage

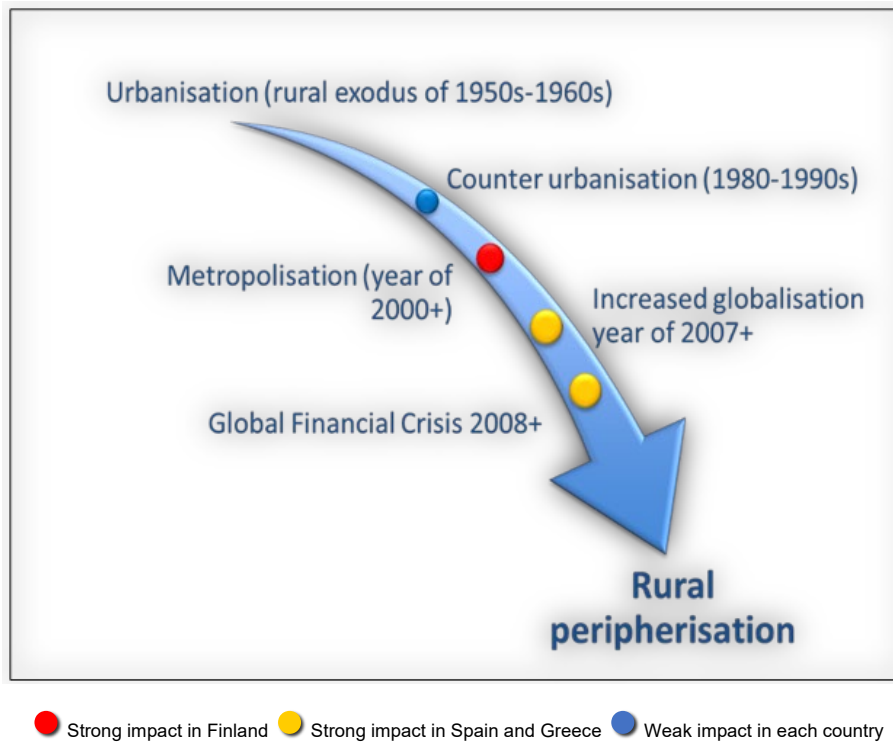
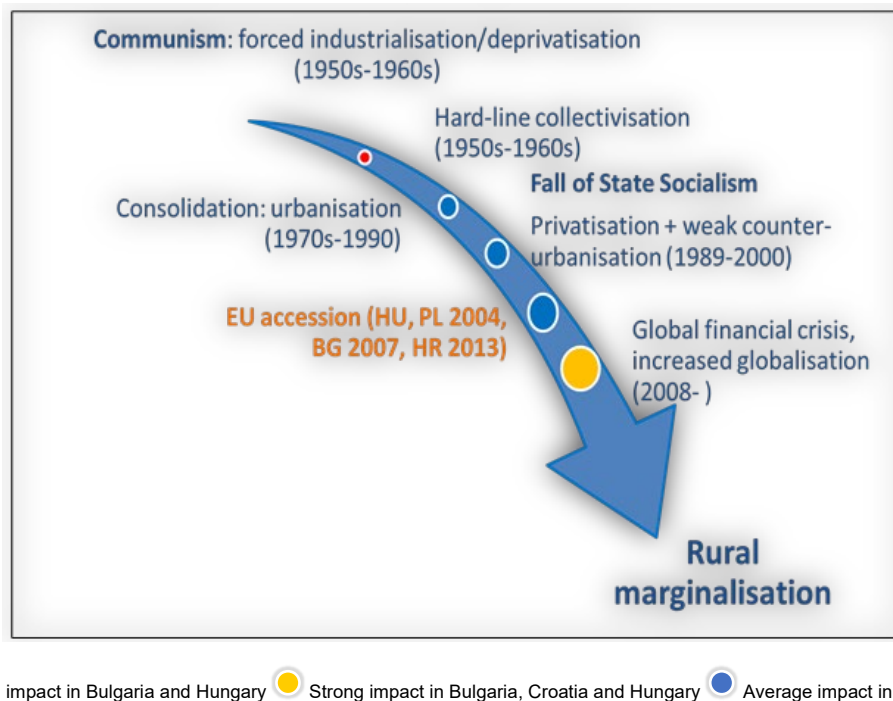


Figure 17: Eastern (Post- State Socialist) model of rural shrinkage



The robust population loss of the 1950s-1960s was followed by still high-rate of rural outflow in the next decades triggered by pushing factors in rural areas such as local government re-

forms and forced amalgamations of schools, concentration of industrial ventures and large-scale farms (in Hungary and Bulgaria) coupled with relocating headquarters into rural centres. These measures dramatically reduced local autonomy, weakened local economies and increased dependency for the majority of villages that fuelled further outmigration of the young and skilled layers of rural societies. The long duration of population decline induced strong legacy effects in extended rural areas and accelerated shrinkage.

Finally, a further and still significant outmigration wave has been driven by globalised processes, namely, by the emerging opportunities for making a better living through migration to the West. This wave was particularly strong after the German unification and following the three rounds of EU accession in 2004, 2007 and 2013. Such 'globalised flows' as well as an increased attraction of urban centres, especially metropolitan areas threaten rural areas with further labour and population drain in all investigated cases.

Despite structural differences between the two pathways of rural shrinkage, they do have commonalities such as the high rates of legacy (demographic) effects, ongoing selective outmigration filtering young people out of shrinking rural regions resulting in interrelated issues of "scales" and "qualifications" meaning that economies in these rural spaces are usually too weak (and too small) to be able to attract significant fresh investments and keep qualified people or attract professionals from outside. Shrinking is a contextual issue, which means that declining population numbers usually increase social and economic vulnerabilities as well as abilities of authorities to provide rural population with a full range of public services. In addition to scarce or one-sided employment offers, which is a common shortcoming of labour markets in shrinking rural areas, affordable service provision at local levels seems to be increasingly threatened by shrinking demand in East and West. Mechanisms of selectivity as well as vicious circles of demographic decline and weakening (shrinking) social and economic potentials create enormous challenges difficult to overcome at any scale of governance.

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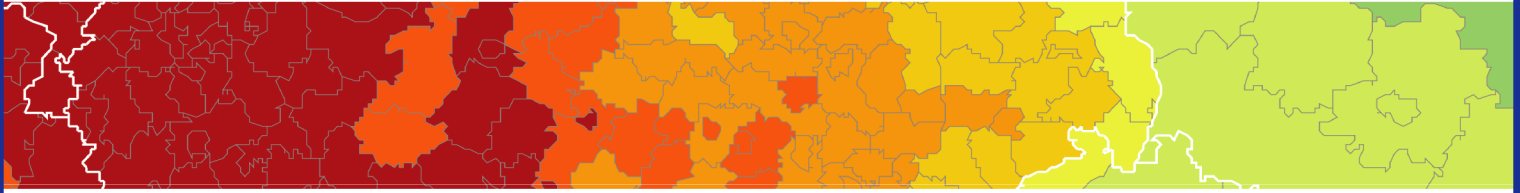
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The ESPON EGTC is the Single Beneficiary of the ESPON 2020 Cooperation Programme. The Single Operation within the programme is implemented by the ESPON EGTC and co-financed by the European Regional Development Fund, the EU Member States and the Partner States, Iceland, Liechtenstein, Norway and Switzerland.