



# Perception and Evaluation of Regional and Cohesion policies by Europeans and Identification with the Values of Europe

### **PERCEIVE**

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# D 4.4: Report on the policy recommendations on how to integrate cohesion policy with urban and rural policies

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#### 1. Introduction

The relations between cohesion policy and urban and rural policies are still hardly tackled by both researchers and policy makers. In the process of improving the efficiency and effectiveness of these policies this issue also requires analysis. In order to succeed in meeting the challenges facing the EU we need to make the most of the potential inherent in the aforementioned EU policies. Thus, it is necessary to identify points of reference and synergies that can be found in these policies, and the manner of their integration to better serve the developmental goals of the EU citizens.

The PERCEIVE project aims at both mapping and explaining inter- and intra-regional variations in: (a) the experiences and results of the Cohesion Policy implementation, (b) citizens' awareness and appreciation of the EU efforts in delivering cohesion, and (c) citizens' identification with the EU. This report is a part of the WP4 of the project, seeking to find complementarities and synergies between the EU Cohesion Policy and other rural and urban policies supported by the EU funds, in order to improve the EU citizens' perceptions on the performance of the European policy.

In order to properly meet the objectives of the PERCEIVE study, i.e. understanding the relation between the Cohesion Policy and citizen's identification with the European project, we also need to consider the urban and rural dimensions, given their potential role in and interaction with the Cohesion Policy.

The aim of the report is to formulate the policy recommendations on the method for integration of the Cohesion Policy with urban and rural policies. It addresses the problem of how territorial cohesion objectives match the 'real problems' that were compared in current and past programming periods. It also identifies the potential spheres where mixing the EU policy instruments can result in better achievement of regional needs as well as the issues that call for greater integration of different areas of the EU, national and local policies.

Designing effective mix of policy tools is a very difficult task, consisting of various elements that influence the change of development conditions. In classic examples of different approaches to the problem of policy mix, a holistic approach is emphasized, based on definition of the following factors determining the correctness of policy instruments (Del Rio, Howlett, 2013):

- all instruments used and the relationship between their effects;
- costs of policy implementation;

- potentially negative side effects of policies on target groups (e.g. impact on disadvantaged groups, household income, balance of competitive advantage of different economic entities);
- political processes before and during design and implementation.

At the same time, establishing clear synergies and trade-offs between various policies is difficult, which was evidenced in the study by Collins et al. (2017b). It is only possible to point to certain dependencies (positive and negative) between the different types of policy instruments that affect each other. In this report, we review the changes in the Cohesion Policy and Common Agricultural Policy programming approach, and on the basis of the WP1 PERCEIVE study, we seek to determine to what extent both policies can create a favourable policy mix that best suits regional needs.

The report begins with an analysis of the results of the implementation and ideas for the future of the Cohesion Policy (chapter 2) and the analysis of the evolution of the Common Agricultural Policy (chapter 3). In these chapters we analyse past/future changes in both policies, simultaneously, trying to answer the question about areas in which they can achieve synergies by responding to specific problems of the EU.

At the same time, in the second part of the report, we look at the implementation of the policy processes using SWOT analysis of the perceived/stated development issues in the case study regions (grouped according to status of development defined by the Cohesion Policy: Competitiveness, Convergence-Phasing out or Convergence type region) in order to identify the regional strengths, weaknesses and needs to be addressed by policy mix (chapter 4). The analysis covered the following categories:

- 1) business and local production competitiveness systems.
- 2) education, research and development, innovation,
- 3) infrastructure facilities,
- 4) poverty and social exclusion,
- 5) natural and cultural heritage and tourist attractiveness,
- 6) energy and environmental protection.

We verified whether there are similarities in the problems and solutions to them among regions representing the same type of the Cohesion Policy regions. Finally, we analysed the similarities between different types of regions, namely regarding opportunities and threats related to their current state of development.

In the next chapter we seek to identify key institutions of the EU policies, whose actions have the potential to bring Cohesion Policy objectives closer to the real needs of the population. This is done to create a better understanding of the channels through which the European policy and its

local implementation experiences contribute to different understandings of the EU and European identification across profoundly different European regions.

Through the survey provided in the WP1, which addresses the rural-urban dimension with specific questions, we explore the differences in how the EU citizens living in urban and rural areas perceive the performance of the European Policy and how they identify with the European values. This is achieved by looking at their knowledge about the Cohesion Policy, perception of local economic situation as well as the key problems faced by their place of residence. In fact, understanding whether urban and rural residents differently perceive the abilities of the Cohesion Policy and its institutions to solve 'real problems', is fundamental to derive useful recommendations. These, in turn, are vital for better targeting local policies to be implemented in urban and rural areas, while addressing the issues emerging from their interconnectedness.

The above findings will help to identify which Cohesion Policy institutions have the chance to be the most effective in responding to local needs, but it can also contribute to enhancing the appreciation of the European project and its measurable effects by the citizens.

A deeper understanding of the governance of the EU policy process, focusing on how different policies (regional, urban and rural) get shaped and enter the delivery process, might enable practitioners not only to improve the policy content, but also to design processes able to meet the iterative nature of policy implementation. This allows for flexibility to address organisational, professional and social contexts and emerging challenges.

Based on all of the analyses conducted within this study, we presented conclusions and recommendations for policy makers concerning the potential steps that would allow Cohesion Policy accompanied by urban and rural policies to better tackle 'real problems' of the EU citizens.

#### 2. Key remarks on Cohesion Policy structure and assessment

It can be argued that at the beginning the Cohesion Policy (CP) was all about cohesion. It applied almost exclusively to territorial cohesion. Only with Lisbon 2000 and Europe 2020 strategies new priorities were added or rather replaced the key principle of territorial cohesion. Yet, they all do not have to be mutually exclusive and subject to a trade-off type of relation. The CP is more or less modified for each of the subsequent programming periods. This is a result of both the lessons learnt and the new EU priorities. With each programming period the CP gets more and more evidence-based and targeted. There is still much to be done, though, not to lose the specificity of

the CP. This policy operates in diversified regional contexts where developmental needs, current level of socio-economic development and local institutions and culture are very heterogeneous . These local factors have a strong impact on the actual results of the CP instruments.

The role played by the CP is difficult to assess, given the lack of data, complexity and diversity of policy measures as well as heterogeneity of local conditions and the problem of distinguishing between policy impact and other factors influencing socio-economic development. Yet, it seems that the impact of the CP in subsequent programming periods is growing due to the implemented changes (Dall'erba, Fang, 2017).

Despite the growing number of studies examining the effects of the CP using different evaluation methods, our knowledge about it is still insufficient. R. Crescenzi and M. Giua (2017) point out that a more ambitions research agenda should be undertaken including the following:

- "further improvement of the contextualization of the policy in order to analyse simultaneously
  the territorial features and the policy structures and arrangements that shape Cohesion
  Policy's link to economic performance;
- progress with the clear identification of 'net' policy impacts by means of appropriate counterfactual methods at both the regional and micro (firm and individual) levels;
- development of stronger synergies between the analysis of conditioning factors and counterfactual methods in order to shed new light on what works (and what does not) in the large variety of territorial contexts of the EU, overcoming the fundamental limitation of the rigorous (but merely binary) results provided so far by most of the analyses based on counterfactual methods".

The results of studies concerning the impact of the CP are varied. Some of them show that "cohesion funds have positively contributed to generating economic growth in lagging areas" (Gagliardi, Percoco, 2017). Yet, there are also studies showing that the CP did not succeed in achieving its ambitious goals related to economic growth. As stated by Krieger-Boden (2016) "some of the projects actually realised seem not to come up to the asserted intentions of the policy, in spite of the extended and complicated procedures. This may raise considerable doubt on the efficacy of the whole policy". Thus, there is a gap between the policy aims and policy delivery. The CP has a growing number of objectives, while the funds earmarked for their implementation do not increase. Moreover, there is the phenomenon called "national convergence, local

divergence", which captures the growing disparities in socio-economic growth within the EU Member States (Pollio, 2009) that is both detrimental for further growth and for the success of the CP. Actually, the results of the studies can be divided into several categories (Polverari et al., 2014):

- studies showing positive and statistically significant effect (Mohl, Hagen, 2010; Becker et al.,
   2010);
- studies showing positive but minor or not statistically significant effects (Esposti, Bussoletti,
   2008; Rodriguez-Pose, Fratesi, 2004);
- studies showing not statistically significant impact on convergence (Akbulut, 2014; De Freitas et al., 2003; Dall'erba, Le Gallo, 2008);
- studies verifying whether impact is conditional on the quality of national institutions and macro-economic policies with varied findings (Arbolino, Boffardi, 2017; Tomova et al., 2013; Ederveen et al., 2006);
- studies showing positive results for some time series data sets, but negative results for others
   (Rodriguez-Pose, Novak, 2013; Puigcerver-Peñalver, 2007);
- studies showing varied results for different countries and regions (Rodriguez-Pose, Fratesi,
   2004; Ederveen et al., 2003).

In fact, all the methods used for the studies (macroeconomic modelling, regression analysis, microeconomic studies and case studies) have their own limitations but they all suffer from lack of regional data concerning socio-economic development. Generally, most studies show positive impact of Cohesion Policy. The exceptions are the studies using regression analysis (Davies, 2017). The studies usually concentrate on economic growth effects, but some of them also tackle different issues. A good example of such studies is the study conducted by P. Mohl and T, Hagen (2011) related to the impact of the CP on employment. The findings show that "high-skilled population in particular benefits from EU structural funds".

#### 2.1. Cohesion Policy versus Common Agricultural Policy

Part of the research on the CP and its impact on the EU socio-economic development is the analysis of mutual relations between the CP and other EU policies. As the Common Agricultural Policy (CAP) consists of two distinct parts, their impact on cohesion and mutual relations with the CP vary. The first pillar, is said to be counter-productive for cohesion, as the funds are not equally distributed and most of the funds reach the most developed agricultural regions. The second

pillar, as a strictly territorial policy, is considered to have a positive effect. Yet, the research results vary significantly and thus give no clear-cut measure on the impact of the CAP first pillar on territorial cohesion (Hansen, Teuber, 2010). The results of research conducted by R. Esposti (2007) show that the CAP measures have no counter-treatment effect, but at the same time their impact on growth is marginal. The study by E. Montresor, F. Pecci and N. Pontarollo (2011) shows CAP subsidies have a positive impact on the convergence process. Negative impacts on regional convergence of the CAP have been presented by Bivand and Brundstad (2003 and 2005) and Bureau and Mahé (2008).

Second pillar of the CAP, which is the rural development policy, seems to be more related to the CP. Rural development policy as the CP is considered to be a place-based policy. Therefore, some experts call for putting this part of the CAP into the CP (Barca, 2009). But moving the support from the CAP to the CP is not a way to make it more effective or efficient (Crescenzi et al., 2011). Crescenzi et al. (2011) analysed the correlation of regional level spending between regional policies and rural development policy. They found out that in the successive programming periods it dropped. In 1994-1999, it was 80%, in 2000-2006 it fell to 59% and in 2007-2013 it was 50%. Thus, it can be stated that these policies are moving in different directions in targeting regional developmental needs. This can be seen, however, as a positive feature, because it can signify that these policies are complimentary and that the demarcation line is accurately determined.

An interesting feature is also the persistence of regional allocations of the CAP and the CP. Crescenzi et al. (2011) stated that regional policies and first pillar of the CAP are characterised by a high level of persistence in the regional allocation of funds between programming periods. In the case of regional policy, the correlation of the allocations was 97% between the programming periods 1994-1999 and 2000-2006, and 92.5% between the periods 2000-2006 and 2007-2013. In the case of first pillar of the CAP, it was, respectively, 94% and 93%. Much lower correlation was observed for rural development policy. Between the periods 1994-1999 and 2000-2006 it was 64%, while between 2000-2006 and 2007-2013 it was 80%.

A different study by Crescenzi and Giua (2014) showed that the positive and significant impact of the EU regional policy is observed in all regions. Yet, this effect is stronger in the most socio-economically advanced areas. Moreover, it is maximised when its expenditure is complemented by rural development and CAP funds. The researchers also stated that top-down funding of the CAP concentrates some benefits in the most deprived areas, while only the most dynamic rural

areas are capable of leveraging on the bottom-up measures of the EU rural development policy. Therefore, the EU policy in order to be effective should be a mix of both bottom-up and top-down measures as well as spatially targeted policies such as Cohesion Policy and spatially blind policies such as the first pillar of the CAP (Crescenzi, Giua, 2016).

Positive correlations can be found by analysing the priorities of agricultural policy and urban policy, especially in the field of smart cities. The discussion on both policies emphasizes the fundamental importance of pro-environmental measures to reduce the effects of climate change and its consequences. The agricultural policy points to environmental actions, which are the most important in terms of sanctioning the functioning of this policy in its current form. Urban policy addresses the need for innovative energy management solutions.

Collins et al. (2017a), using quantitative and qualitative data visualization, in detail approaches the report on the geographical coverage, scale and project content of the EU smart city projects. In the case of urban policy, the research shows that energy management issues still dominate in smart city projects. The analysis seems to lead to the main conclusion that the focus of the Smart City concept is focusing on the energy. The study shows that "the years 2008-2010 reshape the smart policy narrative towards more IT-related projects, but as stressors based on the sample in this work, this trend is not confirmed in the sub-sample where energy take again the lion-share in the Smart City narrative" (Collins et al., 2017a).

#### 2.2. Proposals for Cohesion Policy beyond 2020

Numerous studies call for reform of the Cohesion Policy. In successive programming periods some of the proposals become part of reforms agreed by the EU Member States. But the general issues, which are mentioned by experts, should be taken into consideration. They can be summed up as openness to further learning, diversification and improvement. Gorzelak et al. opt for a more proactive approach to the CP at the Member State level and rethinking of development strategies and better use of evaluation and external examples in the process of designing and implementing the CP. A similar opinion is presented by Böhme et al. (2015), who emphasize the need to use "territorial impact assessments and scenarios as eye-openers or invitations for dialogue" (Böhme et al., 2015).

An interesting point in the discussion about the CP and its future is the EU territorial cohesion. This issue is extensively discussed in the context of the CP priorities and its effectiveness. Among others, Böhme et al. (2015), Dühr et al. (2010) and Medeiros (2017) present the EU territorial agendas as an important part of the EU strategic policy planning. They, however, emphasize that

the EU does not have the competence to deal with spatial planning. However, the CP and the CAP have, in fact, a strong influence on spatial planning. According to Dühr et al. (2010), European spatial planning is desirable because it could help to:

- coordinate the EU policies and actions which have spatial dimensions and impacts;
- develop and implement the EU policy goals of promoting balanced spatial development;
- engage in new forms of transnational territorial governance, which deals more effectively with functional regions;
- prevent damaging competition and free riders on improving environmental conditions or economic competitiveness;
- avoid distortions to the Single Market provoked by varying approaches to spatial planning;
- resolve the competing objectives of economic competitiveness, social cohesion and environmental sustainability;
- provide a model of democratic and socially led spatial organisation for existing and new
   Member States, and neighbouring countries.

It seems that spatial planning can be conductive to creating closer links between the CP and the CAP. Medeiros (2017) proposes a new set of priorities for the CP revolving around territorial cohesion (fig. 2.1). They include: green economy, balanced territory, social cohesion and good governance. Thus, they revolve around closer integration of the EU territory and stronger foundations for sustainable development. Medeiros, moreover, offers not a total revolution but a structural reform that should build on positive aspects of the current CP, such as its principles and guidelines adding to them some new ones (table 2.1). This can be summarised as tools enabling crossing the lines between Member States and projects while significantly increasing the flexibility of implementation also at a national/regional level.

**ENVIRONMENTAL SUSTAINABILITY Green Economy** Eco-Innovation TERRITORIAL COOPERATION/ARTICULATION Low-carbon Economy **Environmental Protection Risk Prevention TERRITORIAL GOVERNANCE Good Governance Balanced Territory** Multilevel Governance **Territorial Cooperation TERRITORIAL** Administrative Territorial **COHESION AND** Capacity Polycentricity **DEVELOPMENT Institutional Thickness Territorial Connectivity Territorial Integration** Monitoring and Evaluation **Social Cohesion** Sustainable and Quality Employment **Education and Training** Social Inclusion **Combating Poverty** SOCIOECONOMIC COHESION

Fig. 2.1. Goals of the CP post-2020 according to Medeiros

Source: Medeioros (2017), fig. 1.

Medeiros suggests keeping the current principles of the CP and adding new ones to them. This should make the CP more effective and better suited to current needs of the EU. A special emphasis is put on transnational cooperation as well as place-based and evidence-based undertakings (table 2.1). Cross-border cooperation is even more important when one realizes that 40% of the EU regions are the regions close to internal border and also the EC calls for boosting growth and cohesion in border regions (European Commission, 2017a).

Table 2.1. The CP post-2020 – principles and guidelines according to Medeiros

Keep original principles	Add new principles
Focusing on the poorest and most backward	Strategic Territorial Planning:
regions	EU/Transnational/Cross-Border
Multi-annual programming	Independency: Monitoring/Policy evaluation

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Strategic orientation of investments	Focus on Impacts: Territorial Impact			
Involvement of regional and local partners –	Assessment (TIA)			
partnership	Place-Based: Tailor made to territorial			
Subsidiarity + Concentration + Additionality	needs/potentials			
Keep original guidelines	Add new guidelines			
Focus on Integrated Territorial Investments	Focus on Large Impact Projects (LIP)			
(ITI)	Focus on Transnational Cooperation Projects			
Focus on Community-Led Local Development	(TCP)			
(CLLD)	Focus on Cohesion and Development			
Sustainable Urban Development (SUD)	(CoDev)			
	Increase Simplification of Project			
	Management Governance (SPMG)			
	Create supra-Projects/Programmes			
	Monitoring/Evaluation Structure (PMES)			
	Focus on Anchor Cities of Less-Developed			
	Areas (ACIT)			

Source: Medeiros (2017), table 2.

S. lammarino, A. Rodríguez-Pose and M. Storper (2017) presented an interesting proposal of changes in the approach of the EU Cohesion Policy. They call for place-sensitive distributed development policies (PSDDP). Such policies refer to an innovative development policy approach taking into account the characteristic features and conditions of each of the regions. Based on the differences in the socio-economic development in the EU, lammarino et al. argue that PSDDP is "a viable option to promote the economic development of the most dynamic places in Europe while, at the same time, countering the potentially negative spiral of geographically restricted development on three fronts by: a) pushing more and more regions towards more non-routine (innovative) functions in their economic mix; b) expanding the sources of creativity and satisfaction that are good in and of themselves on human grounds; and c) stimulating greater investment in basic capabilities that are essential to a dignified and creative life" (lammarino et al., 2017).

The regions call for "bringing more symmetry between the parties during (re)negotiations of operational programmes and introducing a broad catalogue of programme changes that could be implemented on a national (regional) level" (Związek Województw Rzeczpospolitej Polskiej, 2016). As the discussions with regional stakeholders during focus groups showed, the regional representatives feel that they have highly limited room for maneuverer when shaping their regional operational programmes and they would like to have more freedom in tailoring their programmes to the regional needs.

The other proposal was presented by R. Huguenot-Noël, A. Hunter and F. Zuleeg. These authors call for changes that would make the CP contribute more to the EU added value and support the EU's growth and investment. They state that the CP needs to become clearer and must be presented as a "more compelling narrative" of what the EU wants to achieve. In their opinion, the CP must be more strongly linked with the ESI funds and the wider EU framework, such as macroeconomic situation. The CP should be more aligned with not only the EU growth strategy but also national and regional ones. This means also extending the macroeconomic conditionality to the CP as an ex ante mechanism enabling creating sound business environment. The authors also argue that part of the reform should be the creation of stronger multi-level government giving the regions more ownership of the process of growth. This should be accompanied by the territorial and cross-border impact assessments in the European Semester as this can prove helpful in ensuring stronger coherence between the EU policy objectives. At the heart of this proposal is taking by the European Commission "a role of 'strategic enabler' in the implementation of the EU's growth agenda by re-positioning structural, growth-enhancing reforms at the heart of a new growth strategy for the EU. This new growth strategy could bring forward the possible 'multiplier effect' of targeting ESIF towards enabling reforms, and reposition CP as the EU's main tool to sustain investment and solidarity at the same time in the new era" (Huguenot-Noël et al., 2017).

A separate subject, present in the majority of recommendations and position papers, is the issue of simplification. Proposals for simplification relate mainly to: auditing, state aid rules, information requirements and public procurement (Committee of Regions, Dutch Presidency of the Council of the European Union, 2016). Generally, too many changes in regulations and lack of trust are the reasons for burdensome implementation of the CP. An interesting simplification proposal was presented by Krieger-Boden (2016). It envisages limiting the CP to support for poor regions within the ERDF, while ESF should serve as support to poor individuals irrespective of the EU region they

live in. This does not mean that other funds would be eliminated. It is just a call for separating support related to specific objectives and thus analyse and evaluate the results separately for each distinct policy objective. In the case of the CP limited to ERDF it would be territorial cohesion.

Yet, these are not only the EU regulations that make the CP complicated. Also the Member States sometimes make the implementation of the CP instruments more difficult by the so-called gold plating. This phenomena is a result of:

- inconsistent regulatory frameworks,
- uncertainties of authorities managing the programmes,
- fear of audit,
- complexity of programmes (Böhme et al., 2017).

The problem of gold plating can be tackled by a common effort at the EU, national and programme level. According to Böhme et al. (2017), the following actions should be taken:

#### 1. EU level:

- ✓ increasing transparency between programme bodies and the European Commission;
- ✓ promoting clarity, simplicity and continuity.

#### 2. National level:

- √ increasing interoperability of e-governance tools;
- ✓ initiating administrative changes in the Member States;
- ✓ increasing national coordination.

#### 3. Programme level:

- ✓ providing clarity for beneficiaries;
- ✓ making more use of Simplified Cost Options.

#### 4. All parties – horizontal action:

- ✓ creating balance between compliance checks and performance orientation;
- ✓ promoting capacity building;
- √ implementation of a single information and audit system;
- ✓ treating guidelines as guidance, not as part of regulations;
- ✓ coordinating different audit authorities.

It is expected that the use of financial instruments (FIs) within the CP 2020+ will be more intensive than today (Georgiades, 2017). This is a great challenge in terms of the call for simplification as additional institutions that need to be involved in the application of financial instruments and the

complexity of these instruments creates additional burden and cost for both administrative bodies and beneficiaries. There is already much to be done to make the use of FIs more simple and economically sound. They relate to: state aid rules, *ex ante* assessment, combination of grants and FIs, financial intermediaries and selection process, management and control, equal treatment for FIs irrespective of direct or indirect management by the EC as well as for the FIs managed by or under responsibility of the managing authority, funding agreements, requests for payments, interests and other gains and their subsequent use, losses, reporting and relations with the EIB (Committee of Regions, Slovak Presidency of the Council of the European Union, 2016).

As often as one can hear the calls for simplification, the calls for more flexibility can be heard. Flexibility can pertain to different aspects of the policy. It can mean more flexible implementation rules, especially in terms of giving Member States and regions more freedom to modify programmes during the implementation process or more flexibility in shaping the policy instruments. A special attention in the debate on the CP 2020+ is put on increasing the flexibility in order to enable the regions to "respond flexibly to crises and unforeseen events in the short term" (European Committee of the Regions, 2017). The EC is one of the parties calling for more flexibility. In its reflection paper (European Commission, 2017b) on the EU finance it also named other proposal for reforming the CP, which include:

- more flexibility to face new challenges;
- faster implementation of the Cohesion Policy and a smoother transition between programming periods achieved by, for example, stricter de-commitment rules, shorter procedures for closing programmes, and quicker and more flexible processes for appointing the management authorities and for programming;
- increasing the levels of national co-financing for the Cohesion Policy in order to better calibrate them to different countries and regions and increase ownership and responsibility;
- establishing a single investment fund, or a single set of rules for existing funds to ensure more
  coherent investment and to simplify the life of beneficiaries. Coherence can also be improved
  via a single rule book for Cohesion Policy and other funding instruments with programmes or
  projects of the same type;
- adding new criteria of allocation of the funds could be, for instance, linked to the challenges
   Europe faces, from demographics, unemployment to social inclusion and migration, from innovation to climate change.

Last but not least, there are also calls for changes in communication of the CP's results. As stated by Porawski (2017) "a radical change is required in the way EU citizens are informed about the effects of Cohesion Policy. Although undeniable, these effects are almost completely unknown to citizens".

Apart from items that need to be reformed in the functioning of the CP, there are also items that are advocated by different experts to stay the same. First of them is the call for continuing to cover all regions with the CP (Zypries, 2017) as it is a policy for European solidarity (Termont, 2017)<sup>1</sup>. Yet, when it comes to the policy priorities the proposals are more diverse. Some call for continuing the smart, sustainable and inclusive growth, innovation and employments (Zypries, 2017) stating that these priorities remain valid (Morgan, 2017). At the same time, there are calls for continuing the thematic concentration of support introduced in the 2014-2020 programming period (Zypries, 2017) and an even clearer focus on smart specialisation (Micko, 2017), which can take the form of adding to smart specialization tools to make it more effective (Storper, 2017). It seems that one of the key issues of the coming reform will be the budget for the CP. Given Brexit, it is highly probable that the amount allocated for the CP will be lower than today. The key CP beneficiaries will surely try to convince the other members that the CP budget should be substantial as the "transfers are not only effective, but the associated benefits exceed the costs" (Becker et al., 2010) and "cohesion and rural development policies yield high value for money" as "the interventions improve the structure of the EU economies and hence their competitiveness" (Monfort et al., 2017). The importance of the CP and its future success is best summed up by P. Magnette (Minister-President of Wallonia) who stated that "Cohesion Policy is a core element and has proved time and again to be one of the only policies able to help the EU restore a positive public image" (2017).

To sum up, it can be stated that "renovated passion is needed for the CP and, in general, for Europe" (Dotti, 2016) which requires a new vision based on knowledge brokerage.

The analysis proves that the key issue in improving the integration of cohesion, rural and urban policies is the approach based on spatial planning. Place-based development is already part of the above mentioned policies but so far each of them has not been well linked to the other policies. To improve it we need cooperation in designing policy programmes so that the planned measures ensure maximization of synergies that can be achieved. This can be done by designing policy

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<sup>&</sup>lt;sup>1</sup> But it must be mentioned that the EC in its reflection paper on the EU finance posed a question whether all regions should benefit from the CP.

measures that are complementary to one another and create some additional value when combined (for example, support for less polluting urban public transport that is interlink with less polluting rural public transport so that commuters from rural areas can give up using their own car and can use a reliable public transport all the way from their homes to their work places at the same time decreasing the amount of GHGs emitted to the atmosphere).

Yet, it must be stated that all the three policies do not call for revolution but for some fine tuning that has already been started with the current programming period. What is needed now is more encouragement to creation of a holistic policy mix that can increase the value for money of the EU spending by building a whole system supporting coherent development within the regions as well as speeding up the processes of interregional development. The most important part of such encouragement package should be simplification of implementation rules accompanied by their unification so that common rules apply to all sources of the EU funds.

Moreover, the EU support policies should be better integrated with the member states own policies and structural reforms taking into account the general country characteristics as well as the regional specificity and ensuring that the policy mix is well tailored for or regions and types of developmental needs.

#### 3. New rural development models – evolution of the Common Agricultural Policy

The Common Agricultural Policy (CAP) was and still is one of the crucial tools (beside the regional policy and Cohesion Policy) for strengthening the European integration. Over the past five decades, i.e. from the beginning of the EU's existence, the CAP underwent a significant and profound evolution of its objectives and instruments used for their implementation. The programming and decision-making processes also evolved. Regardless of the repeated assessments of effectiveness, durability or efficiency of the public policy instigated by numerous academic and decision-making circles, the Common Agricultural Policy has made an indisputable contribution to e.g.: speeding up structural changes in agriculture and food economy, improving food quality and food security, increasing farmers' incomes, reconstructing economic and social infrastructure and multifunctional development in rural areas, improving the quality of life in rural areas, improving environmental protection and animal welfare in all Member States. Its multidimensional impact, directly or indirectly, benefits farmers, rural residents and all EU citizens.

Depending on the point of view represented by the agricultural policy reviewers, its key advantage (more funds = greater opportunities) or disadvantage (higher expenses = higher costs) is its budget. Throughout its history, the budget for the CAP implementation has steadily increased, but against the total EU budget — it dropped (from approx. 68% in 1988 to approx. 38% in 2017). Simultaneously, in 2017 the expenditure for agricultural policy constitutes only approx. 0.39% of the EU GDP (against approx. 0.6% of the GDP at the beginning of the 1990s) (fig. 3.1). This happens because of the declining role of the agricultural sector in the GDP generation and the dynamic development of the non-agricultural sectors of the national economy. Despite the overall trend of reducing the share of expenditure on agricultural policy, they are still the largest item in the EU budget.

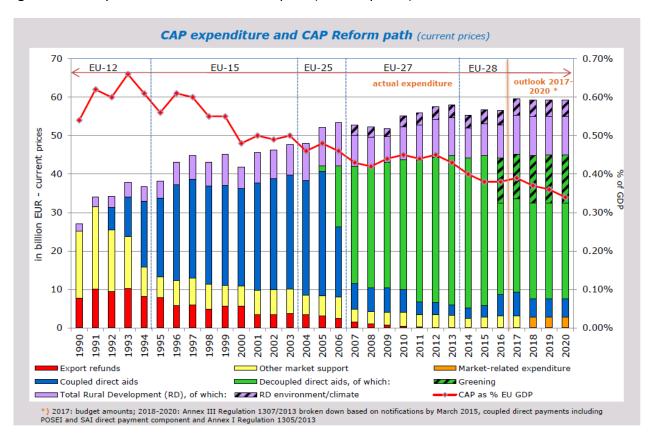


Fig. 3.1. CAP expenditure and CAP reform path (current prices)

Source: CAP expenditure for past years: European Commission, DG Agriculture and Rural Development (Financial Report). GDP: Eurostat and Global Insight.

From the beginning of its operation, i.e. from 1957, until today, the key objectives of the EU Common Agricultural Policy specified in the Treaty remained unchanged, but subsequent reforms changed the instruments used for their implementation. The subsequent CAP reforms enabled

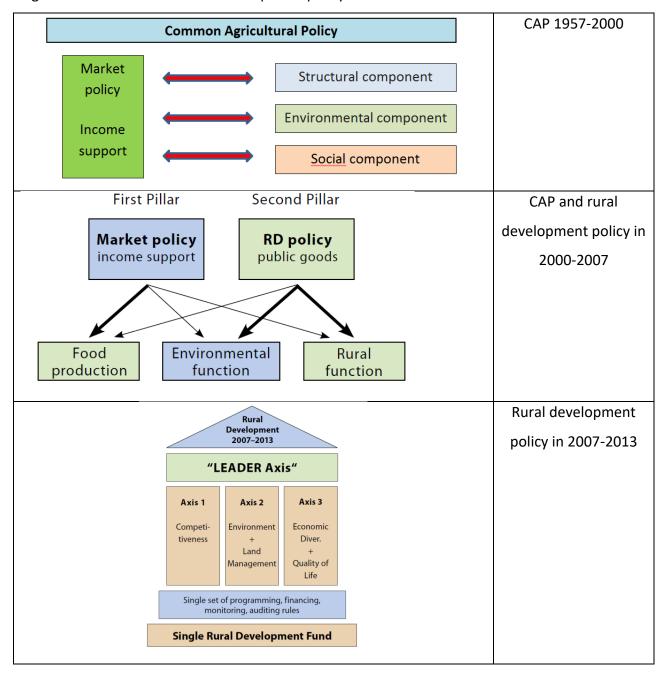
better alignment of the mechanisms used to achieve the assumed objectives. Initially, the rural development policy elements were included into the CAP, but in 2000 it was reorganized in two complementary to each other (and to the European regional and cohesion policies) pillars: the first one – covering direct payments and market measures, and the second – determining multi-annual rural development programmes (fig. 2). In the evolutionary process of the CAP changes, i.e. the smooth transition from strictly market policy to the policy of multifunctional and sustainable rural development, the following key stages may be indicated:

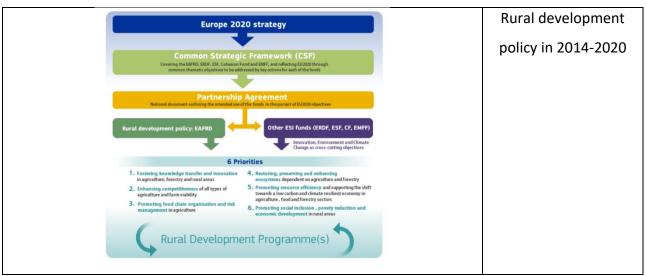
- The Mansholt Plan (1971-1980) had mainly price and market character. It aimed at setting up viable and economically efficient farms and at growth in farmers' incomes, e.g. by better production competitiveness (at the farm level), early retirement programmes for farmers and better integration under the existing supply chains (e.g. through development of producer organizations) as well as support to human capital, for instance, by professional vocational training for farmers and measures for renewal of villages. At this stage, emerged the first territorial element in the European agricultural policy, which was linked to designation of less-favoured areas (LFAs) eligible for special public support. The aim was to stop mass population outflow from farms and rural areas threatening depopulation of some regions and, consequently, problems with conservation of the natural environment and landscape. Later on, these objectives were extended in other policies supporting respective EU regions.
- The MacSharry reform (1992) consisting (in market part) mainly in departure from payments to agricultural products (price support) to direct producer support (income support through direct payments), and in the structural part also in popularization of early retirement schemes, extension of farmer support to measures in the field of environmental protection and afforestation of agricultural land. In general, in the mid-1990s the EU already had a number of instruments to influence the restructuring of agriculture, local development and the natural environment.
- Agenda 2000 (1999) reforms introduced by way of provisions resulting from Agenda 2000 complemented the former objectives of the CAP implementation with new concepts such as: diversification of sources of income and sustainable development on rural areas, animal welfare, food security and quality, and strengthening the internal and external competitiveness of agriculture. Member States could choose from 22 measures, those that

best match their specificities and needs (European Commission, 1999). Rural development policy, for the first time established as a separate pillar, was to support further market policy reforms.

- The Fischler reform (2003) because of the enlargement of the EU with the CEE countries, the Community was faced with new challenges, such as decoupling of direct payments, making the amount of direct payments dependent on compliance with a range of environmental and public health standards (cross-compliance), reduction of support prices on milk and sugar market. In the structural part, the reform clearly strengthened the agricultural policy impact on rural development. Through support granted under the second pillar, agriculture was entrusted with a new task - provision of public goods (SEC, 2004). Between 2007 and 2013 rural development policy is based on three fundaments: (a) competitiveness of agriculture and forestry, (b) land management and the environment, and (c) life quality and diversification of economic activity on rural areas. During its implementation (2008), the CAP Health Check was held, which resulted in partial reallocation of funds from the first pillar to the objectives linked to development of rural areas, mainly by increased modulation rates of direct payments, more flexible rules of public intervention and supply control. These changes were underlain by the need for the European agriculture and rural areas to adjust to the new challenges and opportunities (e.g. more and more pronounced climate change, water shortage increasingly more apparent in many regions of Europe, growing demand for renewable energy, development of broadband Internet access on rural areas).
- The CAP 2014-2020 (2013) further changes in agricultural policy were targeted at transformation of decoupled aid into multifunctional support scheme for agriculture, stronger consolidation of the both CAP pillars and more integrated and better territorially targeted approach to rural development. The CAP priorities now include: maintaining sustainable and competitive agriculture, sustainable use of natural resources, counteracting climate change and ensuring economic and social dynamism on rural areas.

Fig. 3.2. Evolution of the rural development policy





Source: http://enrd.ec.europa.eu/enrd-static/fms/pdf/BEC22A59-E570-413B-5A9B-682D3306E183.pdf https://enrd.ec.europa.eu/policy-in-action/policy-framework\_en\_

Research held in 1980s on the agricultural policy impact on cohesion at the level of NUTS1 regions shows that CAP expenditure strongly polarized agricultural incomes (European Commission, 1981). Unequal distribution of public funds between beneficiaries was identified as one of the key areas of intervention failure (Barbero et al., 1984 European Commission, 1985). Also in the following years, the impact of changes introduced in the CAP functioning structure on territorial cohesion is unclear. Some studies (Tarditi, Zanias, 2001) show that the problem of "fair" distribution of funds between the agricultural policy beneficiaries, still, has not been solved in the mid-2000s (Velazquez, 2008). Moreover, an anti-cohesive effect of CAP expenditure emerges from the ESPON (2004) studies, which is mitigated only by the launch of substantial public funding for rural development (Shucksmith et al., 2005). Analysis on the impact of the CAP payments on the process of economic convergence between the EU regions in the 1990s has even shown their negative impact (Bivand, Brundstad, 2003). Although the vast majority of CAP expenditure did not have a positive impact on regional growth, they did not hamper the implementation of the separately financed regional policy (Esposti, 2008). As regards CAP post-2013, some authors (Bureau, Mahč, 2008) note the risk of conflict between the effects of market intervention and Cohesion Policy objectives (Esposti, 2008). The awareness of the negative effects of public funds distribution under the first pillar of the CAP contributed to the view that this was caused by industrialization of agriculture and breaking off of regional and local bonds between the farm and its environment (Gallent et al., 2008). The viability of rural areas cannot depend solely on the modernization of farm structures, therefore diversification of economic activity on rural areas

should lead to better use of their internal potential in territorial dimension to meet the local needs (Saraceno, 2002). Hence, the need for enrichment of and greater integration between various areas of Community policy. Unfortunately, the 2000 reform, which resulted in the establishment of the second pillar of the CAP, failed to reject the sectoral approach to rural development, and the political compromise reached (in the context of the EU enlargement to the east) was conductive to consolidating the territorial approach to agricultural policy (De Filippis, Storti, 2002). Only after 2007, the method of EARDF area funding for Cohesion Policy was clearly separated (Barca, 2009).

#### 3.1. Rural development policy in 2007-2013

It is possible to separate four decision-making levels in the EU rural development policy for the 2007-2013 programming period, namely: European — containing strategic and directional guidelines; national — designating national strategies; programming — defining policy implementation guidelines in respective Member States or their regions; specific — indicating how particular measures of rural development policy will be implemented (fig. 3.3).

Fig. 3.3. Overall planning framework for rural development policy in the EU in 2007-2013



Source: <a href="http://enrd.ec.europa.eu/enrd-static/policy-in-action/rural-development-policy-overview/eu-framework/en/eu-fr

The common planning and programming framework in the EU Member States, designated according to strategic guidelines, were to help develop plans adjusted to the specificities and challenges of a given country (region). These included planning documents defining the strategic

priorities for rural development, specific programmes and measures for the achievement of objectives specified for a given country (region), manner of their financing, implementation and monitoring. This hierarchical decision-making and planning process was to ensure coherence and complementarity in programming and implementation of agricultural, regional and cohesion policies.

Rural development in 2007-2013 was in its concept and assumptions coherent with the Community priorities for Cohesion Policy formulated in the renewed Lisbon Strategy. Cohesion policy guidelines assumed that it should play a decisive role in supporting the rural renewal process, complementing the measures supported under the EAFRD and the European Fisheries Fund. Setting such priorities by the EU required synergies between the structural, employment and rural development and fisheries policies. Measures launched under the Cohesion Policy in 2007-2013 were targeted at support to competitiveness of regions, increasing their internal potential and their own development strategy, narrowing the gaps in the level of development and conditions within the regions, especially in the urban-rural relations. In respective EU Member States, the issues related to equalizing development opportunities and supporting structural changes on rural areas were included in the National Strategic Reference Framework, whereby rural issues are typically presented at two levels: the first one - related to supporting changes in agriculture, which is the main source of livelihood of many rural residents, and the second one – covering the tapping of the potential of these areas for economic growth and employment. The first level of problems was solved mainly on the basis of the CAP instruments, including the EAFRD, while the second required additional involvement of the Cohesion Policy funds and instruments. Measures to be implemented on rural areas, with the support of the Cohesion Policy instruments, usually directly referred to the directions set out in the Community Strategic Guidelines for supporting the economic diversification of rural areas, fisheries areas and areas with natural handicaps.

In line with global trends in economic development, agriculture as a sector of the national economy is in decline (in favour of other non-agricultural sectors). It has, however, a very large share in the management of the EU. This is particularly true as regards the contribution of agriculture to a broadly-defined rural economy, e.g. by providing food, guaranteeing living space, providing various public services. Taking the above into account, the European rural development policy for 2007-2013, was a complement to the market and income measures implemented under the Common Agricultural Policy. Rural development support measures were focused on three priority axes, i.e.:

the competitiveness of the agriculture and forestry sector (Axis 1), the environment and rural areas (Axis 2), the quality of life on rural areas and the diversification of the rural economy (Axis 3) as well as a bottom-up and partnership approach to rural development (LEADER), enabling comprehensive implementation of the objectives of Axis 3 to the local action groups. Member States were given freedom to choose among 41 measures that best suited their needs. The implementation of thus designed policy was to contribute to the achievement of economic and social cohesion and to the implementation of the EU priorities of competitiveness and durable and sustainable development.

The measures of the rural development policy Axis 2 focused on sustainable use of agricultural and forestry land, which points to clear separation of intervention area in the agricultural policy that is cohesive with other public policies. Going beyond the sectoral primacy of agricultural policy and pointing out that agriculture is one of the most important provider of public goods was of paramount importance for building the EU policy as regards new challenges.

Axis 3 measures focused on investments to improve the condition of social and economic infrastructure on rural areas, resulting from their marginalization and the depopulation of the peripheral areas. Such a clear separation of regional issues in agricultural policy was the first serious attempt to counteract (through agricultural policy instruments) the marginalization and depopulation of rural areas.

But then, LEADER initiative was a bottom-up partnership approach to rural development that consisted in joint preparation of the Development Strategy by the local leaders. The initiative was an attempt to activate grassroots efforts, because the local community knows best what is important and necessary for citizen development. LEADER also goes beyond the sectoral scheme and looks at the needs of rural areas through the prism of joint implementation of innovative micro-projects combining human, natural, cultural, historical and other resources. LEADER programme aimed at establishment of rural social capital by activating residents and contributing to the creation of new jobs on rural areas.

In order to ensure balance between the axes and the objectives implemented under the RDP, minimum funding limits were introduced at the EU and national levels. According to the European Commission guidelines, each programme received: for Axis 1 measures – no less than 10% of total funding; for Axis 2 measures – at least 25%; for Axis 3 measures – at least 10%; and for "Leader" programme – no less than 5%. A total of EUR 230 billion was spent on financing 94 rural development programmes in all Member States between 2007 and 2013, of which EUR 90.8 billion

came from the European Agricultural Fund for Rural Development, EUR 70.1 billion – from national budgets, while the beneficiaries of the co-financed projects funded from their own funds – EUR 64.8 billion. Additionally, as a result of the 2008 CAP Health Check, EUR 4.6 billion was reallocated from the first pillar to the second one. The European Economic Recovery Plan added another EUR 1.02 billion, increasing the budget of the European Agricultural Fund for Rural Development (EAFRD) for the 2007-2013 period to EUR 96.4 billion.

The European policy programming approach adopted over the 2007-2013 period enabled to target the rural development support in line with EU priorities, simultaneously, ensuring freedom at Member State and regional level. This made it possible to maintain a balance between the sectoral dimension (agricultural restructuring), territorial dimension (land management and socio-economic development of rural areas) and the environment dimension (protection of natural resources, mitigation of climate risks). The agricultural policy started a clear evolution towards rural policy which, together with social, regional, educational and environmental policies, forms a strategy for the sustainable development of rural regions. The agricultural policy prioritized issued that are common and important for the entire Community, such as public goods, environment and bioeconomy.

#### 3.2. Rural development policy in 2014-2020

The CAP reform decisions in 2014-2020 focused e.g. on budgetary constraints, alignment of rules regarding direct payments, greater flexibility in policy implementation and allocation of funds, modification of environmental and market provisions, and concentration of funds on environmental, climate and innovation measures. The introduced institutional changes were rather organizational. In general, the agricultural policy and rural development policy in 2014-2020 is to maintain the status developed in 2007-2013. Thus, the 2014-2020 rural development policy is characterised by continuity and stability as regards objectives and measures from the previous programming period. It is both ambitious and vague.

Long-term strategic objectives for the CAP include: investments in new jobs on rural areas to improve the competitiveness of agriculture, sustainable management of natural resources and climate actions by financing environment-friendly farming practices, investments in renewable energy sources and striving for sustainable territorial development of economies and rural communities through broadband Internet access on rural areas. Such goals are achieved through six priorities (fig. 3.4) in eighteen problem areas and these priorities are:

- Fostering knowledge transfer and innovation in agriculture, forestry, and rural areas 3% of total RDP 2014-2020 funds;
- Enhancing competitiveness of all types of agriculture and enhancing farm viability 20% of total RDP 2014-2020 funds;
- Promoting food chain organization and risk management in agriculture 10% of total RDP 2014-2020 funds;
- Restoring, preserving and enhancing ecosystems dependent on agriculture and forestry 44% of total RDP 2014-2020 funds;
- Promoting resource efficiency and supporting the shift towards a low-carbon and climate-resilient
   economy in the agriculture, food and forestry sectors 8% of total RDP 2014-2020 funds;
- Promoting social inclusion, poverty reduction and economic development in rural areas 15% of total RDP 2014-2020 funds.

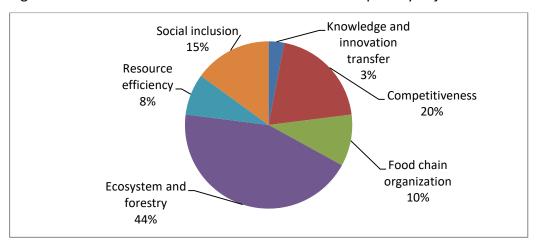


Fig. 3.4. Distribution of RDP 2014-2020 funds between priority objectives

Source: <a href="https://ec.europa.eu/agriculture/sites/agriculture/files/rural-development-2014-2020/country-files/common/rdp-list\_en.pdf">https://ec.europa.eu/agriculture/sites/agriculture/files/rural-development-2014-2020/country-files/common/rdp-list\_en.pdf</a>

The changes referring to rural development with a view to 2020 introduced post-2013, relate mainly to its programming and funding. They consist, e.g. in integration of the European Agricultural Fund for Rural Development (EAFRD) with the Cohesion Policy funds, namely: the European Regional Development Fund (ERDF), the European Social Fund (ESF), the Cohesion Fund and with the European Maritime and Fisheries Fund (EMFF). Presently, these funds operate under the common European Structural and Investment Fund (ESIF). The Rural Development Policy 2014-2020 is a part of the Common Strategic Framework (CSF) (see fig. 3.2), aimed at facilitating

territorial and sectoral coordination of all ESIF activities by targeting programming at the level of Member States and regions for strategic purposes. Better integration of the EAFRD with other funds by the Common Strategic Framework should ensure greater coherence of funds and better implementation of the 2013 CAP reform objectives. However, it is not expected that converting the three thematic axes into six priorities will improve efficiency. Although increasing expenditure on innovative research, is the answer to various demands of many advisory circles, but the underdeveloped administrative procedures remain the burden.

The Rural Development Programme (RDP) 2014-2020 is based on the EU legislation, in particular the Regulation (EC) No 1305/2013 of the European Parliament and of the Council of 17 December 2013 on support for rural development by the European Agricultural Fund for Rural Development (EAFRD) and delegated and implementing acts of the European Commission. In line with the EU regulations, respective RDPs were integrated into the overall development policy scheme of each Member State, in particular through the Partnership Agreement mechanism, which sets out a strategy for the use of the EU funds for the implementation of the common EU objectives of the growth strategy "Europe 2020: A strategy for delivering smart, sustainable and inclusive growth", taking into account the development needs of the given Member State. The RDP documents prepared for respective EU Member States or regions determine the strategic approach and measures to satisfy the needs of a given geographic area that they concern.

A total of 118 national and regional rural development programmes financed by the EAFRD and national contributions were launched in the 2014-2020 programming period. Of the total EUR 453 billion allocated in the EU budget (ESIF funds) for financing all measures under the Partnership Agreement, rural development expenditure account for approximately EUR 99.6 billion from the EAFRD budget (see table 3.1) and EUR 61 billion of public funds from the national budgets of respective Member States. Twenty Member States have decided to implement one national programme, and eight countries launched more than one programme, adopting a regional division (including the largest amount in France – 30, Italy – 23, Spain – 19, Germany – 15). The largest beneficiaries of the EAFRD include: France (EUR 11.4 billion), Italy (EUR 10.4 billion), Germany (EUR 9.4 billion) and Poland (EUR 8.7 billion). Considering the national contributions, total financing under the second pillar of CAP over the entire period between 2014 and 2020 will exceed EUR 161 billion.

Table 3.1. How funds from the 2014-2020 budgets are used under the Partnership Agreement broken down by Member States (EUR billion)?

broken down by M		, , ,	in	cluding:		
	Total for Partnership Agreements (PA)	EAFRD (European Agricultural Fund for Rural Development)	ERDF (European Regional Development Fund)	ESF (Europ ean Social Fund)	EMFF (European Maritime and Fisheries Fund)	CF (Cohesio n Fund)
Austria (1 national programme)	4.9	3.9	0.5	0.4	0.01	-
Bulgaria (1 national programme)	9.8	2.3	3.6	1.5	0.09	2.3
Belgium (2 national programmes)	2.6	0.6	0.95	1.0	0.04	-
Cyprus (1 national programme)	0.9	0.1	0.292	0.129	0.035	0.270
Croatia (1 national programme)	10.7	2.0	4.3	1.5	0.3	2.6
Czech Republic (1 national programme)	23.8	2.2	11.9	3.4	0.03	6.3
Denmark (1 national programme)	1.0	0.629	0.207	0.207	-	-
Estonia (1 national programme)	4.4	0.7	1.8	0.6	0.1	1.1
Finland (2 national programmes)	3.8	2.380	0.789	0.515	0.074	-
France (2 national programmes, 27 regional programmes)	26.4	11.4	8.4	6	0.6	-
Germany (1 national programme, 13 regional programmes)	26.8	8.3	10.8	7.5	0.2	-
Greece (1 national programme)	19.3	4.2	8.2	3.7	-	3.3
Hungary (1 national programme)	25	3.5	10.8	4.7	0.4	6
Ireland (1 national programme)	3.3	2.190	0.409	0.542	0.148	-
Italy (1 national programme, 21 regional programmes)	42.1	10.4	20.7	10.4	0.5	-
Latvia (1 national programme)	5.6	1.1	2.4	0.6	0.14	1.3
Lithuania (1 national programme)	8.3	1.5	3.5	1.1	0.06	2.1

D. 4.4: Report on the policy recommendations on how to integrate Cohesion Policy with Urban and Rural policies

Luxembourg (1	0.140	0.101	0.020	0.020	-	-
national programme)	0.1.0					
Malta (1 national	0.828	0.097	0.384	0.106	0.023	0.218
programme)	0.020			0.200		
Netherlands (1	1.7	0.607	0.507	0.507	0.102	-
national programme)						
Poland (1 national	85.2	8.6	40.2	13.2	_	23.2
programme)		8.0	70.2	19.2		
Portugal (3 national	25.8	4.1	10.7	7.5	0.4	2.9
programmes)	23.0			, .5		
Romania (1 national	30.6	8.0	10.7	4.7	0.2	6.9
programme)						
Slovakia (1 national	15.3	1.545	7.360	2.168	0.016	4.168
programme)		1.545	7.500			
Slovenia (1 national	3.9	0.838	1.390	0.717	0.025	0.895
programme)				· · · · · · · · · · · · · · · · · · ·		
Spain (1 national						
programme, 21	36.5	8.3	19.4	7.6	1.2	_
regional	33.3					
programmes)						
Sweden (1 national	3.6	3.6 1.763	0.945	0.774	0.120	-
programme)						
United Kingdom						
(4 regional	16.2	5.2	5.8	4.9	0.024	-
programmes)						

Source: <a href="https://enrd.ec.europa.eu/policy-in-action/rural-development-policy-figures/partnership-agreement-summaries">https://enrd.ec.europa.eu/policy-in-action/rural-development-policy-figures/partnership-agreement-summaries</a> en

In the period leading up to 2020, the Member States will most often implement measures, which were launched in the previous programming period. Among the most frequently implemented are the agri-environment-climate measures and payments on areas suffering from natural constraints or less-favoured areas (LFAs), as well as "physical" investments and investments counteracting various types of exclusion. It is expected that all rural development programmes implemented in 2014-2020 in the Member States will result in, e.g.:

- start-up support for approx. 170 thousand young farmers and 60 thousand rural entrepreneurs, carrying out of approx. 3.9 million vocational trainings and approx. 1.4 million individualised pieces of business advice for farmers and other rural entrepreneurs;
- support for approx. 2.5 thousand local action groups, and consequently creation of approx. 46 thousand new jobs, further 77.5 thousand jobs will be created by providing support for new non-agricultural companies on rural areas;

- support for approx. 300 thousand farmers to popularize operation of short supply chains, development of local markets, introduction of quality systems and establishment of agricultural producer groups;
- approx. EUR 5.5 billion for investments in projects concerning energy efficiency and energy generation from renewable energy sources (e.g. biogas);
- covering with the management programme approx. 17.4% of agricultural land (30.6 million ha) and 3.5% of forests (4.1 million ha) to better protect biodiversity;
- reduction in emissions of greenhouse gasses and ammonia corresponding to emissions generated by approx. 2 million cows or 3 million pigs.

The rural policy post-2013 is also characterized by its presentation in a broader spatial context. This trend gets stronger due to socio-economic and technological changes, ecological effects and the challenges and opportunities of rural areas. The new structure of the second pillar (six priorities instead of three axes) did not, however, lead to significant changes in the allocation of funds for individual measures. There appeared a great diversity in the methods of policy implementation, at national and regional level, as regards programme strategies and establishment of priorities, which is explained by the need to map the different needs of rural regions. If it comes to coherence of rural development policy with other policies, its core is to still support the LFAs and focus on sustainable agriculture.

Hence, are the objectives set out by the EU for implementation in the current programming period real and do they accurately identify real problems? According to the classic view on public finance, distribution functions are best implemented at the central level, while in terms of allocation – the level of governance should be maximally decentralized (Musgrave, 1959). This is crucial as regards public goods. Theoretically, the protection of pure public goods, where exclusion is not possible, should be within the competence of the central government and in the case of agriculture and rural areas – the competence of the EU institutions – because these are mainly cross-border goods. Agriculture is able to provide many environmental services, most of which are public goods. These may certainly include: agricultural landscape, soil quality, water quality and availability, air quality, etc. Public goods also have a broader, social character – food security or rural vitality. Typical pure public goods cover e.g. climate or biodiversity, and their scope is global. This is a strong argument for maintaining funding for relevant policies at transnational level (EU). However, most services provided by agriculture and related to public goods (except those with

cross-border effects) are local. Assessment of the involvement of public funds in the implementation of rural development policy for 2014-2020 (see Fig. 5) seemingly shows that it is generally accepted to transfer competences of the second pillar to the European level, provided that the effects of the omission in this area would have a pan-European dimension, and limitation of its competence in measures which do not have cross-border effects. Thus, it appears that identification of problems is justified, at least on the budget side.

The changes introduced by the post-2013 CAP reform can address the problems of rural areas only to a limited capacity, though. Maintaining the structure of the two pillars (pillar I – market policy, and pillar II – rural development policy) promotes dualism of agricultural policy, and sometimes even overlapping of some areas of competence (e.g. agri-environmental payments and direct greening payments) (Dupraz, Mahé, Thomas, 2014). The solutions adopted for 2014-2020, blur the previously clear limits between the rural development support and income support (e.g., support for producer organizations and risk management is in the second pillar, and funds for market support in crisis situations – in the first pillar), and Member States can transfer funds from the first to the second pillar. Although the programming of national programmes seems coherent and comprehensive from the documentation side, but is it really so – we will see after 2020 (IEEP, 2014).

#### 3.3. CAP and rural development policy post-2020

With regard to the CAP post-2020, many economists (Buckwell, 2015) believe that reform discussions should be launched as soon as possible. As arguments for that they name, for instance, the fact that the process requires time for preparation of proposals of solutions and usually long negotiations, the reform itself entails common understanding of the purpose and direction of the new policy, problems involved in implementation of the CAP in the current programming period call for urgent adjustments in the existing legislation, and the very CAP for 2014-2020 fails to adequately address the challenges facing the EU. They further reason that the arguments for the post-2020 CAP reform have already been rightly formulated during the discussions that swept through the European Commission in 2009-2013. All this means that the current CAP does not solve comprehensive problems identified at the time. Therefore, there raises a question: why today the arguments for the need to counteract climate change, conservation of water resources, sustainable and multifunctional development, biodiversity conservation, public goods, etc. are more relevant than they were in 2013? An answer to this question may, above all, focus on the statement that today Europe is richer with the experience form the past period and that the

political, economic and social conditions have changed completely. It also seems that some part of the EU population (confronted with the new challenges and economic and political crises) has stopped to accept the CAP expenditure. Thus, it is possible that in order to regain the public support for the CAP reform further greening will be essential. However, the effects of greening in 2014-2020 are still unknown.

Direct payments will also be important in the debate on the future of the CAP. This is due to their significance both in the total support given to farmers and in the CAP budget. Direct payments are the largest part of farm income support in the EU. In 2013-2015, they accounted for approx. 72% of the CAP budget and almost 30% of the total EU budget. Farm income is still greatly dependent on these payments. According to FADN data for 2004-2013, their share in net farm income was 47%, other public transfers represented approx. 15% of this income, and market income was 38%. Although the 2013 reform introduced various measures to offset the disparities in the distribution of direct payments between farms, a majority of payments still goes to farms whose agricultural income exceeds the median of farm income. Capitalization of direct payments raises the costs of entry into the market of new entities or activity expansion by the existing farmers.

Other challenges for the CAP and rural development policy beyond 2020 include: productivity growth and preventing low agricultural incomes, risk reduction and market volatility, counteracting outflow of people from peripheral areas and maintaining farming on less-favoured areas, shortening distribution chains and support for small farms, protection of the natural environment (soils, water resources and biodiversity) and cultural landscape, adaptation to climate change (reduction of greenhouse gas emissions, prevention of extreme weather events), development of renewable energy sources, food security and quality, animal welfare. It is clear that the first five challenges were the CAP objectives specified in the Treaty, while the rest were added as part of its reform (in the mid-1990s, and especially after launching the second pillar). Unfortunately, some of these challenges were created by agriculture and human economic activity, since both agriculture and humans contribute to the degradation of the "natural capital" (degradation of the natural balance in the environment). This refers to soil fertility, biodiversity, air and water quality, climate change. Therefore, a challenge to be tackled beyond 2020 will be to simultaneously improve resource efficiency and restore or conserve the natural capital on rural areas. Apart from the basic role – which is food production – agriculture will play a major role in bio-economy and environmental protection, sustainability in the economic, social and

environmental dimension, renewable energy generation, waste reduction, recovery of biomass and nutrients. It will also be vital to strive for a proper balance between agriculture, forestry and land use, as well as to strive for reduction in greenhouse gas emissions.

The EU community cannot, however, agree which of the aforementioned challenges are the most important ones and should be considered as priority. On the contrary, there are many opposing views, some parties are primarily interested in income and want to focus on improving productivity and efficiency, while others are concerned with crossing of environmental barriers. The tensions between sectoral and territorial measures and cohesion of the CAP with the Cohesion Policy continue to be fundamental. Certainly, the future rural development policy will more strongly emphasize the efforts at a more strategic and integrated approach focused on sustainable and harmonious territorial development.

Given their economic, social and environmental potential, rural areas are crucial for Cohesion Policy implementation in the EU. In 2016, over half of the EU population lived outside the city limits, and the rural areas constituted approx. 90% of the territory of 28 Member States. Agriculture and forestry are key sectors of the economy from the perspective of natural resources management. At the same time, they are a platform of multifunctional development and diversification of economic activity in rural communities.

Over the last decades, the agricultural policy slowly evolved from strictly market policy to multifunctional policy and sustainable rural development (with a still very important element of income support – direct payments). Policy programming started to better reflect the diversity of agricultural needs of respective Member States and their rural areas, and also their different possibilities. In order to guarantee greater efficiency and measureable benefits, a number of environmental and social measures were included into the rural development policy (public goods, new climate challenges, sustainable and multifunctional development, counteracting social exclusion).

Further adjustments of both agricultural and rural policy objectives and their budget to cohesion with other policy areas, even though brought their areas of mutual correlations closer, still leave much to be desired as regards synergies (they are relatively limited and some activities led directly to increasing disparities). Moreover, there is little evidence that the second pillar of the CAP had a significant impact on reducing territorial differences. To gain support for keeping the rural development policy in the European dimension, the policy should be reprogrammed so as to prove

that, in addition to its territorial advantages, it benefits all residents or rural regions and affects the entire society.

#### 4. Territorial development objectives in case study regions

In the report prepared under the PRECEIVE project framework, Collins et al. (2017b) analyse the interaction between regional Cohesion Policy (CP) and rural, development and agricultural policies (RP) of the EU over the 2007-2013 programming period. This study showed no significant relationship between Total Cohesion policy and Total Rural policy, however, when Cohesion Policy is disaggregated, Total Rural policy has a positive and significant impact on IT infrastructure and services policy. Furthermore, disaggregating Rural policy does show nuances of synergy between subcategories of cohesion and rural policy.

Finally, when the above synergies are further explored to test if they depend on structural characteristics of territories, the analysis shows that structurally disadvantaged regions attract expenditure synergies between Total Rural policy and Total Cohesion policy, therefore, providing evidence to support the presence of 'pro-cohesion' policies that exert a cumulative impact by focussing on structurally disadvantaged regions.

Based on the above-described findings we tried to identify the regional strengths, weaknesses and needs to be potentially addressed by policy mix. To operationalize this vast task we applied a comparative analysis of the case study regions. This analysis was based on the case study reports prepared for the PERCEIVE deliverable D1.1 "Report on regional case-studies" (Aiello et al., 2017). These reports included SWOT analysis of six different aspects of the case study regions, including:

- 1) business and local production competitiveness systems.
- 2) education, research and development, innovation,
- 3) infrastructure facilities,
- 4) poverty and social exclusion,
- 5) natural and cultural heritage and tourist attractiveness,
- 6) energy and environmental protection.

SWOTs for each of the case study regions were prepared based on statistical data, regional operational programmes and regions' development strategies that were discussed with regional

experts. As the regions were chosen to represent all the types of the EU regions identified for the purposes of the Cohesion Policy, they reflect the complex and heterogeneous reality of the EU Cohesion Policy, namely the diverse experiences among EU regions in its implementation.

The first step of the analysis groups the SWOTs for each of the analysed aspects into the cohesion types of regions.

The second step of the analysis, concentrates on identifying common characteristics within a given type of region. Therefore, the SWOTs prepared for deliverable D1.1 were abbreviated to core issues and problems that offer a concise overview of the specificity of each of the case study regions.

The third step was to verify whether there are similarities in the problems and solutions to them among regions representing the same type of the Cohesion Policy regions.

Finally, the paper verifies the existence of similarities between different types of regions, namely regarding opportunities and threats related to their current state of development.

The findings show that real problems and methods of approaching them are similar within a given region type, yet there are also significant similarities between different types of regions concerning problems in socio-economic development.

#### 4.1. Business and local production competitiveness systems

Table 4.1.1. Business and local production competitiveness systems –competitiveness regions

Emilia-Romagna ITH5				
Strengths	Weaknesses			
High employment .	Decreasing employment and growing youth			
Production specialized in the agri-food,	unemployment.			
mechanical, mechatronics and motoring, and	Decline in the number of businesses.			
construction sectors.	Company size below the European average.			
Constant growth of export.	Backwardness in the use of advanced ICT.			
Foreign direct investment.				
Opportunities	Threats			
Exploitation of specialisations on international	Low domestic demand for investment and			
level.	advanced services.			
Innovation ecosystems and business cooperation	Delay with respect to new demand trends.			
policies.	Insufficient attention to public policies for the			
Building of a "system" – departing from a structural	production system's attractiveness and promotion.			
base of relationships, skills, mappings and places,	Industries that had cooperated find themselves, in			
built through the Cohesion Policy.	some cases, failing within the same industry.			

D. 4.4: Report on the policy recommendations on how to integrate Cohesion Policy with Urban and Rural policies

Norra Mellansverige SE31	
Strengths	Weaknesses
Strong exporting industrial branch with a quality	Less diverse employment industry and
labour force.	lower diversity of opportunities in the workforce
Strong clustering of businesses within certain	leaves the region more vulnerable.
fields.	Higher levels of unemployment than country
	average.
Opportunities	Threats
Investments in adult jobs training to encourage	The youth trends in migration
new skills for a changing workforce	Low level of new small businesses,
Specialization in renewable energy jobs	The key industries of the region tend to be those
	dominated by a male workforce
Essex	c – UKH3
Strengths	Weaknesses
High employment and low unemployment rates.	Labour productivity and
Upward trend of:	high rate of Youth unemployment.
export trade volume,	SMEs difficult access to credit.
propensity to export,	
foreign direct investment .	
Opportunities	Threats
Impact of the EU enlargement .	Impact of the economic crisis.
Impact of Trans-European Transport Network	Effect of economic crisis – narrow economic base
(TEN-T).	limits resilience.
	Brexit – relations with the international market
	Impact of migration flows.
	Effects of the enterprises delocalization process.

Competitiveness regions are likely to be strong in manufacturing and traditional sectors and attractive for investments (Emilia-Romagna, Norra Mellansverige, Essex). Opportunities are, therefore, connected with further expansion of strong sectors, but with adjustments regarding competitiveness on foreign markets and improvement of regional business system. The last one is related with better cooperation among regional partners and efforts toward strengthening labour force. On the other hand, strengthening the traditional sectors is accompanied by an inability to stimulate youth employment, namely toward more advanced sectors. Sluggish growth of small and medium enterprises additionally confirms the need to redirect development policies toward greater inclusion of the youth in the business system. Otherwise the economic potential of the regions would suffer from future shortage of informed and qualified labour force and sectors of the economy.

Table 4.1.2. Business and local production competitiveness systems – convergence-phasing out region

Burgenland AT11	
Strengths	Weaknesses
Both high employment and low unemployment rates are strengths of the labour market in Burgenland.	Foreign Direct Investment is focused on industry (not services) and below the EU average. Less developed tertiary sector (services and technology).
Opportunities	Threats
The impact of the economic crisis was less pronounced in Burgenland. The EU enlargement and migration fluxes sustained occupation and population growth.	Lower export and import rates in comparison to other more industrialised regions in Austria.  EU enlargement and migration fluxes might create public opinion concerns.

Burgenland is the only case study region representing convergence-phasing out of the EU regions. Similarly to investigated, more advanced, regions relatively high employment rates are considered as a strength. Again the business sector seems to be focused on traditional industries. Growth of these sectors is supported with incoming population growth. However, dependence on immigration causes concerns a the public opinion which are not directly covered by development-Cohesion Policy.

Table 4.1.3. Business and local production competitiveness systems – convergence regions

Extremadura ES43	
Strengths	Weaknesses
Active employment policies and modern sector	Low population density and population growth.
education orientated.	Low activity and employment rates of young
Specialization towards sectors with natural	people with polarization of the youth labour
comparative advantages and high competitive	market: some drop out of low-skilled and other
potential.	highly skilled are underemployed.
Strong food and construction sectors.	High specialization in primary activities and low in
Advances in modernization of organizational	industry and market services.
structure in large groups of the SMEs.	Low specialization of employment in technological
Growth of external trade and FDI flow.	and knowledge-intensive sectors.
	Poor integration and competitiveness in the
	European and world economy.
Opportunities	Threats
Promotion in the last years of public instruments of	Low population and low income.
support to business financing.	High unemployment with tendency to increase
Large availability of European Funds,	NEETs problem and aging of the active population.
Improvement of university-level human capital,	Weak growth reflecting productivity problem and
Attractiveness of the Portuguese market for the	difficult access to credit.
region's exports.	Lack of region traditional sectors modernization.
Increased use of associative formulas to access	Excessive reliance on the public sector.

internationalization and development of public	Reduction in the amount of European Funds in
programmes.	case of losing the status of "Convergence Region" in the future.
	Excessive weight in the exports of agricultural and
	little technological component products.
	Limited export activity outside the EU.
	Lack of strategic planning of internationalization
	processes due to low export culture.
Calabi	ia ITF6
Strengths	Weaknesses
Presence of typical quality productions and	Low regional employment rate.
agricultural and food products with territorial	Vast unemployment including NEET.
specificity.	Weak demand for advanced services by very small
Consolidated industrial specialisation in various	enterprises and few medium enterprises, often
sectors of the agricultural and food transformation.	only with a local range.
-	Difficulty for SMEs to access credit.
Opportunities	Threats
Promising economic fields of action for the	Production delocalisation in the absence of growth
adoption of the Smart Specialisation Strategy	and internationalisation of micro and SMEs also
(agricultural and food industry, cultural and	with high innovative content.
creative industry, bio-construction, information	Increase of territorial digital gaps, scarce use of
and communication, logistics, environment, life	emerging technologies and reduced use of ICT
sciences).	products and services in productive and
Increase of the national and international demand	
Increase of the national and international demand	commercial scopes of action.
•	
Increase of the national and international demand for quality agricultural and food products linked to territorial identity.	commercial scopes of action. The number of jobs created during the 2007-2013 programme was below the envisaged target.
Increase of the national and international demand for quality agricultural and food products linked to territorial identity.  Warmińsko-N	commercial scopes of action.  The number of jobs created during the 2007-2013 programme was below the envisaged target.  Mazurskie PL62
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Increase of the national and international demand for quality agricultural and food products linked to territorial identity.  Warmińsko-N Strengths The presence of large domestic and foreign	commercial scopes of action. The number of jobs created during the 2007-2013 programme was below the envisaged target.  Mazurskie PL62 Weaknesses Low competitiveness of the region as a result of
Increase of the national and international demand for quality agricultural and food products linked to territorial identity.  Warmińsko-N Strengths The presence of large domestic and foreign companies and successful utilization of regional	commercial scopes of action. The number of jobs created during the 2007-2013 programme was below the envisaged target.  Mazurskie PL62 Weaknesses Low competitiveness of the region as a result of distance from major markets and sources of
Increase of the national and international demand for quality agricultural and food products linked to territorial identity.  Warmińsko-New Strengths  The presence of large domestic and foreign companies and successful utilization of regional natural resources in business.	commercial scopes of action. The number of jobs created during the 2007-2013 programme was below the envisaged target.  Mazurskie PL62 Weaknesses Low competitiveness of the region as a result of distance from major markets and sources of energy.
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National infrastructure investment programs in			
energy and transport infrastructure.			
Dolnoślą	Dolnośląskie PL51		
Strengths	Weaknesses		
Rich in mineral resources and strong and diverse	Unfavourable demographic trends.		
industry.	Lover than average quality of government (EQI).		
High level of working age population.	Unsatisfactory cooperation between business and		
Relatively high educational level.	research and development sector (namely small		
High concentration of transport routes of national	and medium enterprises).		
and EU importance.	Low investment capacity of small and medium		
Developed services for businesses including	enterprises.		
modern sectors as ICT and research and	Low number of projects under network		
development.	cooperation.		
	High level of unemployment among young people.		
Opportunities	Threats		
Increased access to capital for business	More competitive opportunities for career		
development through EU programmes.	development outside the region and outflow of		
Development of trans-border tourism cooperation	human capital.		
with the use of special EU funds.	High level of national taxation and unstable		
Adjustment of policies stimulating cooperation	regulations for business sectors.		
between research and development sector with	Moving out of the region by the management of		
business and international cooperation.	local companies		
Flexible regulations allowing for cooperation	Centralization of development programmes and		
between public and private sector.	development funds.		
Partnership of local administration to implement			
common projects.			
Sud Est Ro	mania RO22		
Strengths	Weaknesses		
Relatively low unemployment rate.	Significant disparities with regard to the economic		
Integration of young people into the labour market	development level across the region.		
<ul><li>decrease of NEET.</li></ul>	Relative industrial specialization of the region SMEs		
Increase of economic competitiveness.	is determined by low cost of resources.		
Relatively diversified industrial sector.	Seasonality of certain activities (tourism) in the		
The setting up of new enterprises accelerated	region.		
increase in modern sectors of economy.	Low employment rate in technology and		
The EU membership has positively influenced the	knowledge-intensive sectors.		
attraction of foreign direct investments.	SMEs access to finance.		
	Low export and low processing level of exported		
	products.		
Opportunities	Threats		
The diversified geographical structure of the region	Foreign direct investment flows decreased as the		
SE.	effect of the economic crisis.		
Specialization in the production and export of	Deficit of the balance of trade and decrease of the		
certain products.	processing level of exported products.		
The EU enlargement represents an opportunity for	Relocation of industrial production to other		
NMS, due to the EU funds available for their	regions.		
integration, but this depends on the absorption	Strong external migration for work.		
capacity and effective governance of this process.			

Convergence regions see their main development concerns in the inability to stimulate employment, namely by creation of attractive jobs for the youth. Reliance of business on traditional sectors, which are subject of modernization processes, suggests traditional point of view on development. Despite interest of foreign capital that results both in improvement of trade and labour markets, there is a high threat of relocation of the new companies to more competitive regions. The improvement of quality of labour forces, internal cooperation of businesses and further utilization of development funds are recognized as priority actions. Similarly problems of access to credits of SMEs reflect the potential direction of the policy reform.

#### 4.2. Education, research and development, innovation

Table 4.2.1. Education, research and development, innovation – competitiveness regions

Emilia-Ror	magna ITH5
Strengths	Weaknesses
High share of people in tertiary education and higher than the country average. High rankings of universities. Patents – 15% of the national total, higher per capita average than that of Europe. Higher than the country and EU average share of graduates in technical and scientific subjects. Presence of important national research institutions. Regional companies' propensity for innovation. Specialisation in medium-high technology manufacturing sectors.	Low intensity of investment in R&D. Infrastructures for R&D still too fragmented. Low share of employment in high-level knowledge services.
Opportunities	Threats
Emerging needs and new demand in high- specialization sectors. Funds and targeting the development of industrial research and innovation.	Persistence of low national commitment to research and innovation.
Norra Mellar	nsverige SE31
Strengths	Weaknesses
Three universities with specializations in studies that favour the region's geographical needs.	Lower percentage of post-secondary educated population than the national average.  Low level of R&D investments and firms doing R&D.
Opportunities	Threats
More investments in education and social services might attract more young people and ease the decline in the youth population.	Relatively low levels of R&D and higher education among the population make future developments in new businesses and industry less likely.
Essex	UKH3
Strengths	Weaknesses
Range of tertiary education institutions Networks between SMEs and research centres.	Percentage of people with tertiary education above the EU, but below the UK average.

	Low R&D spending.
	Patent application below UK average.
Opportunities	Threats
-	Impact of Brexit.

Case study investigation of competitiveness regions underlines their strength regarding the level of education and accessibility as well as the quality of the educational sector. Despite the good base, the need for further improvement is stressed. This includes the need for increasing the R&D spending and connections between research and business sectors. The problems that should be better reflected in policies are likely to be connected with unsatisfactory research and educational effort regarding high-specialization sectors. Preferences for research serving present industry needs with unsatisfactory national commitment to research and innovation results in threats to future attractiveness of these regions.

Table 4.2.2. Education, research and development, innovation – convergence-phasing out region

Burgenland AT11	
Strengths	Weaknesses
Networks between research centres and SMEs.	Tertiary education attainment and investment in research and development.
	No higher education institution in international rankings.
Opportunities	Threats
The next funding period focusing on R&D and	International opportunities for scientific research
innovation.	international opportunities for scientific research

The investigated example of the convergence-phasing out region points to greater external opportunities for researchers as main threats for their further development. Strong call for investment in tertiary education and research and development sector, is therefore justified. Bearing in mind good cooperation between research and business sector, integration of R&D and innovation policies with policies supporting SMEs would be a solution.

Table 4.2.3. Education, research and development, innovation – convergence regions

Extremadura ES43	
Strengths	Weaknesses
Significant increase in the share of population with	Low formative level.
higher education.	High dropout rate.
Different learning initiatives in education.	Low ranking of the University.
R&D expenditure in the higher education sector	Low R&D spending.
higher than the Spanish average and similar to	Reduced presence of high and medium technology

EU-28.	sectors.
The research lines are closely linked to the main	
economic activities.	Low patent number.
	Shortage in advanced RDI services for
Availability of advanced scientific and technological infrastructures.	companies.
	Excessive public intervention in the
Instruments to foster cooperation between R&D and business.	development of high technology companies and
and business.	projects.
	Low interaction between companies and research centres.
	Innovative culture underdeveloped in the region.
Opportunities	Threats
Potential of new technologies for SMEs.	Brain drain.
New models of public-private collaboration.	Loss of competitiveness.
Expanded international markets using ICT.	Loss of competitiveness.
Innovative potential of traditional sectors.	
Research and innovation in	
the field of environment and energy.	
Increased European funding for R&D.	
Innovative potential of traditional sectors.  Promotion of business innovation.	
	ria ITF6
Strengths	Weaknesses
Progress in the qualification of technical and	Share of tertiary education graduates below the EU
vocational education and training.	and national average level.
Regional system of infrastructures for research.	Very low R&D spending.
Scientific and technological competences.	Scarce attractiveness of universities.
scientific and technological competences.	Low number of patents.
	Extremely low share of graduates in technical
	subjects.
Opportunities	Threats
Development of new markets for innovation in	Reduction of R&D competitiveness.
sectors of social or territorial relevance.	Low R&D expenditure.
sectors of social of territorial relevance.	Brain drain.
 Warmińsko-N	Nazurskie PL62
Strengths	Weaknesses
Large resources of labour.	Persisting poor education of residents.
Increasing percentage of people with higher	Low number of graduates of technical faculties.
education.	Low R&D expenditure.
Increasing number of graduates of technical	Very low number of patents.
faculties.	Lack of cooperation between R&D and business.
Increasing R&D expenditure.	
Engagement of public authorities for	
innovativeness.	
Opportunities	Threats
Inflow of highly qualified personnel to the	Aggravating discrepancies between the
universities.	educational level, R&D and economic
Interest of external capital in the region.	innovativeness and the national and EU average.
Creating system of support for the process of	High risk aversion among local entrepreneurs.
patenting inventions.	Outflow of highly skilled persons, in particular
Increasing the number of graduates of technical	those having technical skills.
faculties.	Reorientation of the public support exclusively

D. 4.4: Report on the policy recommendations on how to integrate Cohesion Policy with Urban and Rural policies

Making use of the current R&D.   Unique resources of surface waters.		
Strengths   Weaknesses	_	towards innovation activity.
Strengths Relatively high share of the working age population. Strong academic centre and development of higher education in other cities of the region. Share of the population with higher education close to the EU average Increasing social activity of local communities and Increasing expenditure for R&D. Relatively high number of patents. Increase in the number of graduates of universities, in particular of the technical faculties.  Opportunities Adjusting the concept of education and training to the requirements of the labour market. EU funds. Partnership of the local self-government and NGOs.  Sud Est Romania RO22 Strengths  Growing percentage of higher education graduates.  Networks between the RDI and SMEs.  Extremely low number of patents. Networks between the RDI and SMEs.  Existence of national and European programmes aimed at the internationalization of research and the European network.	·	
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Existence of national and European programmes aimed at the internationalization of research and education to the European network.		stage.
aimed at the internationalization of research and education to the European network.	Opportunities	Threats
·	Existence of national and European programmes	Poor connection of the research and higher
higher education. Migration of young and highly qualified people.	aimed at the internationalization of research and	education to the European network.
	higher education.	Migration of young and highly qualified people.

The main concern of convergence regions regarding education, research and development and innovation sphere, is connected with the brain drain phenomenon. The visible improvement in the educational level is accompanied by an insufficient research and development progress. Together with extremely low numbers of patents, only integration of different polices would allow for reconstruction of the education, research and development and innovation system. Improvement of education and research quality, e.g. using stronger networking, is considered as a preferable policy action.

#### 4.3. Infrastructure facilities

Table 4.3.1. Infrastructure facilities – competitiveness regions

Norra Mellansverige SE31	
Strengths	Weaknesses
Good access to other strong-growth regions and	Infrastructure is lacking in some areas, and often
advanced high-speed train connections with some	distances are quite long to travel from one
cities in the region.	town/city to the next.
Very high proportion of Internet access despite it is	The western side of the region is less connected to
a rural region.	the high-speed train system linked with capital
Small cities with solid collective transportation.	than the eastern.
Opportunities	Threats
Building greater access to towns and cities within	The region, which lacks a larger cosmopolitan city
the region as well as nearby growth centres	and high level transportation and full Internet
outside the region will help to slow down out-	coverage does not attract multi-national
migration of population from rural areas and aid	companies (MNCs) in the same way as other
with future investments from outside the region.	regions in the country.
Essex	UKH3
Strengths	Weaknesses
Dense road, motorway and railway systems –	Key transport corridors are operating at or close to
coverage in line with UK average.	capacity, and are considered to be one of the main
Quality of road, motorway and railway systems –	barriers to economic growth in Essex.
broadly in line with UK average.	
Coverage of the airport services is satisfactory.	
Opportunities	Threats
Links to London	Government decisions on airport expansion – or
Links to international gateways (London Gatwick	improved surface transport links to fully utilise
and Harwich Ports, Stansted and Southend	existing capacity.
airports).	Complex partnership environments.
Infrastructure facilities can take advantage of the	
national/international commercial and tourist flow.	

Strong connections with other regional centres are considered the key element of infrastructure together with internal links. Namely, further investments in infrastructure would prevent outward migration of people and businesses. Strengthening links with major country and international transport corridors would attract multi-national companies.

Table 4.3.2. Infrastructure facilities – convergence-phasing out region

Burgenland AT11	
Strengths	Weaknesses
The quality of roads, motorways and the coverage of airport services in Burgenland is satisfactory. Development of eco-friendly transportation systems.	Less developed transportation system and access to airports in Südburgenland when compared to Nordburgenland
Opportunities	Threats
While TEN-T forms an opportunity for Burgenland,	North-South disparities might increase as

it has benefitted from other projects too.	Südburgenland remains disconnected.
Infrastructure facilities are able to absorb	Sustaining investments in tourism might aggravate
commercial and tourist flows with some places in	as current transitional phase does not allow for
Burgenland, however, being largely dependent on	tourism infrastructure funding.
car transport.	-

In convergence-phasing regions supporting infrastructure connected with tourism sector together with improvement of inter-region communication links would help to stimulate growth and diminish internal disparities. Application of environment-friendly solutions would be a justification for investment supporting policy adjustment.

Table 4.3.3. Infrastructure facilities – convergence regions

Extremadura ES43	
Strengths	Weaknesses
Modern network of road transport infrastructure.	Medium-low density of road infrastructures
Airport with daily connections with	due to the large territory and long distances
Madrid and Barcelona.	between population centres.
	Seniority of the rail network.
	Very low modal share of commodities transport
	by rail (the smallest of the main EU countries).
	Drops in passenger traffic in the analysed period.
	Difficult access to the region.
Opportunities	Threats
Improvements in infrastructure are causing	The great territorial extension causes problems
growing territorial cooperation processes, which	of accessibility to the main roads of remote
indicate a progressive functioning of the network	municipalities, which could lead to their exclusion
of cities and towns.	and marginalization from future economic
The improvement in the road network is	improvements.
contributing to the consolidation of a system of	Improvements in the road network compared to
intermediate cities that act as a base of economies	the rail network could accentuate the greater
of local scope.	weight of road transport, with the associated
	environmental impact.
	The peripheral situation of the region could
	significantly reduce the effectiveness of
	investments in transport infrastructures.
Calabria ITF6	
Strengths	Weaknesses
Presence of harbours for travellers and goods of	Serious lack of infrastructure and services,
which some have great potential which is still not	constituting a severe obstacle for environmental
exploited.	sustainability and the quality of life and work in
Presence in the region of three airports, with	Calabria.
significant growth potential as regards the flows of	Dominance of car transport with strong negative
passengers and goods, developed in the last years	externalities from environmental, social and
in terms of infrastructures and services (air side	economic viewpoints, especially in cities.
and land side).	Absence of cooperation and integration strategies
	among the region's airports.
	Low number of Local Public Transport users.

	-
	Absence of coordination between rail and road
	services.
Opportunities	Threats
Growing awareness among public institutions of	Reduction of the region's productive
	competitiveness due to the lack of connection of
the enormous costs deriving from an inefficient	•
transport system.	the secondary and tertiary junctions to the TEN-T
Growing tendency of the Central Southern regions	infrastructures and multimodal junctions.
(Lazio, Campania, Puglia, Sicilia) to use the harbour	Departure from the national and European
of Gioia Tauro.	standards concerning the sustainability of the
	regional and local transport systems.
	Starting with a programme that envisaged a list of
	big projects: undergrounds, two dams, Abatemarco
	and Menta. The problem of the completion of the
	water schemes was faced. Not accomplished.
	Mazurskie PL62
Strengths	Weaknesses
Favourable location – six border crossing points in	Poor communication accessibility of the region.
the voivodship: 3 roads and 3 railways.	Peripheral location in relation to domestic and
Location in the Baltic Sea region, border with the	foreign activity centres.
Baltic Sea from the west through the Vistula	Requirement to protect the natural environment.
Lagoon.	Significant spatial volatility in the region with
Favourable natural conditions for the development	respect to natural, communication and economic
of tourism.	factors.
Significant share of waters in the area of the	Significant dispersion of settlement network, low
voivodeship.	population in rural areas, emerging depopulation
Free land/space for investment.	areas.
Even distribution of city networks with supra-local	Bad technical condition and inadequate
functions.	parameters of roads and railway infrastructure of
	regional and supra-regional importance.
	Lack of direct rail links between individual urban
	centres.
	Improperly functioning regional airport.
	Poor technical infrastructure in rural areas and
	small towns including waste management.
	Insufficient infrastructure for tourism
	Urban, post-military, post-industrial areas requiring
	revitalization.
Opportunities	Threats
Construction of Via Baltica and expressway s7	Omission of regional needs in planning national
routes.	and international communication corridors.
The development of low cost airlines.	Insufficient use of the opportunities created by the
Possible direct access to the sea.	border location.
Greater use of natural and cultural values for	Significant decrease in the length of operated
tourism development.	railway lines.
Increased budget outlays, including the EU funds,	,
for infrastructure.	
Development of residential features in rural areas	
surrounding large cities.	
	skie PL51
Strengths	Weaknesses
Well-developed transport infrastructure (road, rail,	Standard of accommodation and catering facilities
The severoped dansport initiastructure (road, rail,	Standard of decommodation and catering facilities

water, air) with extensive network of roads of	and tourism infrastructure below European
international importance.	standards.
Attractive and diversified system of components of	High intensity of crisis in urban space, post-
the natural environment.	industrial and post-military areas.
Abundant resources of mineral waters, including	Low technical and functional standard of public
thermal waters.	roads and railway lines and stations.
Dense network of railway lines and stations.	Low utilization of the airport.
Airport with regular domestic and international	Spatial variation of the equipment of the region
flights.	into devices and networks of local technical
	infrastructure.
Opportunities	Threats
Extension of cross-border connections as part of	Delays in the construction and reconstruction of
the European transport network.	transport infrastructure.
Comprehensive realization of the expressway and	Low density of express roads networks and
motorway system.	insufficient access to "big cities".
Development of active winter and summer	The inadequate number of ring roads of the
tourism.	villages and insufficient capacity of highways.
Modernization of the national railway.	Limited transport accessibility of the southern and
Possibility of developing sea-river transport by	partially northern parts of the voivodship.
means of inland waterway access to a harbour.	Failure to adhere to the technical parameters of
Development of logistic centres with inland	a large part of the roads and some bridges.
waterway transport.	Inadequate institutional and legal support for
Successive development of the gas network.	inland waterway development by public
Development of renewable energy sources.	institutions.
Revitalization of urban, post-industrial and post-	Delays in modernizing environmental
military areas.	infrastructure.
·	Increasing risk of investing in flood-prone areas.
Sud Est Ro	mania RO22
Strengths	Weaknesses
Multiple transport possibilities: road, railway, air	Great distances between the urban centres and
and water:	the Pan-European corridors:
- the most important European river goes across	- low intermodular connectivity, absence of
the region, the Danube (fully navigable waterway)	a bridge over the Danube connecting urban areas,
and the region borders on the Black Sea,	- significant share of the public roads and the
- the country most important port Constanţa	railway network in the region are below European
provides all types of transport (road, railway,	standards,
maritime, air transport and transport via pipelines	- ports are not sufficiently integrated for the modal
for oil),	transport of commodities and passengers,
- in 2007-2013 some extension of the motorway	- absence of required technical maintenance
network took place, as well as of modernized	services for aircrafts and passengers facilities.
roads,	
- there is a tendency (however slight) to extend the	
electrified rail network,	
- existence of 4 airports in the region (out of which	
1 international airport).	
Opportunities	Threats
Localisation of the region – crossed by 3 Pan-	Relative isolation of the region from the EU in
European corridors.	terms of road, rail and air transport quality.
The port Constanța located in the TEN-T network,	Irrational development of river and maritime
endowed with warehouses and terminals for all	transport can lead to biodiversity loss.

become the main gateway for the Europe – Asia	with negative effects upon trade and tourism flows
Corridor for commodity traffic.	
Romanian ports in the region represent an	
important component of the European sea-river	
network (the Danube and the Black Sea).	
The transport on the Danube and Black Sea	
represents an economically viable alternative, less	
polluting than the terrestrial transport.	
Base to develop regional airports.	

Problems of infrastructure in investigated convergence regions are connected both with inadequate density of network and their quality. In case of geographically isolated and sparsely populated regions, high cost of maintenance of communication networks creates certain problems for local governments. In most cases, improvement of existing infrastructure would be a sufficient step forward accompanied by development of national and transnational corridors. Policies supporting infrastructure development planning on higher than regional level would result in optimal allocation of investments.

#### 4.4. Poverty and social exclusion

Table 4.4.1. Poverty and social exclusion – competitiveness regions.

Emilia-Romagna ITH5		
Strengths	Weaknesses	
Lower than the national and EU averages share of	Approx. 1/5 of the population at risk of poverty	
people at risk of poverty and social exclusion.	and social exclusion.	
Lower than the national and EU share of families with	Early school drop-out rate higher than the EU	
low work intensity.	average.	
	<b>—</b>	
Opportunities	Threats	
Lowering the early school drop-out rate and increasing	Risk of increasing the share of population at risk	
professional competences of school drop-outs.	of poverty and social exclusion.	
Norra Mellansverige SE31		
Strengths	Weaknesses	
Low level of poverty compared to the EU.	Relatively small, dispersed and declining	
	population.	
	Rural outward migration.	
	Lower diversity of work places.	
Opportunities	Threats	
More investments in jobs for youth to prevent	Decline and aging of the population.	
outward migration.	Reliance on social services of depopulated	
	communities.	
Essex UKH3		
Strengths	Weaknesses	
Comparatively attractive workers' wages for	Large share of early school drop-outs.	

businesses.	Growing share of people at risk of poverty and
	social exclusion.
Opportunities	Threats
Effects of national policies.	Low skilled labour force.

Relatively high level of wages and lower level of poverty compared to the EU averages is accompanied by large population of early school drop-outs. The future problems are related with low quality labour force incapable to undertake knowledge-intensive jobs. Outward migration of young population from rural areas creates unattractive environment for investments. National policies and stimulus for young population to increase their professional competences are pointed out as a possible solution to avoid poverty increase.

Table 4.4.2. Poverty and social exclusion – convergence-phasing out region.

Burgenland AT11	
Strengths	Weaknesses
Lower than the national and EU averages share of people at risk of poverty and social exclusion.	-
Opportunities	Threats
The EU and national engagement in reduction of poverty and exclusion.	Populism in politics generated using the EU enlargement and refugee crises.

Investigation of convergence region pointed out the problem of populism policies causing social tensions against enlargement and refugees acceptance. This requires more coordination and common agreement on the EU level, to optimise the related actions aiming at reduction of poverty and social and economic exclusion.

Table 4.4.3. Poverty and social exclusion – convergence regions

Extremadura ES43	
Strengths	Weaknesses
Decreasing poverty rate.	High unemployment rate, leading to a high
Decrease in early school drop-outs.	poverty risk rate.
	High dispersion of the population.
	High female inactivity rate.
	High level of exclusion and poverty.
Opportunities	Threats
Development of regional Plans of Social Inclusion.	Aging population.
Policies to promote the development of technologies	
increasing the quality of life.	
Calabria	ITF6
Strengths	Weaknesses
Decrease in early school drop-outs.	Almost 50% of citizens at risk of poverty and
	social exclusion.
	High share of material deprivation.

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	High chare of families with law labour intensity
O contraction and the contraction of the contractio	High share of families with low labour intensity.
Opportunities	Threats
Modernising employment services system.	Decreasing accessibility of social, cultural and
Enhancement of social economy and partnerships for	recreational services.
social innovation.	1: 0:00
Warmińsko-Ma	
Strengths	Weaknesses
Existing social support system.	High unemployment and bad economic situation
NGOs operating in the field of social policy.	of families.
Programmes for solving social problems at regional	Long-term dependence of families on benefits of
and local levels.	the social security system.
	Inadequate financial resources of municipalities
Openantumities	and counties for solving local problems.
Opportunities	Threats
Existing system of legal norms.	Aging of the population.
The EU and national funds for social integration.	Inadequate housing policy.
Flexible forms of employment.	Legal regulations promoting single motherhood
Development of infrastructure to meet the changing	to obtain additional support.
social needs.	ia DIF1
Dolnośląsk	
Strengths  Light share of the working age negulation	Weaknesses
High share of the working age population.	Low birth rate and negative migration balance.  Lack of integrated approach to solving social
Growing civic activity.  Increasing social capital.	problems.
increasing social capital.	High poverty risk.
Opportunities	Threats
Increased activity of NGOs.	Unfavourable demographic trends.
Development of information society.	Growing asymmetry in access to social services in
Development of information society.	the rural and urban areas.
Sud Est Rom	
Strengths	Weaknesses
Integrated approach for targeting the vulnerable	One in two persons at risk of poverty or social
groups.	exclusion.
διοάρο.	Very high poverty risk rate.
	Very high material deprivation.
	High rate of early school drop-outs.
Opportunities	Threats
Economic growth.	Low adequacy of the social assistance benefits.
Leonomic growth.	Fragmentation of social services.
	Weak administrative capacity to absorb funds for
	social inclusion.
	SOCIAL HICUSION.

High poverty and social exclusion risk observed in convergence regions seem to be well-addressed in policies. Improvement is explained with a decrease in early school drop-outs, growing economic and social activity of citizens. However, in some regions absorption of funds for social inclusion is a result of ineffective administration. Integrated approach to solving social problems, instead of

direct social support is more promising. This, however, requires development of more flexible forms of employment opportunities with active role of NGOs to stimulate innovative solutions.

#### 4.5. Natural and cultural heritage and tourist attractiveness

Table 4.5.1. Natural and cultural heritage and tourist attractiveness – competitiveness regions

Emilia-Romagna ITH5		
Strengths	Weaknesses	
Protected sites.	Falling number of visitors in museums.	
Monitoring and control of the state of biodiversity	Decreasing length of tourists' stay.	
conservation.	Weak growth in accommodation capacity.	
Increase in forestry areas of high natural and environmental value.	Seasonality of tourist flows.	
Opportunities	Threats	
Further growth in recreational, cultural and tourist activities.  Recognition and enhancement of typical and	Scarcity of national resources for redevelopment of the heritage of cultural and environmental assets.  Difficulty in promoting tourist destinations at	
quality products.	international level.	
High potential for tourism development in urban centres and deseasonalisation of tourist flows.	Fragmentation of the tourist offer.  Weakening of economic activities in the urban centres.	
Norra Mella	nsverige SE31	
Strengths	Weaknesses	
Strong tourist industry.	Touristic offer lacks diversity.	
Central location in Sweden.	Threats	
Opportunities		
Investments in the tourist industry. Climate change.  Essex UKH3		
Strengths	Weaknesses	
Natural resources.	Decreasing capacity of tourist accommodation.	
Cultural heritage.	Threats	
Opportunities	Threats	
International tourism.	Winter storms.	

Competitiveness regions recognise natural and cultural heritage as base for tourism development. However, falling interest of tourists in cultural heritage is accompanied by diminishing interest in investments in accommodation capacity. Slow growth of tourism requires more intensive promotion of regions. Other development obstacles are related to seasonality of tourist flows that call for diversification of the offer.

Table 4.5.2. Natural and cultural heritage and tourist attractiveness – convergence-phasing out region

Burgenland AT11			
Strengths Weaknesses			
Tourism, although mostly from within Austria.	Tourism is catered towards elderly people.		
Opportunities	Threats		
Availability of tourism infrastructure.	International tourism is considerably low.		

Relatively good level of utilisation of natural and cultural heritage advantages of studied convergence-phasing region bases on internal population. Further expansion depends on international tourism interest to visit the region. Existing infrastructure is named among the opportunities in this case.

Table 4.5.3. Natural and cultural heritage and tourist attractiveness – convergence regions

Extrema	ndura ES43	
Strengths	Weaknesses	
Great natural wealth.	Risk of soil degradation.	
Conservation zones.	Very low rate of hotel occupancy.	
Large reservoirs of fresh water.	Difficult accessibility.	
Cultural heritage and tourism development.	High seasonality.	
Increase in the number of tourist establishments.	Low internationalization of the tourism sector.	
Increase in the flow of foreign tourists.		
Opportunities	Threats	
Natural wealth attractiveness and potential to Possible environmental degradation due		
generate economic activity.	economic development.	
Cultural heritage and tourism development.	Potential loss of biodiversity and habitats.	
	Loss of hotel and tourist capacity due to the low	
	tourist occupation.	
Calab	oria ITF6	
Strengths	Weaknesses	
Natural and cultural resources.	Extremely high levels of hydrological risk with	
Strengthening natural heritage.	underdeveloped system for its reduction.	
	Drop in the number of tourists and museum	
	visitors.	
	Shortages in sustainable management of natural	
	and cultural resources.	
	Underdeveloped tourist services.	
Opportunities	Threats	
Promotion of economic chains linked to cultural,	Non-compliance with regulations concerning wast	
environmental and tourist attractions.	and waters.	
Smart specialization related to environmental and	Further deterioration of cultural and	
cultural patrimony.	environmental patrimony.	
Growth in the international tourism.	Decrease in biodiversity and loss of habitats.	

	Mazurskie PL62		
Strengths	Weaknesses		
Clean and biodiverse environment.	Insufficient development of tourist and		
Attractive landscapes.	recreational facilities.		
Numerous architectural sites.	Spatially diversified number and quality of		
Developed recreational tourism.	accommodation and tourist facilities.		
Increasing number of tourist facilities.	Insufficient use of accommodation facilities.		
Improved standard of tourist services.	Low communication accessibility.		
Cultural and ethnic heritage.			
Opportunities	Threats		
Location.	Insufficient promotion of tourism.		
Favourable social and cultural conditions for	No legal and economic preferences for tourism		
cooperation.	development.		
Increasing demand for the tourist and recreational	Barriers in the extension of contacts with the non-		
and sanatorium offer.	EU countries.		
Creation and promotion of tourist products and	Excessive exploitation of natural resources.		
brands.	Pressure on the creation of additional protected		
Development of business tourism.	areas.		
	Low support for the cultural institutions.		
Dolnoślą	skie PL51		
Strengths	Weaknesses		
Diversity of natural resources.	Significant proportion of devastated and degraded		
Well-developed tourist infrastructure.	areas.		
High potential of spa treatment.	Economic activity burdensome for the		
Integrated protection of natural and landscape	environment.		
resources and cultural heritage.	Insufficient quality of tourist infrastructure.		
-	Insufficient funding of cultural institutions and		
	recreational facilities.		
	Lack of integrated information and tourism		
	promotion system.		
Opportunities	Threats		
Increase in the number of foreign tourists.	Deteriorating technical condition of facilities for		
Restoration of historical monuments.	culture.		
Growing role of the spa tourism.	Lack of funds for renovation and reconstruction of		
Creation of cross-border tourist complexes.	historical spa architecture.		
·	Limited support for tourism-related activities.		
	Lack of complex spatial planning system.		
Sud Est Ror	mania RO22		
Strengths	Weaknesses		
Diverse natural resources.	Tourism circuits cannot put into value the rich		
Cultural and historical heritage.	natural, historical and cultural heritage of the zone.		
Increase of the number of visitors in museums and	Precarious tourism promotion.		
other similar institutions.	Decreasing number of tourists.		
	Seasonal character of tourism.		
	High level of earthquake risk.		
Opportunities	Threats		
Increased interest for the conservation of	Low integration in the international tourism		
biodiversity.	circuits.		
Existence of natural areas with special tourist	Precarious maintenance of the patrimony.		
attraction.	Absence of policies and coherent programmes to		
attraction.	promote tourism.		
	promote tourism.		

Convergence regions are rich in natural and cultural resources that together with correctly managed cultural heritage make them attractive for tourism activities. Namely, integrated protection of natural and landscape resources and cultural heritage help to preserve regional values. On the other hand, intensive development of economy and insufficient promotion of regions hamper exploitation of natural and cultural heritage values. In some cases, there occurs degradation of nature due to intensive development of agriculture and extraction and processing of natural resources. In such cases promotion of economic chains connecting cultural and environmental values of the region with tourist activities would help to use opportunities in sustainable way. Similarly, consolidation of different development and social policies is a solution aiming at preservation of regional endowments. Promotion of regions' values and tourism capacity on international level would support better utilisation of existing facilities and would justify further investments.

#### 4.6. Energy and environmental protection

Table 4.6.1. Energy and environmental protection – competitiveness regions

Emilia-Romagna ITH5				
Strengths	Weaknesses			
High level of separate collection of waste.	Low rate of growth in separate collection of wast			
Relatively good fuel efficiency.	Energy dependence.			
Increase in renewable energy sources.	High air emissions from the energy sector.			
Potential for energy-useful biomass production,				
including from waste.				
Opportunities	Threats			
Orientation of public policies towards the targets	Progressive reduction of regional and national			
of the European 20-20-20 targets.	resources on local public transport.			
Agreements for the prevention and recovery of	Credit access restraint slowing down the			
waste.	investment in energy efficiency.			
	Delays in the implementation of ecologically			
	equipped areas.			
Norra Mella	nsverige SE31			
Strengths	Weaknesses			
High quality renewable energy sector.	High per capita energy consumption.			
Three universities with specializations in studies				
that favour geographical needs.				
Opportunities	Threats			
'Smart specialization' of clean and renewable	Large rural area makes connection with larger			
energy.	energy grid more expensive.			
Building transportation that is energy sustainable.	•			
	UKH3			
Strengths	Weaknesses			
Production and consumption of energy from	Reliance on construction and manufacturing			

renewable sources.	industries.
High rate of separate waste collection.	
Opportunities	Threats
International agreements on climate.	Founding cuts.
Low carbon and renewable sectors as potential	Impact of Brexit.
growth industries.	

On the regional level, energy and environmental protection actions aim at increasing utilisation of renewable energy sources and further improvement of waste management. In most cases, vast experience in these fields is stimulated by programmes and polices aiming at environmental protection. Therefore, incorporation of sustainable energy production and environmental friendly practises in all policies would speed up their implementation. Sparsely populated rural areas require special attention of policy makers as costs of grid are higher there. Support for public transportation would increase attractiveness of these areas and result in lower emissions.

Table 4.6.2. Infrastructure facilities – convergence-phasing out region

Burgenland AT11				
Strengths	Weaknesses			
One of the EU leaders in producing on-shore wind power. Increasing use of renewable energy.	Missing capacities in R&D undermine the potential of renewable energies. Solar energy production is below the European			
	average.			
Opportunities	Threats			
As 'flagship region' in Austria could sell its	Inability to utilise its potential and compete			
competences and attract international attention.	internationally.			

The convergence-phasing out region covered by the case study is an example of leading producer of on-shore wind power. Therefore, the policy concerns are shifted toward utilisation of know-how opportunities to compete on international level. However, specialisation only in wind power would be unsatisfactory to become widely recognised as renewable energy technology centre. Support directed to increase the regional R&D capacity would help with exploration of the remaining potential.

Table 4.6.3. Infrastructure facilities – convergence regions

Extremadura ES43			
Strengths Weaknesses			
Significant generation of electrical energy and	Insufficient environmental control in the areas of		
renewable electric energy.	higher agricultural productivity.		
Promotion of alternative and clean energy.	High demand for petroleum products.		
Environmental and cultural goods.	Low share of selective waste collection.		
Generation of waste per capita below the Spanish	Low recycling share.		

average.	Insufficient biodiversity management.		
Relatively low levels of emissions and pollutant	Scarce sewage treatment, especially in small		
discharges.	municipalities.		
Opportunities	Threats		
Natural richness, with much of the territory under	Dependence on fossil and non-renewable fuels.		
some type of environmental protection.	Emissions and waste management		
More than 1/3 of the territory is occupied by	Agriculture's share in total water consumption		
valuable ecosystems.	(92%).		
Existence and development of Specific Climate	Increased productivity of the agricultural sector at		
Change Adaptation Plans within each sector.	the cost of degradation of the natural ecosystem.		
	ria ITF6		
Strengths	Weaknesses		
Progress in interventions aimed at making electric	Low separate waste collection.		
energy for Public authorities buildings efficient and	Low energy efficiency of the SMEs' productive		
at reducing consumptions in public lighting.	cycles.		
Increasing production of energy from renewable	Lacks in the system for the disposal of polluting		
sources.	materials.		
Increased capacity to produce electric energy.			
Opportunities	Threats		
Growing awareness of energy efficiency and	Permanence of energy inefficiency in public		
environmental sustainability.	structures.		
	Non-compliance with regulations within the waste		
	and water sectors.		
	Mazurskie PL62		
Strengths	Weaknesses		
Large share of the NATURA 2000 and other	Low share of renewable energy in energy		
protected areas.	consumption.		
Large share of forest area.	Underdeveloped gas network.		
All wastewater discharged through sewage	Shortages in energy infrastructure.		
network is treated biologically and with increased biogenic removal.	Only 70% of the region's population is covered by		
Large share of urban population using sewage	sewage treatment.		
network.			
Opportunities	Threats		
Increase in the use of renewable energy.	Pressure for creating new protected areas seen as		
and and of ferromanic cricing.	a threat to development.		
 Dolnośląskie Pl	.51 Convergence		
Strengths	Weaknesses		
Big reserves of minerals.	Insufficient use of alternative energy sources.		
Ensuring energy supply.	Threat to forests in the most valuable tourist areas.		
National parks and landscape parks, etc.	Local and periodic high concentrations of dust and		
Progressive improvement of water and air quality.	gas pollutants.		
Successive reclamation of degraded and	High share of emissions from means of transport.		
devastated areas.	Degradation of natural landforms caused by		
	business activity.		
	High percentage of degraded and devastated		
	areas.		
	Small share of protected areas.		
	Insufficiently developed selective waste collection.		
	Insufficient technical condition of power grids,		
	especially in rural areas.		

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Opportunities	Threats		
Successive development of the gas network.	High atmospheric pollution.		
Renewable energy generation (hydropower,	High level of pollution of surface water.		
windmills).	Delays in modernization of environment protection		
	infrastructure.		
Sud Est Ro	mania RO22		
Strengths	Weaknesses		
Diverse energy potential.	Insufficient production of renewable energy.		
Growing municipal waste recycling rate.	Low rate of separate waste collection.		
Decreasing CO₂ emissions.	Low rate of municipal waste recycling.		
Opportunities	Threats		
Favourable condition for production of renewable	Insufficient infrastructure for renewable energy		
energy.	production.		
Favourable national and EU policies for green	Location of wind parks on the flight paths of		
energy consumption and production.	migratory birds.		
	Faulty integrated waste management system.		

Common problems of convergence regions are low share of collection and recycling of waste. High dependence on fossil and non-renewable fuels is accompanied by problems of excessive pollution. Investments in energy and waste management are critical in regions with environmentally protected areas. Here NATURA 2000 and agriculture policy is an example of good practice with potential for further extension. However, local development stakeholders may consider this as a threat, so consultation on planning phase should be a solution.

#### 4.7. Summary

Analysis of business and local production competitiveness systems of investigated regions point to high dependency of more advanced regions on traditional industry sectors. Similarly, recent development of business in "convergence" regions is mostly related with primary sectors of economy. Commonly observed inability to stimulate growth of youth employment could be overcome with integration of policy effort to stimulate small and medium enterprises growth with preferences for young entrepreneurs. Similar measures are in force in Common Agricultural Policy to stimulate transfer of farms from one generation to another. General improvement of regional labour force would prevent potential relocation of the companies to more competitive regions. The problem of education, in connection with research and development, and innovation spheres, indicates that all regions are facing problems with unsatisfactory development of R&D sector. Namely, greater external opportunities for researchers brain drain phenomena. Therefore, even in the presence of good quality of educational sector, further investment in tertiary education and

research are justified. Strengthening networking between research sector and regional businesses is suggested as a preferable policy action as well as support to stimulants for vocational training that would enable the researchers to gain experience in business environment.

The investigated regions mostly have satisfactory dense network of major roads and rails. However, all of them have a problem with the quality of transport networks, as they are of unsatisfactory capacity or below the EU standards. Strong connections within the region and with other regional centres are considered as a key infrastructural element to prevent outward migration of people and businesses. Together with international transport corridors the given region would attract multi-national companies of global importance. In case of geographically isolated and sparsely populated areas, high costs of maintenance of communication networks create certain problems for local governments. The EU policies should, therefore, focus more on improvement of the existing infrastructure with exemption of convergence regions. Here improvement of infrastructure density should take into account cost-benefit rationale as well as environmental values.

The share of people at the risk of poverty or social exclusion varies between competitiveness and convergence regions. Yet, in all of the regions there is still a need for further actions in this field. This requires both direct support for poor people as well as preventive actions which should be concentrated on different forms of education and vocational training. In the case of social exclusion, a growing problem is ageing that should be handled by different policy measures, including connecting elderly people to natural and cultural heritage to prevent their social exclusion through involving them in different kinds of social activities. Both in poverty prevention as well as social exclusion prevention a special role should be played by NGOs and local communities. Thus, policy mix should include their active participation

Natural and cultural heritage in all the regions is considered to be an important part of their endowment. They all see the room for further increases in developing tourism, but struggle with insufficient promotion. In the case of convergence regions, there is still threat of degradation of the natural environment because of intensive development of agriculture and extraction and processing of natural resources. In order to develop sustainable tourism and balance the coexistence of the heritage with the economic development, further progress in turning the EU

economy into a circular one is needed. This requires a policy mix, targeting all the aspects of socioeconomic activity from education to support for businesses in applying new green technologies.

The energy and environmental protection in the case of better developed regions is accompanied by already well-developed or developing sustainable energy production. Contrary to competitiveness regions, the convergence regions are mostly dependent on conventional sources of energy (fossil fuels) that have negative impact on the environment. Therefore, promotion of environment-friendly practises should be a part of all policies. More flexibility would optimise regional decisions regarding actions supporting development of sustainable energy sector. Regions with well-developed sectors are more focused on the use of their experience and are willing to become global players, while the others are at an early stage and concentrate on the uptake of most promising technologies.

In most cases vast experience in the field of environmental protection is stimulated by the EU and national programmes and policies. Unsatisfactory level of waste recycling and public transportation promotion are the examples of issues that would require EU-level attention. NATURA 2000 and agricultural policy are already examples of good practices with potential for further extension.

After reviewing SWOTs, one can feel that better-off regions are not better prepared for socioeconomic challenges, especially those related to globalization. This suggests the need for further support to all these regions with respect to common problems such as brain drain, youth education improvement and migration of businesses and people.

#### 5. How effective are public institutions in responding to regional needs?

The PERCEIVE original survey is intended to help researchers better understand the micro and macro level dynamics that drive support (or lack thereof) of the EU regional polices. The survey includes over 35 substantive questions as well as seven demographic and background questions of the respondents (Charron, Bauhr, 2017). The respondents, from 18 years of age or older, were contacted randomly via telephone in the local language. To achieve a random sample, the 'next birthday method' was used<sup>2</sup>. To aid in research of the PERCEIVE project's pre-selected case study regions, at least 500 randomly drawn respondents were taken from each of the select regions to

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<sup>&</sup>lt;sup>2</sup> In total, 17,147 interviews were carried out in 15 EU Member States (Charron, Bauhr, 2017).

make a survey representative. Total sample in the case study regions amounted to 4,863 respondents (table 5.1).

Table 5.1. Sample information

Case Study Region	abbreviation	respondents
Burgenland	AT11	517
Extremadura	ES43	541
Emilia-Romania	ITH5	581
Calabria	ITF6	535
Dolnośląskie	PL51	579
Warmińsko-Mazurskie	PL62	538
Sud Est	RO22	532
Norra Mellansverige.	SE31	516
Essex	UKH3	524

Source: (Charron, Bauhr, 2017).

In this chapter, we analyse the survey results in selected PERCEIVE case study regions. We aim to define the relationship between the assessment of the situation in the region by its inhabitants and their opinion on the quality of governance at various levels of administration. This will help to identify which Cohesion Policy institutions have the chance to be most effective in responding to local needs, but can also contribute to enhancing the appreciation by citizens of the European projects and their measurable effects. The analysis takes into account the responses of the rural population (which in the questionnaire referred to as the locality below 10,000 inhabitants<sup>3</sup>) and the others, defined as urban.

#### 5.1. Urban-rural perspective on Cohesion Policy and institutions

The table shows the extent to which participants in the different surveyed regions perceive that they have benefited from the EU funded projects in their daily life<sup>4</sup>. The fig. 5.1. shows answers of rural population and fig. 5.2. – urban population. The figure 5.1. shows that rural citizens in the two Polish regions (Warminsko-Mazurskie and Dolnośląskie) are most likely to perceive that they have benefited from the EU funded projects in this sample. Between 60 and 70 per cent of participants in these regions perceive that they have benefited in their daily life. This figure could

<sup>3</sup> Question: D6. About how many people live in the place the interview was conducted?

<sup>&</sup>lt;sup>4</sup> Q3. To your knowledge, have you ever benefited in your daily life from any project funded by the EU? (yes, no, (Don't know/Refused)).

be contrasted with the share of participants in the two Italian regions — Calabria and Emilia-Romagna — where less than 10 per cent of rural residents believe that they have benefited in their daily life from the EU funded projects. The figure for most other regions included in this sample lie around 20 per cent, i.e. around 20-25 per cent of participants in Norra Mellansverige, Essex, Burgenland, Sud-Est, and about 30 per cent in Extremadura believe that they have benefitted in their daily life from an EU funded project.

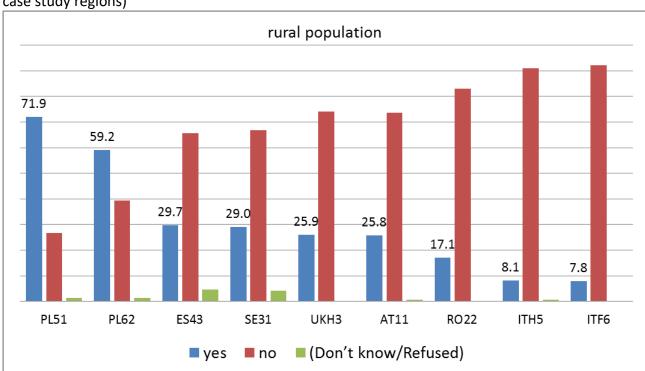


Fig. 5.1. Share of respondents benefiting from any project funded by the EU (rural population in case study regions)

Source: own calculations based on survey data (n=1768).

The perception of the benefits of projects for urban residents is quite different. The figure 5.2 shows that citizens of urban areas in Burgenland (AT) and Extremadura (SE) are most likely to perceive that they have benefited from the EU funded projects in this sample. Only between 20 and 25 per cent of participants living in towns and cities in Warminsko-Mazurskie (PL), Calabria (IT), Emilia-Romagna (IT) and Essex (UK) perceive that they have benefited in their daily life. Less than 20 per cent of respondents in Dolnośląskie (PL) and Sud Est (RO) believe that they have benefitted from an EU funded project.

urban population 72.6 63.0 39.8 25.0 23.6 23.1 20.9 12.1 8.2 AT11 **SE31 ES43** PL51 ITF6 ITH5 UKH3 PL62 RO22 (Don't know/Refused) ■ yes ■ no

Fig. 5.2. Share of respondents benefiting from any project funded by the EU (urban population in case study regions)

Source: own calculations based on survey data (n=3095).

One may notice some general tendency in differentiating the answer to this question depending on the level of development of the regions. The EU policy in the convergence regions is focused on infrastructure problems, at territorial level (usually in rural areas), to a lesser degree, affecting the cities. These responses point to the need to better align the communication process regarding the implementation of the EU projects among the population, which should be tailored to the specificity of the region and country in which they are implemented.

An important issue in assessing the relevance of implemented policies is the perception of inhabitants of the most important problems faced by individual regions. Figure 5.3. and table 5.2. show how residents in case study regions perceive what has been the biggest problem facing their region in the past five years. Residents of the case study regions most often pointed to unemployment (nearly 36%) as well as poverty and low wages and corruption (16, 15 and 14%, respectively). Taking into account the division into villages and towns, there are slight differences in priorities. While the basic problems (unemployment, poverty and infrastructure) are signalled to a greater extent by the rural population, the problems related to intangible development factors (as quality of governance, environment, education) are perceived as more pressing in urban areas.

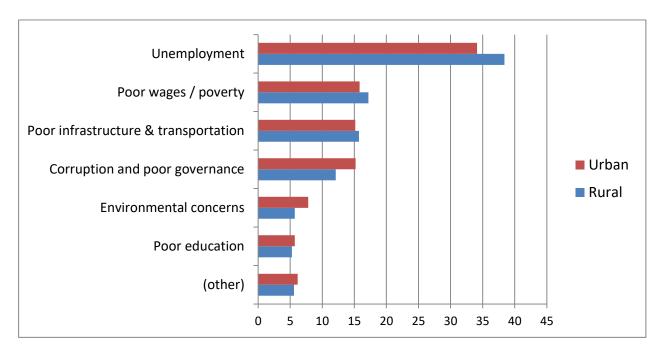


Fig. 5.3. The most pressing issues in rural and urban areas of case study regions (% of responses)

Source: own calculations based on survey data (n=4863).

In this case, however, it is worthwhile to take advantage of the opportunities offered by the study and to provide answers depending on the size of the locality of the respondent, in terms of the number of inhabitants. By analysing the results of the distribution of indications in different categories, one can point to differences in perception of significant problems for inhabitants of regions of different types (table 5.2).

Unemployment is the most significant problem for all residents of the surveyed regions. This problem is most often signalled by the inhabitants of rural areas. The phenomenon of poverty and low wages is strongly linked to it.

In contrast, for the residents of the very large city or urban area, the problem of unemployment is perceived as important as problem of corruption and poor governance (20 per cent of responses each) and relatively more often the respondents from urban regions point to the problem of poor infrastructure & transportation (22.5 per cent).

Table 5.2. The biggest problems in case study regions according to the type of territory

		Type of territory			
	Rural	Urban			
		10,000-	100,000-	> 1,000,000	
	< 10,000	100,000	1,000,000	(very large city	Total
	(rural)	(small town or	(large city or	or urban area)	. o ca.
		city)	urban area)		
Unemployment	38.4	36.8	29.8	20.0	35.7
Poor wages / poverty	17.2	16.2	15.2	7.5	16.3
Poor infrastructure &	15.7	13.9	17.0	22.5	15.4
transportation	15.7	13.9	17.0	22.5	15.4
Corruption and poor	12.1	13.9	17.9	20.0	14.1
governance	12.1	13.9	17.9	20.0	14.1
Environmental concerns	5.7	7.6	8.6	3.8	7.1
Poor education	5.3	5.4	6.2	10.0	5.6
(other)	5.6	6.2	5.3	16.3	6.0
Total	100.0	100.0	100.0	100.0	100.0

Source: own calculations based on survey data (n=4863). The highest proportion of indications for particular problems (rows) was highlighted in bold.

Quite a peculiarity is the fact that environmental issues are perceived to be relatively more significant for inhabitants of small and medium-sized cities (about 8 per cent), while relatively small percentage of residents of very large cities in the studied regions indicate awareness of the hazards and problems associated with this issue (less than 4 per cent).

Another important issue related to the possibility of estimating the future possibilities of improving the effectiveness of implemented policies is the analysis of the assessment of the potential impact of public institutions on the reduction of the most important and 'real problems' identified by the inhabitants.

Participants were asked to evaluate the effectiveness of different institutions in dealing with the particular problem that they perceived as the biggest or most important in their region<sup>5</sup>. According to Charron and Bauhr (2017, p. 24), in general rather few participants perceived that any of the

65

<sup>&</sup>lt;sup>5</sup> Q5. How effective do you think the following institutions will be at dealing with the biggest problem in your region? (the European Union; national governing institutions; regional/local governing institutions, versus: Very effective; Somewhat effective; Not so effective)

institutions suggested were very effective in dealing with the problem. The similar relation can be observed in case study regions (fig. 5.4.). In both samples (total survey and case study regions) participants were more likely to perceive that the regional or local institutions were very effective in dealing with regional/local problems, with 14 per cent of the case study regions' sample (and 16 in total sample) selecting this option.

60 53.6 50 39.4 40 the European Union 30 ■ national governing institutions ■ regional/local governing institutions 20 14.0 10 0 Very effective Somewhat effective Not so effective

Fig. 5.4. Citizens' perception of effectiveness of institutions case study in solving regional 'real problems' – sample averages by response

Source: own calculations based on survey data (n=4863).

An interesting pattern emerges if the effective (very or somewhat) category is compiled and compared to the not so effective category. Residents of the regions surveyed are most confident that regional authorities can be most effective in solving their 'real problems' – a total of 53.4 per cent of indications. The perception of the effectiveness of different levels of institutions differs in terms of urban-rural (fig. 5.5) and in particular regions (fig. 5.6).

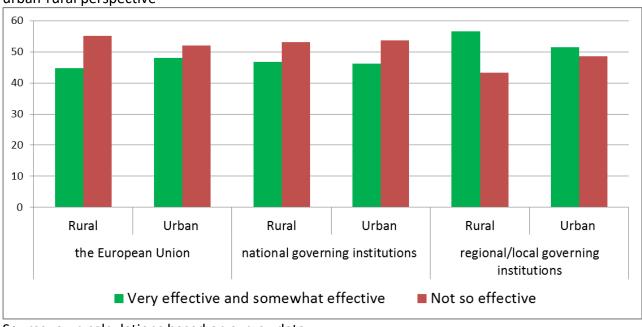


Fig. 5.5. Perception that institution is very and somewhat effective in solving 'real problems' – urban-rural perspective

Source: own calculations based on survey data.

In the study group, rural residents were more willing to trust the capacity of regional authorities to solve local problems, than that of the national and the EU institutions (fig. 5.5). On the other hand, in the case of urban areas, there is a general lack of confidence in the effectiveness of the institutions, and only in the case of regional authorities, the percentage of respondents who consider them to be effective is slightly higher than the percentage of those who consider them to be not so effective.

When analysing the distribution of responses in regions it is worth emphasizing that the perception of effectiveness of institutions on different levels by the inhabitants is very diversified. It is noteworthy that the overall high level of trust to all institutions implementing the policy is represented only by the Extremadura region (between 60 and 70 per cent). For the remaining regions, the regional authorities are better rated — in the case of Burgenland and Norra Mellansverige it was close to 70 per cent of interviewees, and in Dolnośląskie, Essex and Warmińsko-Mazurskie — 50-60 per cent. The overall low rate of positive responses was observed in both Italian regions — but in this case, regional authorities were relatively often referred to as institutions capable of addressing the 'real problems' at regional level. The exception in the whole study is the Sud Est region, where high levels of distrust to national and regional public institutions translate into high expectations of the European Union's ability to solve local problems.

100
90
80
70
60
40
30
20
10
ES43 AT11 SE31 PL51 UKH3 PL62 RO22 ITH5 ITF6

The European Union national governing institutions regional/local governing institutions

Fig. 5.6. Perception that institution is very and somewhat effective in solving 'real problems' in case study regions

Source: own calculations based on survey data.

The above analysis points to certain trends that require more detailed analysis using quantitative methods. In the next part the above-described results were also compiled with the opinions of the inhabitants of the case study regions regarding satisfaction with the current economic situation (in static and dynamic manner) or level of corruption in these institutions.

#### 5.2. Regional needs and public institutions – a quantitative analysis

The purpose of the quantitative empirical analysis was to answer the question of the extent to which the policy and institutions at different levels, contribute to closing the gap between the objectives of territorial development and cohesion and the so-called 'real problems'. A set of questionnaire questions from the case study regions (Charron, Bauhr, 2017) paired with preliminary qualitative results was used (table 5.3). The subject of the analysis were 25 pairs of questions for which a correlation study was performed.

Table 5.3. Questions from the survey used in empirical analysis

Number	The content of the question	Type of data
Q3	To your knowledge, have you ever benefited in your daily life from any project	Binary
	funded by the EU? 1.Yes 2.No 99.(Don't know/Refused)	
Q4	In the past 5 years or so, which of the following do you think has been the	Nominal
	biggest problem facing your region? 1.Poor education 2.Poor infrastructure &	
	transportation 3. Corruption and poor governance 4. Unemployment	
	5.Environmental concerns 6.Poor wages / poverty 98.(other)	
Q5_1	How effective do you think the following institutions (European Union) will be	Ordinal
	at dealing with the biggest problem in your region? 1. Very effective	
	2.Somewhat effective 3.Not so effective	
Q5_2	How effective do you think the following institutions ((COUNTRY's) national	Ordinal
	governing institutions) will be at dealing with the biggest problem in your	
	region? 1. Very effective 2. Somewhat effective 3. Not so effective	
Q5_3	How effective do you think the following institutions (Your regional/local	Ordinal
	governing institutions) will be at dealing with the biggest problem in your	
	region? 1. Very effective 2. Somewhat effective 3. Not so effective	
Q16_1	On a 0-10 scale, with '0' being that 'there is no corruption' and '10' being that	Ordinal
	corruption is widespread, how would you rate the following institutions?	
	(European Union)	
Q16_2	On a 0-10 scale, with '0' being that 'there is no corruption' and '10' being that	Ordinal
	corruption is widespread, how would you rate the following institutions?	
	((COUNTRY's) national governing institutions)	
Q16_2	On a 0-10 scale, with '0' being that 'there is no corruption' and '10' being that	Ordinal
	corruption is widespread, how would you rate the following institutions? (Your	
	regional/local governing institutions)	
Q17	How satisfied are you with the current economic situation in your region today?	Ordinal
	1. Very satisfied 2. Somewhat satisfied 3. Somewhat unsatisfied 4. Very	
	unsatisfied	
Q18	Compared with (5 years ago), do you think the economy in your region is:	Ordinal
	1.Better 2.About the same 3.Worse	
Source: o	www. elaboration based on: Charron Bauhr 2017	

Source: own elaboration based on: Charron, Bauhr, 2017.

Due to the nature of the data that is not continuous but rather of binary, nominal or ordered type, classical correlation coefficients such as Pearson's ratio would be incorrect and impractical. The correlation analysis was based on the contingency tables between the questions (answers to questions described in table 5.3). Among statistical measures used to infer the association and its direction, a classic general chi-squared test for measuring whether measurable and non-measurable attributes belong into mutually exclusive classes at the significance level of 1% was used along with log-likelihood ratio and contingency coefficient.

The Cramer's V association coefficient was chosen as the basis for evaluating the direction and strength of the response. It has been used for its flexibility and ability to accommodate more

complex contingency tables than simply 2x2. According to the definition, it can be used for all types of discontinuous data, i.e. nominal, binary and ordered.

The Cramer's V value ranges from 0 (indicating independence of characteristics) to 1 (indicating a perfect association). The higher values of Cramer's V coefficients indicate a stronger relationship between the two analysed characteristics (answers to questions).

In the case of the chi-squared test at 1% significance level, the null hypothesis refers to the lack of correlation between the two tested characteristics and is accepted or rejected in favour of an alternative hypothesis that there is a relationship between the test characteristics. The analysis was performed on the whole sample of the respondents and the sample divided into urban and rural areas.

Question D6 was used for this purpose where option 1 (less than 10,000 inhabitants – rural) was classified as rural and all remaining levels, i.e. 2 (10,000-100,000 inhabitants – small town or city), 3 (100,000-1,000,000 inhabitants – large city or urban area), 4 (> 1,000,000 – very large city or urban area) were allocated to the urban category. This division was aimed at identifying the perception of problems among the inhabitants of these areas. It also makes it possible to formulate precise policy conclusions. The results of the association analysis are presented in tables 5.4-5.6.

Table 5.4. Analysis of association between selected survey questions – Full sample<sup>6</sup>

Row	Column	χ2	p-value	LL ratio	p-value	Cont. coeff	Cramer's V
Q16_1	Q17	182.95	0.000	170.26	0.000	0.192	0.113
Q16_1	Q18	180.27	0.000	171.93	0.000	0.191	0.138
Q16_1	Q4	181.54	0.000	190.56	0.000	0.192	0.08
Q16_2	Q17	674.23	0.000	625.42	0.000	0.352	0.217
Q16_2	Q18	117.29	0.000	116.72	0.000	0.155	0.111
Q16_2	Q4	361.59	0.000	360.47	0.000	0.266	0.113
Q16_3	Q17	741.88	0.000	643.88	0.000	0.367	0.228
Q16_3	Q18	108.14	0.000	103.68	0.000	0.149	0.107
Q16_3	Q4	328.93	0.000	322.57	0.000	0.254	0.107
Q3	Q17	73.815	0.000	74.434	0.000	0.124	0.125
Q3	Q18	173.53	0.000	169.01	0.000	0.188	0.191

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In tables 5.4-5.6 in the p-value columns, bolded associations were statistically insignificant at the assumed significance level of 1%. In the case of Cramer's V coefficients, the bolded observations indicate the relation between the perception of the capacity of the particular institution i.e. European Union, central government or local authority (Q5) to solve the problems of the region and expressed satisfaction with the current economic situation of the region (Q17). Estimated correlation coefficients increase with the transition from the EU level to the local level. This means that the chance of a positive assessment of problem solving ability is highest for local authorities.

D. 4.4: Report on the policy recommendations on how to integrate Cohesion Policy with Urban and Rural policies

Q4	Q17	165.88	0.000	169.05	0.000	0.184	0.108
Q4	Q18	128.64	0.000	130.72	0.000	0.162	0.116
Q5_1	Q17	69.115	0.000	70.489	0.000	0.12	0.085
Q5_1	Q18	150.47	0.000	151.02	0.000	0.175	0.126
Q5_1	Q4	88.475	0.000	89.295	0.000	0.135	0.096
Q5_2	Q17	193.79	0.000	197.13	0.000	0.198	0.143
Q5_2	Q18	98.553	0.000	99.399	0.000	0.142	0.102
Q5_2	Q4	87.959	0.000	88.988	0.000	0.135	0.096
Q5_3	Q17	390.89	0.000	386.83	0.000	0.276	0.203
Q5_3	Q18	92.565	0.000	93.156	0.000	0.138	0.099
Q5_3	Q4	169.66	0.000	171.07	0.000	0.186	0.134
Q3	Q5_1	101.39	0.000	101.27	0.000	0.144	0.146
Q3	Q5_2	4.352	0.112	4.347	0.114	0.03	0.03
Q3	Q5_3	27.05	0.000	27.151	0.000	0.075	0.075
	•		•		•	<u> </u>	

Source: own calculations

Table 5.5. Analysis of association between selected survey questions – Rural sample

Row	Column	χ2	p-value	LL ratio	p-value	Cont. coeff	Cramer's V
Q16_1	Q17	98.843	0.000	94.951	0.000	0.232	0.138
Q16_1	Q18	72.602	0.000	70.643	0.000	0.2	0.144
Q16_1	Q4	107.46	0.000	109.6	0.000	0.241	0.101
Q16_2	Q17	234.1	0.000	220.79	0.000	0.344	0.212
Q16_2	Q18	85.541	0.000	86.904	0.000	0.216	0.157
Q16_2	Q4	144.48	0.000	150.67	0.000	0.277	0.118
Q16_3	Q17	278.19	0.000	248.32	0.000	0.371	0.231
Q16_3	Q18	76.26	0.000	74.21	0.000	0.205	0.148
Q16_3	Q4	124.93	0.000	124.19	0.000	0.259	0.109
Q3	Q17	29.726	0.000	30.322	0.000	0.13	0.131
Q3	Q18	57.226	0.000	55.729	0.000	0.178	0.181
Q4	Q17	57.237	0.000	56.653	0.000	0.178	0.105
Q4	Q18	40.018	0.000	41.079	0.000	0.15	0.107
Q5_1	Q17	23.044	0.001	23.99	0.001	0.114	0.081
Q5_1	Q18	24.766	0.000	24.928	0.000	0.118	0.084
Q5_1	Q4	20.372	0.060	20.216	0.063	0.108	0.076
Q5_2	Q17	73.566	0.000	74.437	0.000	0.201	0.145
Q5_2	Q18	52.302	0.000	53.099	0.000	0.171	0.123
Q5_2	Q4	13.365	0.343	13.608	0.326	0.087	0.062
Q5_3	Q17	111.54	0.000	111.48	0.000	0.245	0.179
Q5_3	Q18	24.674	0.000	24.701	0.000	0.118	0.084
Q5_3	Q4	39.696	0.000	39.709	0.000	0.149	0.107
Q3	Q5_1	14.941	0.000	14.791	0.000	0.092	0.093
Q3	Q5_2	2.227	0.328	2.243	0.325	0.036	0.036
Q3	Q5_3	2.222	0.329	2.243	0.329	0.036	0.036

Source: own calculations

Table 5.6. Analysis of association between selected survey questions – Urban sample

					p-		
Row	Column	χ2	p-value	LL ratio	value	Cont. coeff	Cramer's V
Q16_1	Q17	127.71	0.000	119.4	0.000	0.202	0.119
Q16_1	Q18	140.15	0.000	134.38	0.000	0.211	0.152
Q16_1	Q4	160.36	0.000	171.2	0.000	0.225	0.094
Q16_2	Q17	471.47	0.000	433.29	0.000	0.368	0.228
Q16_2	Q18	62.314	0.000	62.592	0.000	0.142	0.102
Q16_2	Q4	289.97	0.000	284.62	0.000	0.296	0.127
Q16_3	Q17	499.92	0.000	435.95	0.000	0.377	0.235
Q16_3	Q18	58.242	0.000	56.077	0.000	0.138	0.098
Q16_3	Q4	289.62	0.000	282.35	0.000	0.296	0.127
Q3	Q17	44.664	0.000	44.806	0.000	0.121	0.122
Q3	Q18	117.19	0.000	114.19	0.000	0.193	0.197
Q4	Q17	136.96	0.000	139.68	0.000	0.208	0.123
Q4	Q18	99.204	0.000	100.481	0.000	0.179	0.128
Q5_1	Q17	50.048	0.000	50.281	0.000	0.128	0.091
Q5_1	Q18	135.09	0.000	136.03	0.000	0.207	0.15
Q5_1	Q4	94.714	0.000	96.233	0.000	0.175	0.125
Q5_2	Q17	122.7	0.000	125.09	0.000	0.198	0.143
Q5_2	Q18	50.058	0.000	50.293	0.000	0.128	0.091
Q5_2	Q4	101.83	0.000	102.62	0.000	0.181	0.13
Q5_3	Q17	284.16	0.000	282.71	0.000	0.294	0.217
Q5_3	Q18	75.742	0.000	76.548	0.000	0.157	0.112
Q5_3	Q4	140.74	0.000	142.4	0.000	0.211	0.153
Q3	Q5_1	99.095	0.000	98.547	0.000	0.178	0.18
Q3	Q5_2	5.834	0.054	5.808	0.055	0.044	0.044
Q3	Q5_3	29.676	0.000	29.753	0.000	0.099	0.099

Source: own calculations

A range of issues that have been addressed during the analysis of dependencies include, in particular, the existence and magnitude of the correlation between satisfaction with the economic situation of the region and belief in the effective resolution of problems by institutions of different administrative levels (European Union, central government, regional administration). The relation between questions Q5 and Q17 and Q18 was used for this purpose.

The second issue involves the correlation between respondent's satisfaction with the economic situation of the region and the perception of benefits from EU projects. It was examined on the basis of the relationship between Q3 and Q17 and Q18, Q4 and Q17 and Q18, Q5 and Q16 and Q17 and Q18, Q5 and Q16 and Q4 as well as Q3 and Q5.

The results are presented in tables 5.4-5.6 in the full sample and subgroups for the rural and urban responses. The results of the chi-squared dependence/independence test for the full sample (table 5.4) indicate that in all cases, except for the relationship between Q3 and Q5\_2, the null hypothesis of independence between the analysed questions should be rejected in favour of the association. For specific questions, this implies, *inter alia*, the statistically significant relationship between the assessment of the degree of corruption at the various levels of administration (European Union, central governments and regions) and satisfaction with the current economic situation in the region, or the belief that the situation has improved in the past five years and the classification of the most important problems affecting the region. In the case of rural areas, statistically insignificant relationships also included question pairs Q5\_1-Q4, Q5\_2-Q4, Q3-Q5\_2, Q3-Q5\_3. This means that in this area there is no link between the assessment of the effectiveness of administration at the level of the European Union and the central government and the classification of the most important problems of the region, as well as the benefits of the European funds and the perception of the efficiency of the central and regional administration. In urban areas, only Q3-Q5\_2 relation was statistically insignificant.

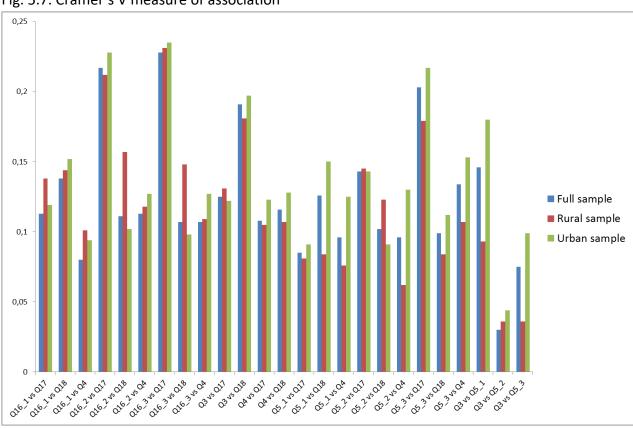


Fig. 5.7. Cramer's V measure of association

Source: own elaborations

On the basis of the data from table 5.4, it is possible to estimate that for the whole group the chance of a positive assessment of the economic situation in the region increases with the positive opinion about the capacity of the particular type of institution to solve the biggest problem in the selected region. This relation is expressed by questions Q5\_1, Q5\_2 and Q5\_3 (describing the perception of the effectiveness of the European Union, national governments and regions), and Q17 and Q18 describing respondents' views on the economic situation in the region in static and dynamic terms.

Cramer's V correlation coefficient levels are marginally highest in the case of answers related to the efficiency of regional authorities (Q5\_2). This relation was observed for the whole group as well as for the respondents in cities when the answer is related to the current economic situation. However, it is not true in the case of assessing the economic situation (Q18) in rural areas. It is interesting to analyse the relationship between the declared direct benefits of projects funded by the European Union (Q3) and the respondents' perception of administration's ability to solve the most important problems in the region (Q5\_1, Q5\_2, Q5\_3).

For the whole sample, there was no link between the respondent's use of the European funds in the past and the positive assessment of problem solving ability in the case of central governments. In the case of respondents in rural areas, this statement was true also in the case of regional administrations. This type of relationship was not recorded in urbanized areas. In other words, in rural areas the greatest confidence and conviction about the ability to improve economic situation was declared against the European Union. In the urbanized areas, the regional authorities enjoyed the greatest confidence, as was the case when the full sample was taken into account without a general breakdown. In all cases, the overall lack of opportunities in this area was noted for central governments. In absolute terms, as shown in fig. 5.7., the highest correlation coefficient Cramer's V values were recorded for pairs Q16\_2 and Q17, Q16\_3 and Q17, Q3 and Q18 and Q5\_3 and Q17. In the first two cases, this means that with the increase in the perception of corruption at regional and national level, the assessment of the economic situation is increasing, the beneficiaries of the EU funds are positively evaluating the economic situation in their region, and those who are positively assessing the capacity of regional authorities to solve problems at the same time favourably assess the economic situation in the region. The latter refers in particular to respondents from urban areas.

To illustrate the contingency relationship between the answers to the questions in the sample, mosaic plots (mekko charts), i.e. graphical method of visualizing relations between two or more qualitative

data, were used. The width of the columns and rows in such charts is proportional to the number of observations within that category, and indicates the relative importance of a category of responses in the surveyed population and allows for visual inspection of the data, even without reference to detailed numerical values. They are shown in figures A.1-A.9 in annex. Grouping the answers for the whole group as well as for the rural and urban categories, makes it possible to assess whether the proportions of a given answer are consistent or rather different in different subgroups.

In the analysis of the relation between the perception of the capacity of the particular institution i.e. European Union, central government or local authority to solve the problems of the region and expressed satisfaction with the current economic situation of the region, estimated correlation coefficients increase with the transition from the EU level to the local level. This proves that the chance of a positive assessment of problem solving ability is highest for local authorities. The study outcomes therefore may support the need for further strengthening the role of regional authorities in implementation of cohesion policy. However due to different perceptions of institutions by citizens of different EU countries and regions, this should be supported with close cooperation between EU, national and regional institutions.

#### 6. Conclusions and recommendations

Over the last decade, the objectives of rural development policy and regional and cohesion policies are slowly approximated, but still their level of compliance in the territorial dimension is insufficient. The ongoing debate on the future of the EU beyond 2020 devotes a lot of attention to policy coordination and its compliance with cohesive territorial development. Over the years, subsequent reforms lead to a gradual departure from sectoral to horizontal planning. Agricultural policy has step by step moved the mainstream of public aid from market measures to rural support measures. In line with the new challenges, public support was targeted at environment and climate measures, the scope of impact has covered broadly defined rural communities and apart from competitiveness and innovation, the focus was also on sustainable and multifunctional rural development. This, at least partly, strengthened the impact of respective measures under one agricultural and rural policy. In the programming dimension, the objectives of respective EU policies also seem cohesive, but the synergies between agricultural, regional and Cohesion Policy, especially in the territorial dimension, are limited.

The changing political, economic, social and environmental conditions pose new challenges for the rural, regional and cohesion policies of the EU post-2020. In the face of these challenges and crises some EU communities stop to approve of sectoral expenditure. But they approve of the so-called green economy, sustainable territory, social cohesion and good governance. Thus, they turn towards a closer integration of the EU territory and a stronger basis for sustainable development. A key to this solution is transnational and cross-border cooperation which goes beyond administrative borders and covers the area of interregional cooperation (and in the operational and decision-making dimension - interpersonal). It is an innovative approach to development policy which considers characteristics and individual conditions in each of the region. It also gives greater freedom to regions in adjusting programme objectives to individual needs and even during programme implementation - their adjustment to new conditions. It is also worthwhile to consider the creation of mechanisms for a stronger impact of regions on elaboration of the EU development strategies. This would also provide an opportunity to simplify complex administrative procedures for execution of programmes, their auditing and implementation of the EU solutions in national law. The measures will certainly have to change to reduce the excessive transaction costs. A radical change in the manner of informing the EU citizens about the effects of the Cohesion Policy and rural policy is also essential. Although their achievements are undeniable, an average citizen is almost unaware of or does not associate them with the EU aid. In order to increase approval for the EU programmes, in particular in regions of incomplete participation, certain attention should be paid to capacity building, knowledge enhancement and participation in local development.

Sustainable and multifunctional rural development along with the EU spatial cohesion should be looked at through the prism of various sectors and regions. Exactly because of their diversity in policy post-2020, these differences must be reflected, leaving the regions and local communities the possibility to choose. It is also necessary to put an increased emphasise on territorial issues during distribution of funds. Another challenge is also improvement of fund allocation mechanisms from the perspective of their greater spatial concentration. The ability to maximize benefits and synergies, and to achieve territorial cohesion depends largely on the very implementation of policy in each Member State, from adequate mechanisms for allocating public funds through decision makers in the regions, finally, to people. Public aid is desirable when there is a discrepancy between a private and a social product. But it is not always the best way to solve

the problem of market failure. The effects of actions undertaken by the state are difficult to be precisely predicted, because, among other things, we are dealing with the failure of public institutions (state failure). Public aid beneficiaries (irrespective of whether they are administrative or private authorities) often put their interests (political, private) over the general interest and in their actions they often adapt to the opportunities that it creates. Public aid is also unable to provide equality and social justice, although there is a widespread conviction that public funds must be provided to support the achievement of specific objectives in the name of higher social interests. Such a solution, despite it is rather an attempt to treat the symptoms of the disease rather than the systemic solution, is more favourable than absence of a solution at all. It is, therefore, necessary to strive for a policy orientation to make its benefits reach all citizens and society as a whole.

In the debate on the future of the Cohesion Policy, new policy priorities related to innovation, climate change or tackling the problem of refugees are often presented as contradictory to the traditional Cohesion Policy priorities of economic, social and territorial cohesion. Yet, it is a most probably a false contradiction. There is no trade-off relation between both approaches as to achieve cohesion we need growth and jobs which can be sustainable only when we use innovative solutions, taking into account the challenges which are present not only at the EU level but also at the regional level.

In the future, sustainable development, with an emphasis on its environmental component, will be a natural element in the EU policies. In both regional and urban policy, public support for air quality, soil, water and energy efficiency in cities and rural areas is justified by public support. This seems to be a natural bond around which an effective mix of policies should be developed in the future to clearly distinguish the added value of the European project.

On the basis of comparative assessment in the regions covered by the PERCEIVE study, we tried to determine whether there are good practices for linking or better coordinating the instruments of different EU policies to better suit regional needs. We also tried to verify the relations between the case study regions in order to identify the regional strengths, weaknesses and needs to be addressed by the policy mix.

Findings from the study showed that defined problems and methods of approaching them are similar within a given region type (Competitiveness, Convergence-Phasing out or Convergence),

but there are also significant similarities between different types of regions concerning problems in socio-economic development. Therefore, in the future, it is imperative to further strengthen the importance of regions in the programming and implementation of the EU policies among local policies that respond to local 'real' needs.

The regions face problems of low level of education in connection with research and development and innovation spheres, which indicates unsatisfactory development of R&D sector. Therefore, even in the presence of good quality of educational sector, further investment in tertiary education and research are justified. Strengthening networking between research sectors and regional businesses is suggested as a preferable policy action. Supporting stimulants for vocational training that would enable the researchers to gain experience in business environment is also recommended.

The surveyed regions mostly have satisfactory dense network of major roads and rails. However, all of them have a problem with the quality of transport networks, as they are of unsatisfactory capacity or below the EU standards. Strong connections within regions and other regional centres are considered as a key infrastructural element to prevent outward migration of people and businesses. Together with international transport corridors the given region would attract multinational companies of global importance. In case of geographically isolated and sparsely populated areas high costs of maintenance of communication networks create certain problems for local governments. The EU policies should, therefore, focus more on improvement of the existing infrastructure with exemption of convergence regions. Here improvement of infrastructure density should take into account cost-benefit rationale as well as environmental values.

The share of people at the risk of poverty or social exclusion varies between competitiveness and convergence regions. Yet, in all of the regions there is still a need for further activity in this field. This requires both direct support for poor people as well as preventive action which should be concentrated on different forms of education and vocational training. In the case of social exclusion, a growing problem is ageing that should be handled by different policy measures, including connecting elderly people to natural and cultural heritage to prevent their social exclusion through involving them in different kinds of social activities. Both in poverty prevention

as well as social exclusion prevention a special role should be played by NGOs and local communities. Hence, policy mix should include their active participation.

Natural and cultural heritage in all the regions is considered to be an important part of their endowment. They all see the room for further increases in developing tourism, but struggle with insufficient promotion. In the case of convergence regions, there is still threat of degradation of the natural environment because of intensive development of agriculture and extraction and processing of natural resources. In order to develop sustainable tourism and balance co-existence of the heritage with the economic development, further progress in turning the EU economy into a circular one is needed. This requires a policy mix, targeting all the aspects of socio-economic activity from education to support for businesses in applying new green technologies.

The energy and environmental protection in the case of CP 'competitiveness' regions is accompanied by already well-developed or developing sustainable energy production. Contrary to them, the convergence regions are mostly dependent on conventional sources of energy (fossil fuels) that have negative impact on the environment. Therefore, promotion of environment-friendly practises should be part of all policies. More flexibility would optimise regional decisions regarding actions supporting development of sustainable energy sector. Regions with well-developed sectors are more focused on the use of their experience and are willing to become global players, while the others are at an early stage and concentrate on the uptake of most promising technologies.

In most cases, vast experience in the field of environmental protection is stimulated by the EU and national programmes and policies. Unsatisfactory level of waste recycling and public transportation promotion are the examples of issues that would require EU level attention. Here problem of unsatisfactory low rate of recycling of waste represents underexploited possibilities to stimulate rural and urban economy and development of circular economy. NATURA 2000 and agricultural policy are already examples of good practices with potential for further extension. However, in less developed regions investments toward stronger economy could be preferred above environment concerns.

Analysis of case study regions, suggests that better-off regions are not better prepared for socioeconomic challenges, especially those related to globalization. This suggests the need for further support to all these regions with respect to common problems, such as brain drain, youth

education improvement and migration of businesses and people. Outmigration and immigration are observed in both rural and urban areas. Improvement of education together with stronger participation of young population in local business development seems as robust solution for sustainable development for all regions.

Summarising, real problems are related to threats of depreciation of the most critical regional endowments. Mix policy could therefore be based on smart specialisation concept with strengthening interregional connections.

An important dimension of the analysis presented in this report is the extent to which urban-rural division influences the perception of institutional and political capacity to respond effectively to real problems. The descriptive analysis suggested that rural residents in case study regions were willing to trust the capacity of regional authorities to solve their 'real problems', more than of national institutions and the EU. Qualitative analysis proved the opposite tendency, i.e. in rural areas the greatest confidence in and conviction about the ability to improve economic situation was declared towards the European Union. On the other hand, in the case of urban areas, there was a general lack of confidence in the effectiveness of the institutions, and only in the case of regional authorities, the percentage of respondents who consider them to be effective was slightly higher than the percentage of those who consider them to be not so effective. Qualitative analysis supported this conclusion, i.e. in the urbanized areas, the regional authorities enjoyed the greatest confidence, as was the case when the full sample was taken into account without a general breakdown. An important message from the study is that in all cases, the overall lack of opportunities in this area was noted for central governments.

Generally, the beneficiaries of the EU funds are positively evaluating the economic situation in their region, and those who are positively assessing the capacity of regional authorities to solve problems, at the same time favourably assess the economic situation in the region. The latter refers in particular to respondents from urban areas.

The analysis of correlations between the perception of the capacity of the particular institution i.e. European Union, central government or local authority to solve the problems of the region and expressed satisfaction with the current economic situation of the region show that the chance of a positive assessment of problem solving ability is highest for local authorities. Estimated correlation coefficients increase with the transition from the EU level to the local level. At the same time, in

many regions, the EU institutions provide residents with a guarantee that their local problems will be adequately addressed in public policy.

Therefore, as an important recommendation for potential future policy mix, it may be suggested that the EU policy-makers and regional authorities are most likely to respond positively to the 'real problems' of the population from the point of view of the EU citizens. It also seems appropriate to improve the image of the European policies as effective tools to meet current challenges.

The following general recommendations can be drown from the above-presented study:

- The EU policies do not call for revolution but for some fine tuning that has already been started with the 2014-2020 programming period. The most important part of such encouragement package should be simplification of implementation rules accompanied by their unification, so that common rules apply to all sources of the EU funds.
- Place-based development is already part of cohesion, rural and urban policies but so far each of them has not been well linked to the other policies. The key issue in improving the integration between the cohesion, rural and urban policies in the future is, therefore, the approach based on spatial planning. It can be achieved by cooperation in designing policy programmes, so that the planned measures ensure maximization of synergies and create some additional value when combined<sup>7</sup> at the EU, national and regional levels.
- The EU support policies should be better integrated with the Member States own policies and structural reforms taking into account the general country characteristics as well as the regional specificity, and ensuring that the policy mix is well tailored to regions and types of developmental needs.
- Simultaneously, the EU should support transnational and cross-border cooperation which goes beyond administrative borders and covers the area of interregional cooperation (and in the operational and decision-making dimension). It is an innovative approach to development policy which considers characteristics and individual conditions in each of the region. It also gives greater freedom to regions in adjusting programme objectives to individual needs and even during programme implementation their adjustment to new conditions. It is also

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<sup>&</sup>lt;sup>7</sup> For example, support for less polluting urban public transport which is interlinked with less polluting rural public transport, so that commuters from rural areas can give up using their own car and can use a reliable public transport all the way from their homes to their work places, at the same time, decreasing the amount of GHGs emitted to the atmosphere.

worthwhile to consider the creation of mechanisms for a stronger impact of regions on elaboration of the EU development strategies.

- There is no trade-off relation between both approaches as to achieve cohesion we need growth and jobs which can be sustainable only when we use innovative solutions, taking into account the challenges which are present not only at the EU level but also at the regional level.
- The problems and methods of approaching them are similar within different CP regions (Competitiveness, Convergence-phasing out or Convergence), but there are also significant similarities between different types of regions concerning problems in socio-economic development. Therefore, strengthening the power of the regions in shaping and implementing the EU policies in response to 'real problems' identified at the regional level, while enhancing cooperation between the EU institutions, national governments and regional actors, may in the future be the key to a more effective use of the policy mix for better integration of the Cohesion Policy with urban and rural Policies.

The study proves that it is further necessary to develop the comprehensive theory of the European regional 'cohesion in diversity'. The theory bases on better apprehension of the channels through which the European policy and lessons learnt from its local implementation contribute to different urban-rural understandings of the EU and European identification across much diverse European regions. A further step in this direction covers combining outcomes from the different studies under the PERCEIVE project.

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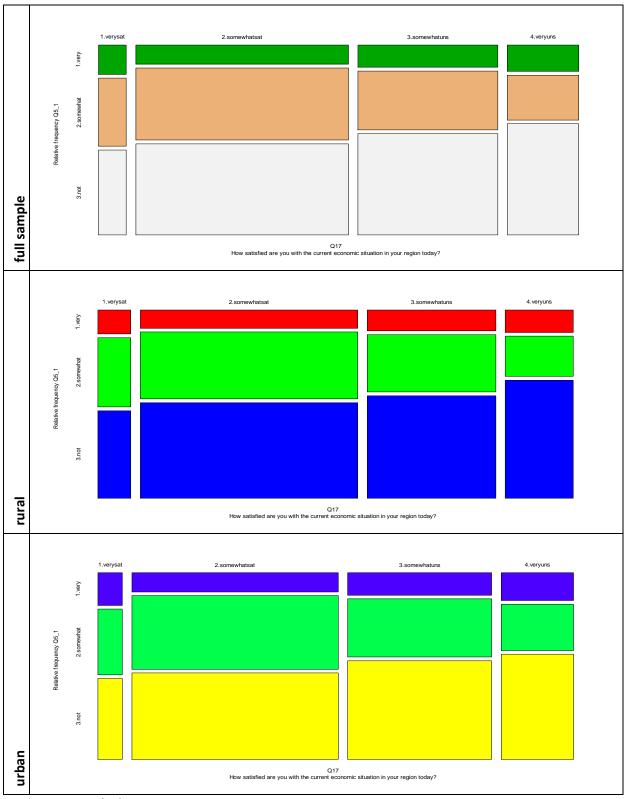
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#### Annex. Mekko charts illustrating the contingency relationship between the answers to the questions<sup>8</sup>

Fig. A.1. Mosaic plot Q5\_1 vs Q17



 $<sup>^{\</sup>rm 8}$  For description of survey and questions see chapter 5.

Fig. A.2. Mosaic plot Q5\_1 vs Q18

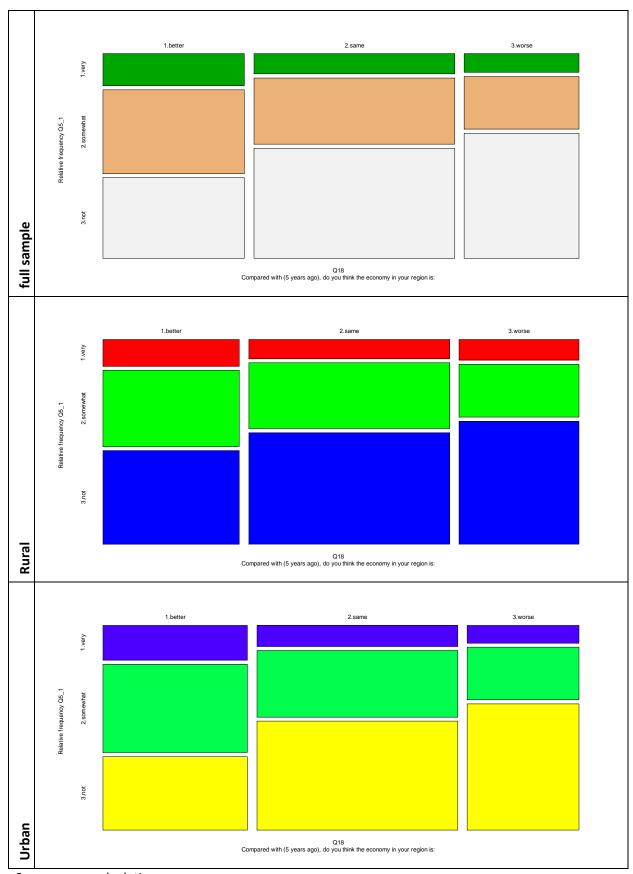


Fig. A.3. Mosaic plot Q5\_2 vs Q17

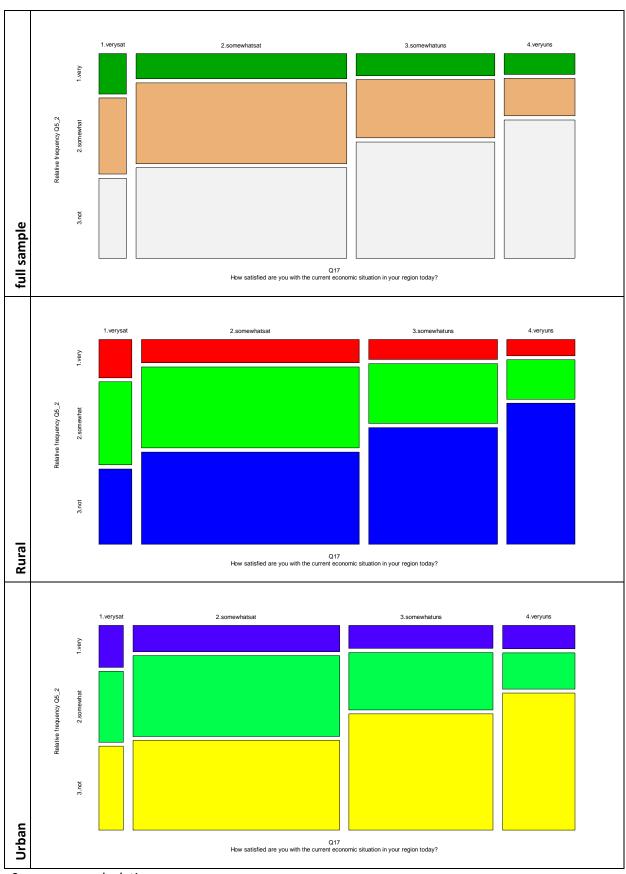


Fig. A.4 Mosaic plot Q5\_2 vs Q18

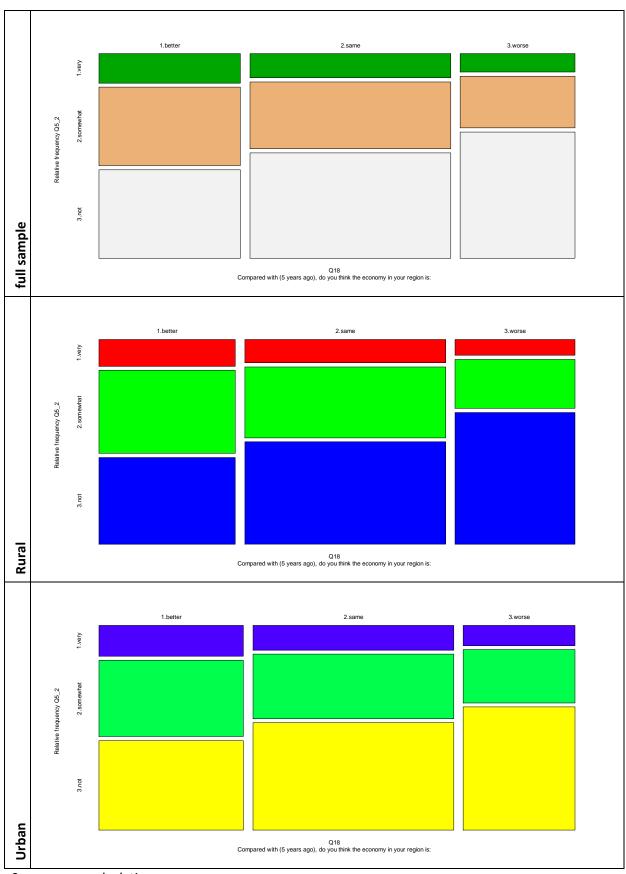


Fig. A.5. Mosaic plot Q5\_3 vs Q17

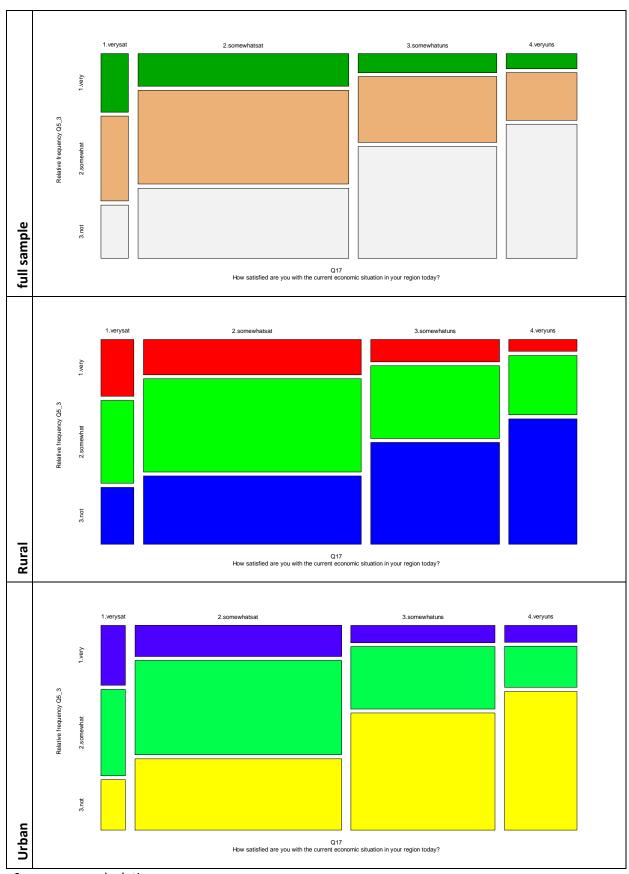


Fig. A.6. Mosaic plot Q5\_3 vs Q18

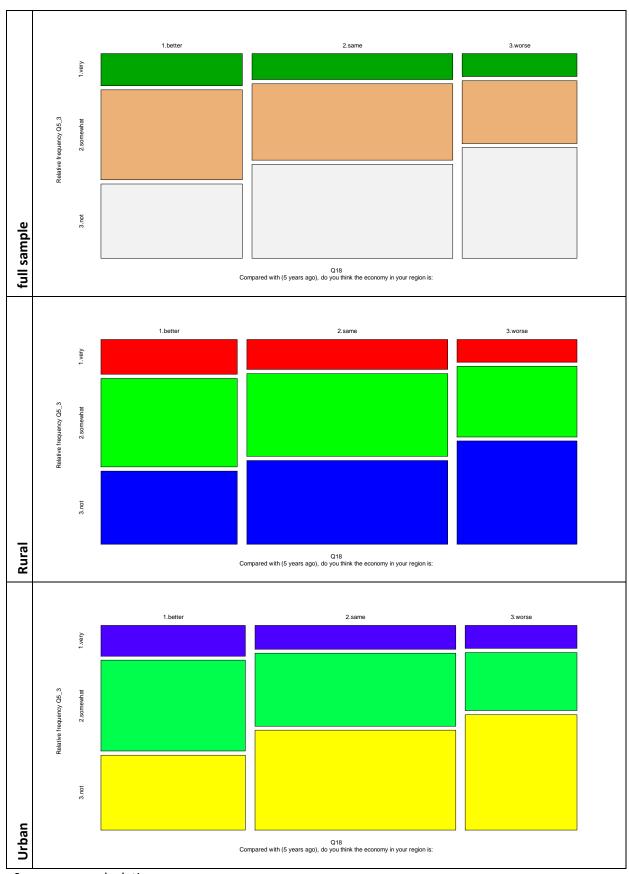


Fig. A.7. Mosaic plot Q3 vs Q5\_1

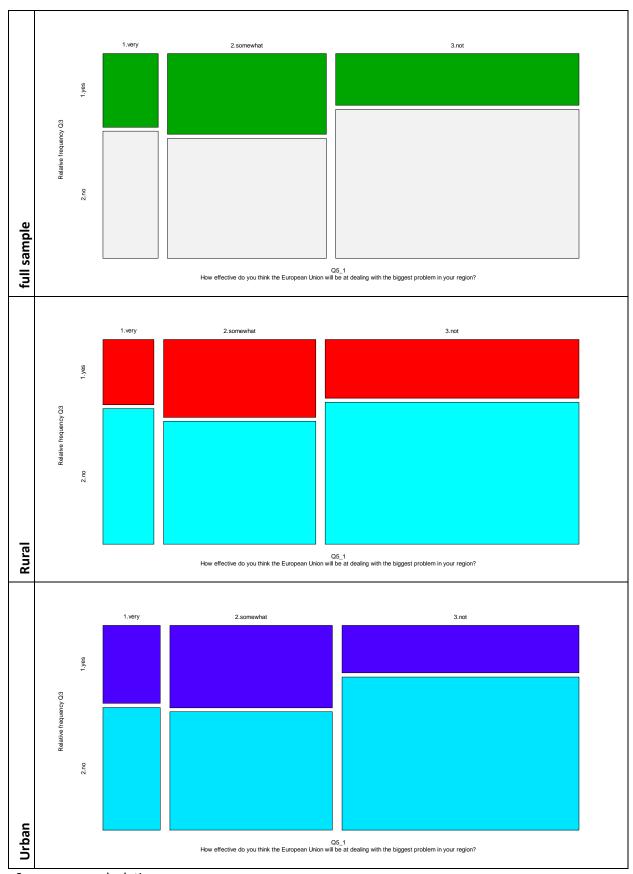


Fig. A.8. Mosaic plot Q3 vs Q5\_2

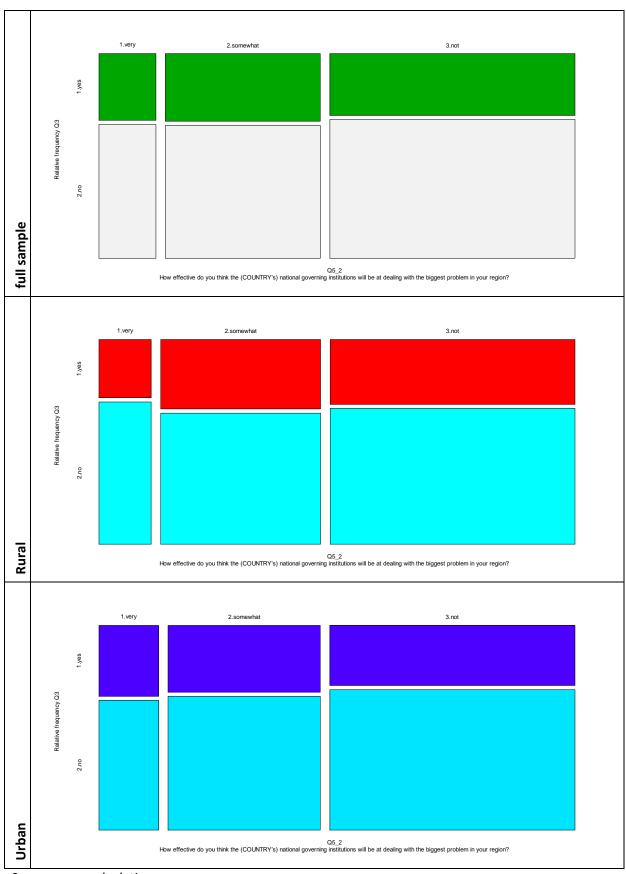


Fig. A.9. Mosaic plot Q3 vs Q5\_3

