



Munich Personal RePEc Archive

# **The Carpathian Euroregion from the perspective of economic cooperation in peripheral regions**

Smętkowski, Maciej and Rok, Jakub

Centre for European Regional and Local Studies (EUROREG),  
University of Warsaw

10 April 2016

Online at <https://mpra.ub.uni-muenchen.de/82763/>  
MPRA Paper No. 82763, posted 27 Mar 2020 07:49 UTC

**Maciej Smętkowski\*, Jakub Rok\***

\* Centre for European Regional and Local Studies (EUROREG), University of Warsaw, Krakowskie Przedmieście 30, 00-927 Warsaw, Poland  
Corresponding Author: Maciej Smętkowski, [msmetkowski@uw.edu.pl](mailto:msmetkowski@uw.edu.pl)

## **The Carpathian Euroregion from the perspective of economic cooperation in peripheral regions**

The paper comprises selected research findings from the EUBORDERREGIONS project entitled: 'European Regions, EU External Borders and the Immediate Neighbours. Analysing Regional Development Options through Policies and Practices of Cross-Border Co-operation', financed by the European Union as part of the FP7 Programme.

## **Abstract**

Euroregions provide an institutional framework that fosters cross-border cooperation. Their main objective is to manage and support economic, environmental, social, cultural and institutional cooperation in border areas. Economic cooperation should be considered as a crucial factor that may help strengthen the cohesion of the border regions, allowing them to overcome underdevelopment related to their peripheral location within the respective countries. The aim of the paper is to evaluate the significance of cross-border economic interactions in the Carpathian Euroregion. The analysis covers foreign trade relations as well as foreign direct investments in the border regions of Hungary, Poland, Romania, Slovakia and Ukraine. The first, empirical part of the paper, reviews these flows from the country-level perspective, providing an insight on the potential importance of economic cross-border cooperation. The second part presents a selection of empirical findings related to the intensity and direction of economic cooperation on the basis of the Polish case study. The last part assesses the impact of the Euroregion's activities aimed to strengthen economic cooperation between the partners located in different countries. Finally, the recommendations regarding future activities in this field, including reconfiguration of cooperation networks, are formulated.

## **Keywords:**

Cross-border cooperation,  
Carpathian Euroregion,  
peripheral regions,  
trade flows

## Introduction

In light of traditional regional development theories, the success of border regions largely hinges on high border permeability, because the boundary between different economic systems is regarded as the main reason underpinning their peripherality. It should be borne in mind, however, that their peripherality is first and foremost economic, not spatial, in nature. In consequence, border regions often lack the requisite resources, including human capital, to effectively join the mainstream of global information economy. In addition, they make a poor use of the existing endogenous potential for growth which, amongst other factors, includes the institutional environment for development processes. In this regard, institutions aimed to promote economic, social, cultural, political and institutional cross-border interactions can play a pivotal part.

Due to processes improving border permeability in Europe which are taking place in the wake of the demise of the Iron Curtain and as a result of European integration, border regions are increasingly perceived as areas facilitating contacts, flows and exchanges rather than as outlying parts of individual countries (cf. De Soussa 2013). The ongoing integration processes can however have a varying impact on cross-border regions, which can both derive benefits but also suffer losses as a result, depending on the circumstances posed by the local and national context (Niebuhr and Stiller 2002). For instance, the positive effect of the EU (European Union) enlargement by 10 new Member States should be better visible in the regions bordering on the EU-15 countries rather than in those situated along the Community's external border (Resmini 2003). Empirical studies of the external border of the European Union corroborate the view that the development of regions located along this border is weak, not least because of the so-called tunneling effect (Krätke 1999; Petrakos and Topaloglu 2008; Smętkowski et al. 2015). This effect occurs when, as the limitations posed by the existence of the border become weaker, interactions are increasing mostly between the core regions of the neighboring countries. As a result, the role of intermediation offered by the border regions in economic contacts is decreasing, and the regions themselves tend to develop their external linkages more frequently.

However, the increasing border permeability, despite the relatively diminishing role of the border regions in overall trade, can trigger economic linkages within the cross-border region. Such a situation can be observed especially where moderate structural discrepancies exist, whereas full similarity or full structural diversity as a rule tends to obliterate this effect (De Soussa 2013). The results also tend to differ, depending on what groups of actors are analyzed. While in the case of SMEs (small and medium-sized enterprises) better border permeability typically supports the development of cross-border cooperation (Dimitrov et al. 2003), the impact on large corporations operating internationally is as a rule negligible. Moreover, the so-called border effect, whereby the scale of domestic trade remains considerably larger than that of foreign trade, is distinctly visible even in the conditions of full economic integration (cf. e.g. Nitsch 2000; Helble 2007).

As a rule, cross-border economic cooperation develops stage by stage (e.g. Scott et. al 1996); it begins with spontaneous trade in open-air marketplaces, and leads, through regular trade, to the development of economic cooperation and capital linkages, which ultimately may produce an integrated production complex. Furthermore, the decreasing asymmetries in the development levels

and the narrowing functional and institutional distance, may also lead to increased flows of knowledge (Lundquist and Tripp 2011). As a result of a growing economic cooperation, it can also be expected that other forms of cooperation will develop and the functional integration of the border region will increase, also in the social, institutional and political spheres. This is partially corroborated by the findings from empirical studies, which however fail to provide an unambiguous answer as to the direction of the causal relationship between these phenomena (Garcia-Duran, Mora and Millet 2011).

As demonstrated above, the institutional dimension plays a crucial role in creating conducive conditions for the development of CBC (cross-border cooperation). Contemporarily, considerable attention in the studies of border regions is given to the 'relativization' of spatial scales (Brenner 1999). This is due to the fact that not only does the level of the central authorities matter for the development of CBC, but also the actors at the lower levels of the hierarchy, which can lead to the evolution of a system of multi-level governance (cf. e.g. Piattoni 2009). This in turn produces re-territorialization, associated with a greater involvement of actors at the regional and local levels in socio-economic development processes. In particular, in addition to the increasing role of local government at the regional level (Keating 1998), this leads to the establishment of various institutions which become involved in CBC development processes. An interesting typology of such institutions was proposed e.g. by Blatter (2004), who, firstly, pointed to the instrumental and control functions that facilitate resolving specific problems, and to identification functions which help build a specific identity. Secondly, he introduced two models of co-governance, one strongly embedded territorially, and the other sustaining the development of functional ties irrespective of the location or physical distance. In effect, Blatter (2004) distinguished four model situations: commission (instrumental/territorial); connection (instrumental/functional); consociation (identity-providing/territorial), coalition (identity-providing/functional). The first significantly relies on the involvement of governmental actors, a large scale and a broad range, accompanied by the participation of experts. In the second, actors come from various tiers, with a wider scope of operation, manifesting the participation of planners as well as developers. The third is characterized by a prevalence of regional-level actors furnished with broad competences and a considerable scope of operation, with charismatic leaders as an integrating element. In the fourth, the structure is considerably networked and not limited territorially, the scope of cooperation being largely determined by specific interest groups.

In this approach, Euroregions, understood as *a transnational cooperation structure of a few bordering territories located in different countries of Europe* (Chabanna 2013, p. 79), can be viewed as a combination of functions used in the above typology. They can be established by the local or central authorities, and the scope of their operation can be either broad and encompassing all types of cross-border interactions, or only some of them (Lepik 2009). Regardless of the above, Euroregions require the participation of local and regional actors in such cooperation, as they should be more aware of shared interests, offered by the development of CBC. According to the typology of CBC (Medeiros 2011), Euroregions are regarded as its most-developed form, characterized by considerable intensity, stability, and involvement of many actors, particularly local ones, who are jointly pursuing a development strategy for the cross-border region. In this context, the geographical range of Euroregional cooperation is viewed as especially important (Perkmann 2003), which however does not

determine the range of actors involved in cooperation or its intensity. This means that active cooperation may also be effected in a broader spatial framework, so as a small spatial range does not preclude the engagement of actors from higher levels of the hierarchy. However, regarding the effectiveness of the implementation of EU programs, some authors point out that smaller entities are as a rule more effective in this regard: *It appears that the micro-CBR (cross-border regions), as an institutional form, is better suited to taking an active role in implementing EU policy measures than the larger Working Communities that suffer from coordination drawbacks due to the higher number of participating authorities as well as their diversity in terms of legal-administrative competencies...* (Perkmann 2003, 167).

### **Aim and structure**

The main aim of the paper is to evaluate the significance of cross-border economic interactions in the Carpathian Euroregion. Economic cooperation has been selected as the main object for the analysis due to the fact that such cooperation should be considered as a crucial factor that may lead to the strengthening of the cohesion of border regions, allowing them to overcome their underdevelopment related to peripheral location within the respective countries. The analysis covers foreign trade relations and FDI (foreign direct investments) in the border regions of Hungary, Poland, Romania, Slovakia and Ukraine, as well as the perception of SMEs related to CBC opportunities. The latter are based mainly on the results of the surveys conducted in the Polish part of the Carpathian Euroregion, where most extensive activities could be observed regarding support to economic integration processes. According to the research hypothesis, the process of economic integration between the EU Member States should continue to expand, whereas the barrier in the form of the external border was expected to hamper cooperation with the Ukrainian regions across the border. One additional aim was to find an answer to the question whether, and how, the activities of the Carpathian Euroregion impact these processes. According to our hypothesis, the impact of the Euroregion would prove to be insignificant, partly due to the small volume of the allocated funds and to the alternative institutional solutions in the bilateral relations.

The paper has three parts. The first part discusses the Carpathian Euroregion and its activities in the context of promoting cross-border economic cooperation. The second, empirical part of the paper is focused on economic cooperation and its evolution in the Carpathian Euroregion. This part includes, on the one hand, the analysis of trade and FDIs based on the country-level perspective that provides us with an insight on the potential importance of economic cross-border cooperation. It also offers a selection of empirical findings related to the intensity and direction of economic cooperation on the basis of the Polish border region case study. The last part assesses the impact of Euroregion's activities aimed to strengthen economic cooperation between the partners located in different countries. Finally, the recommendations regarding future activities in this field including reconfiguration of cooperation networks are formulated based on the drawn conclusions.

### **Carpathian Euroregion as a tool to promote economic cooperation**

The Carpathian Euroregion was established in 1993 by the foreign affairs ministers of Hungary, Poland and Ukraine. Currently, the Carpathian Euroregion covers 19 administrative units from five countries – Hungary (five NUTS-3

counties), Poland (one NUTS-2 voivodship), Romania (five NUTS-3 counties), Slovakia (two NUTS-3 regions) and Ukraine (four oblasts) (NUTS is an acronym for the EU nomenclature of territorial units for statistics). It might be considered as a mega-region, with 15.8 million inhabitants and an area exceeding 150 thousand sq. km. Its geographical backbone is the Carpathian mountain range, offering a common cultural and environmental heritage, but simultaneously posing a physical barrier to cooperation. Travelling times between the main cities in the area vary from two to three hours when bilateral relations are considered, up to eight hours between the farthest points (not including the time needed for crossing the border between the New Member States and Ukraine).

The Carpathian Euroregion was the first such political initiative set up exclusively by post-communist countries. The area is inhabited by various ethnic minorities, many of whom are entangled in the long-standing territorial disputes and political confrontations. State borders and regimes were shifting constantly in the twentieth century, leading to instability and uncertainty. After the fall of the Soviet Union, this part of Europe embarked on a process of integration, with an ultimate goal of joining the structures of the so-called Western World (such as NATO or the European Union). Thus, the logic behind the establishment of the CE (Carpathian Euroregion) was to prevent regional ethnic conflicts in the transition period (Tanaka 2006), as well as to create a body that would facilitate the implementation of pre-accession EU programs (Perkmann 2003). The explicit objective of the Carpathian Euroregion is to bring together people living in this region and to promote their cooperation in the field of social, economic, scientific, ecological, educational, cultural and sports affairs. It is often considered as the most successful Euroregional initiative in this part of Europe, mostly due to the achievements in the sphere of environment protection, cultural exchange, institutional networking and promoting a peaceful coexistence (Tanaka 2006; Chabanna 2013; Borshch 2014).

The institutional setting of the Carpathian Euroregion is somewhat blurred. The Interregional Association Carpathian Euroregion is not a separate entity recognized by international law, but rather a political framework that facilitates inter-regional cooperation. However, it has its own set of regulations that define the territorial scope and the organizational structure. The structure is composed of four parts: Council, Secretary General, National Offices and Working Commissions (Tanaka 2006). The Council is the supreme body of the CE, where each party has 10 representatives from central and local administration as well as from other private and public organizations. It meets twice a year to discuss joint activities and make decisions regarding the budget and major organizational changes (e.g. rules of the organization). The Secretary General is elected every two years and acts as an executive director, managing day-to-day cooperation activities and overseeing the auditing and financial issues. There are five National Offices, which serve as an interface between the Council and the initiatives that are being implemented in this field. Each of the Offices is responsible for coordinating activities of one of five thematic Working Commissions (dealing with regional development, trade, tourism and environment, prevention of natural disasters and social infrastructure).

The National Offices were set up to fit dissimilar national contexts, regarding e.g. the law or public administration structures. The institutional settings of these Offices, as well as their scopes of competences, are therefore different. This, in turn, impedes their cooperation. In 2001, the Polish side registered the

Association of the Carpathian Euroregion Poland, supported by the local governments from the Polish side of the border. Later on, a similar formula was taken up by the Ukrainian and Slovakian partners (in 2007 and 2008, respectively). Such a model of establishing the National Offices is believed to bring benefits to Euroregional cooperation, providing a stable foundation for undertaking common international activities (Association of the Carpathian Euroregion Poland 2011).

### **Euroregional activities in the economic sphere**

This section is focused on activities provided by the CE that are aimed at strengthening and enhancing the economic dimension of cross-border cooperation. This area has not been thoroughly examined yet, and therefore the following analysis draws mainly on a comprehensive review of the documents and data published on websites of the National Offices as well as their collaborators<sup>1</sup>. According to the overview, the CE is implementing a variety of activities targeted at strengthening the economic ties in the region. These might be grouped into five, partially overlapping clusters: (1) lobbying for the development of technical infrastructure (border crossings, roads) necessary for cooperation, (2) promotion activities, (3) coordination, (4) networking and (5) institutional spin-offs (**Fig. 1**).

#### **Fig. 1. Activities undertaken by the Carpathian Euroregion**

[figure 1 here]

Source: own elaboration.

An increase in the number of **border crossings** between the countries is often seen as a major – though indirect - achievement of the Carpathian Euroregion as regards the strengthening of economic cooperation (Borshch 2014). It was a preliminary step that allowed a more intensive exchange on the local and regional levels and thus also the development of more sophisticated structures of cooperation. However, one should remember that the decisions regarding the development of border crossings and transport infrastructure were made at the state level, and the impact of Euroregion's lobbying activities in this field is practically impossible to assess.

**Promotion activities** undertaken by the CE includes organizing numerous trade fairs that provide a platform for companies located in different parts of the region to display their offer and establish business relations. These fairs are often accompanied by expert seminars on various aspects of cross-border economic cooperation. One example of such a fair is the yearly Alps-Carpathian Cooperation Forum, started in 2011 by the Polish National Office. This international fair and conference event aims to promote the economy of the Carpathian region and encourage a discussion on the development of the region, drawing on the experience of the Alpine countries. In 2014, a new initiative was launched during the Forum – the Regional Brand 'CARPATHIA'. It was

---

<sup>1</sup> The accessed materials refer mainly to the activities initiated by the Polish partners. The reason for this is twofold. Firstly, the Polish side seems to place the highest value on developing economic cooperation, while other National Offices often focus on fostering socio-cultural relations. Secondly, only the Polish National Office has been acting as an implementation agency of the EU programme (namely, micro-projects funded under the Cross-Border Cooperation Programme Poland-Slovakia 2007-2013). Direct involvement in the distribution of EU funds increased the capacity of the organization, thus allowing for developing actions with a greater impact.

developed together by Polish and Swiss experts to complement the strategy of sustainable tourism in Carpathian region. Based on the brand, a new partnership of public and private organizations was created with the aim of improving the visibility and attractiveness of the region. In order to support the local businesses in internationalization activities, a special fund has been established. It provides small grants for enterprises interested in promoting their products abroad and in developing cross-border business relations.

A **coordination activity** refers mainly to programming of development. The Euroregional System of Cooperation is a governing instrument established in order to fulfill the goals set by the Interregional Council. It is a platform for different partners from the public and private sector that allows for developing and implementing common strategies, programs and projects. In the first years after the creation of the CE, the funding for these common actions was provided mostly by the Carpathian Foundation located in Kosice and its branch offices (later on established as separate entities) from Hungary, Poland, Romania and Ukraine. These foundations were established with the aid from the East-West Institute, and have received funds from various private and public donors. After the EU accession and withdrawal of some of the donors, the network of foundations became looser and they began to act more independently. However, the projects financed by these foundations usually serve social goals rather than economic ones. EU programs have been another important source of funding for Euroregional activities. Among the National Offices, only the Polish Office has served as an implementation agency of one of the EU programs – the Poland-Slovakia Cross-Border Cooperation Programme 2007-2013. It was responsible for implementing micro-projects supporting the local initiatives. In effect, it has become a key institution for supporting cross-border cooperation in this part of Poland. By June 2014, 115 projects were funded, with a total value of EUR 4.24 million (Association of the Carpathian Euroregion Poland 2014)

In 2005, a new concept emerged inside the CE, which led to an initiative known as the *Carpathian Horizon 2020 – The Strategy of Regional Development of Carpathians*. It is a project of a macro-regional strategy that was intended to be coupled with a special operational program for the Carpathian region in the 2014-2020 financial perspective. It proposes to replace six cross-border cooperation programs implemented in the region during the 2007-2013 period, with one – The Carpathian Space Program. The first priority stated in this strategy is to create an innovative and competitive region with a high economic potential (Association of the Carpathian Euroregion Poland 2013). Despite the CE partners' lobbying for approving this solution, the European Commission decided to continue its policy of dispersing CBC funds amongst smaller bi- and trilateral programs.

The third group of activities is built upon **networking**. The first such initiative was established as early as 1993, when the Carpathian Association of Chambers of Commerce was founded. Its aim is to develop economic and trade relationships between the regions that are represented by nine Chambers participating in this network. Development of this association has been promoted by the Working Commission on Trade Development, managed by the Romanian partners. Other economic-oriented networks have been launched more recently and they are still limited to participants from two or three countries. One of such initiatives is the Tourism Cluster of the Carpathian Euroregion. It is a platform of local governments, enterprises and non-governmental organizations (NGOs) that aims to strengthen the capability of the region to fully tap its potential as a

tourist destination. Another initiative – the Carpathian College – focuses on developing the scientific cooperation among the higher education institutions located in the CE. Yet another networking structure is dedicated to local authorities representing the cities from the CE area (The Network of Cities of the Carpathian Euroregion). It aims at enhancing the scope and effectiveness of cooperation through exchange of knowledge and coordination of dispersed activities. Currently, only 11 cities from Poland and Slovakia take part in this initiative. The Carpathian Network of Cooperation is a platform that gathers experts from different fields, who are engaged in shaping the development policy of the CE. The network has been established in order to identify and mobilize the human potential for achieving the goals of the Euroregion. A few thematic sections have been created, e.g. covering issues of tourism, environmental protection and entrepreneurship. Finally, a network of regional development institutions has been established in order to share experiences but also to better coordinate the activities undertaken in different parts of the Carpathian borderlands.

The active presence of the CE has paved the way for ‘**institutional spin-offs**’, i.e. new institutions that use the potential and capabilities of the existing CE structures to serve complementary goals, focusing also on enabling cross-border economic cooperation. One example of such an institution is the Carpathian Agency of Regional Development that aims at coordinating efforts undertaken by different development agencies on both sides of the Polish-Slovakian border. Another example is the Centre for Cross-border Cooperation in Przeworsk (Poland) – formally a branch office of the Rzeszów Agency of Regional Development. It fosters the economic development of the Polish-Ukrainian-Slovakian borderland through consulting, networking and knowledge management activities.

## Economic co-operation in the Carpathian Euroregion

The Carpathian Euroregion is faced with a number of challenges, mostly of economic and political nature. The area of the Euroregion is divided by the external EU border, and the introduction of the Schengen acquis has hampered the exchange between Ukraine and the EU Member States. On the other hand, the recent geopolitical developments in Ukraine raise the profile of cross-border cooperation between the EU and Ukraine. From an economic point of view, regions forming the CE have a relatively low level of economic development, as compared to the respective national averages (**Tab. 1**).

**Tab. 1.** Scale of disparities between the analyzed parts of the Carpathian Euroregion

Regions forming the CE	GDP per capita [EUR]		GDP per capita [country=100]	
	2004	2011	2004	2011
Hungary	5463	6706	67.3	63.4
Poland	3730	6499	69.8	67.7
Romania	2191	4089	77.9	66.0
Slovakia	4663	8683	73.8	67.8
Ukraine	711	1611	69.1	62.9

Source: own elaboration based on Eurostat data.

The Slovakian regions were among the most affluent ones measured in absolute terms, in EUR. In the recent years, they have recorded the highest GDP (Gross

Domestic Product) growth, as a likely consequence of joining the Eurozone. The Polish regions were also developing robustly, and in effect were able to catch up with the Hungarian regions. The wealth of the Romanian regions grew dynamically, yet from a much lower level, but nevertheless the rate of growth was nearly twice as low as that of the Slovakian regions. At the same time, the development level of the Ukrainian regions compared to that of the EU regions was very low, only slightly exceeding EUR 1000 per capita. At the same time, the Ukrainian regions were relatively the least affluent compared to the country at large (similarly to the Hungarian regions), and their GDP level related to national average has decreased in the analyzed period by almost 7pp, surpassed only by the Romanian regions which recorded a staggering 12pp drop. In consequence, none of the border regions exceeded 70% of the national average, and the situation could be regarded as relatively stable only in the case of the Polish region. This means that the constituent regions of the Carpathian Euroregion were among the most peripheral areas of their respective countries. To make matters worse, this peripheral status has increased even further in the recent years. This was caused, amongst others, by their unfavorable economic structure associated mainly with a high share of employment in the unproductive, mostly subsistence agriculture, which translated into a very high level of hidden unemployment. Their weaknesses also included a low level of urbanization and a weak role of large cities, the biggest of which concentrated from a mere 5.7% of the population in the case of Romania to 14.7% in the case of Slovakia.

### International trade and investments at country level

The scale of economic ties expressed as the trade volume and the scale of mutual investments between the individual countries whose regions are comprised by the Carpathian Euroregion varies significantly. Based on the foreign trade statistics, the main directions of such linkages can be identified (**Tab. 2**). In a summary approach for Poland and Ukraine, i.e. countries with the greatest demographic and economic potential, the share of the remaining countries of the macroregion in trade was relatively low, under 10%. This is particularly well visible especially in Poland, a country with very strong trade links with the EU15 countries, notably Germany. A similar situation can be observed in Ukraine, with its robust trade ties with the CIS (The Commonwealth of Independent States) countries, particularly Russia. Interestingly enough, Poland has the strongest ties not with Ukraine, but with Slovakia and Hungary, both countries much smaller than Ukraine. Each of these countries accounts for some 2.3-2.4% of overall trade volume, compared to 1.7% in the case of Ukraine. By contrast, Ukraine has the strongest ties with Poland (4.1%), and also Romania (2.1%) and Hungary (2.0). For the remaining three countries, the macroregion plays a significant role in trade as it accounts for ca. 13-14% of foreign trade.

**Tab. 2.** Trade flows between countries in 2010 [%]

Per cent of total foreign trade		Poland	Romania	Slovakia	Ukraine	Hungary	All 5 countries
Of	Poland		1.0	2.4	1.7	2.3	7.4
	Romania	3.0		1.4	2.6	6.4	13.4
	Slovakia	6.3	1.2		0.9	5.9	14.3
	Ukraine	4.1	2.1	0.8		2.0	8.9
	Hungary	4.2	4.1	4.1	1.5		13.9

Source: own elaboration based on UNCTAD data.

It is interesting to observe how, driven by European integration processes, particularly the EU accession of four of the analyzed countries, the macroregion's share in foreign trade volume has changed. While Slovakia, Hungary and Romania recorded a robust 4% growth in 2005-2010, the role of such exchange in Poland and Ukraine increased only slightly, by a mere 0.5pp (**Fig. 2a**). The increased significance of such trade was distributed fairly evenly in terms of exports and imports in the case of Hungary, Poland and Ukraine (**Fig. 2b**). On the other hand, the EU membership in Romania triggered a strong increase in exports to the macroregion's countries (by 6pp), which can probably be associated with accelerated restructuring processes and an increasing competitiveness of the economy. An opposite situation could be observed in Slovakia, where imports increased rapidly (5pp), a likely consequence of its accession to the eurozone in 2009.

**Fig. 2.** Share of analyzed countries in foreign trade  
[figure 2 here]

Source: own elaboration based on UNCTAD data.

As regards the attractiveness of the macroregion's countries for foreign investment, it should be noted that the analyzed countries provided important capital destinations globally. In the analyzed period, Poland was the most attractive country in this regard, followed by Romania and Ukraine, both countries with the biggest sales markets. However, taking into account the size of the population, FDI (foreign direct investment) inflows were comparable in Hungary and even greater in Slovakia. On the other hand, in per capita terms, we can see that Ukraine was not as attractive as the remaining countries of the macroregion. Quite importantly, the examined countries were not important sources of foreign investment. In this respect, Poland and Hungary have the strongest position, but even in their case it was only 35-40% of the total capital influx. It should also be noted that much of this outflowing capital was invested in the macroregion's countries – notably in Ukraine and Romania (**Tab. 3**). We can say therefore that the capital flows were from the more affluent to the less affluent countries, which partly offset the imbalance that could be observed in foreign trade.

**Tab. 3.** Polish and Hungarian FDI outflow 2005-2010 [million USD]

2005-2010 FDI Stock		Destination				
		Poland	Hungary	Ukraine	Romania	Slovakia
Source	Hungary	404		1271	481	310
	Poland		296	892	470	80

Source: own elaboration based on UNCTAD data.

As a matter of course, the national-level statistics do not provide information whether the cross-border regions play any significant role in economic linkages. We attempt to answer this question below, based on the research conducted in the Podkarpackie Voivodship, using statistical data as well as surveys of businesses and local residents.

### Cross-border linkages of the Podkarpackie Voivodship – a case study<sup>2</sup>

The study of cross-border cooperation was conducted in the Podkarpackie Voivodship located in the south-eastern part of Poland, bordering on Ukraine and Slovakia. The analyzed administrative units correspond to the NUTS2 regional level. This region is inhabited by a population of 2.10 million and has an area of 17,800 km<sup>2</sup>. Until recently, cross-border economic activity in this region was often based on semi-formal small-scale retail trade in marketplaces located close to the border. After introducing the Schengen acquis, the sealing of the Eastern border of Poland has led to a rapid decrease in the role of small border trade, which contributed to the loss of jobs on both sides of the border. The most primitive forms of cross-border business activities decreased significantly, and the volume of petty trade has decreased significantly after the stricter rules on the transport of goods were introduced. The more sophisticated and/or large-scale investments are often discouraged due to a low level of accessibility of the region. Road and rail infrastructure is underdeveloped and the number of border crossing points is not sufficient to facilitate a smooth flow of people and goods across the border.

In the recent years, it could be observed that the role of the Podkarpackie Voivodship in Poland's foreign trade has been decreasing steadily (**Tab.4**). The region's share in Poland's exports which was 4.0% in 2000 shrank to 3.3% in 2010, and in imports - from 4.1% to 2.4%. This could signify that the role of trade intermediaries played by the regional enterprises had decreased in relation to international trade, especially with Ukraine. The geographical structure of foreign trade has also changed, with a decreasing role of the eastern markets, i.e. the countries bordering on Poland which are not EU member states (Belarus, Russia, and Ukraine). In 2010, the share of these markets in exports totaled ca. 13% (an approximately 2pp decrease in 2006-2010), and 5% imports. In parallel, the new Member States kept up their ca. 15% share in the volume of foreign trade. In effect, despite their border location, Germany has remained the main trade partner for the Podkarpackie businesses, with a 28% share in exports and 24% in imports, the remaining EU countries totaling, respectively, 22% in exports and 27% in imports. Quite interestingly, the close proximity of the new EU Member States is of greater significance for imports (+4 pp in imports compared to the country's average and -1 pp in exports), and the proximity of the eastern markets - in exports (+5pp in exports and -7 pp in imports).

**Tab. 4. Role of the Podkarpackie Voivodship in foreign trade**

Indicators	2000	2006	2010	Change 2006-2010 (pp)
<b>EXPORT</b>				
Share of total imports	4.0	3.5	3.3	-0.2
- exports to RU-BY-UA (% total)	n/a	15.5	13.3	-2.2
- exports to CEEC (% total)	n/a	12.8	15.0	2.2
In relation to PL average (pp)				

<sup>2</sup> Altogether, 193 enterprises and 372 residents were surveyed as part of the ESPON TERCO and FP7 EUBORDEREGIONS projects, in three locations: the region's capital, Rzeszów (180,000 residents) and two major subregional centres, Krosno (60,000), situated near the border with Slovakia, and Przemyśl (70,000), situated close to the Ukrainian border.

- exports to RU-BY-UA	n/a	7.2	5.9	-1.4
- exports to CEEC	n/a	0.8	-1.0	0.8
IMPORT				
Share of total imports	4.1	3.6	2.4	-1.2
- imports to RU-BY-UA (% total)	n/a	5.5	5.0	-0.5
- imports to CEEC (% total)	n/a	12.3	15.0	2.7
In relation to PL average (pp)				
- imports to RU-BY-UA	n/a	-2.6	-5.8	-3.2
- imports to CEEC	n/a	3.4	4.0	0.6

Source: own elaboration based on GUS (*Główny Urząd Statystyczny*, Central Statistical Office in Poland). Abbreviations: PL – Poland, RU – Russia, BY – Belarus, UA – Ukraine, CEEC – Central and Eastern European Countries.

The directions of trade linkages are clearly dependent on the location of a given enterprise within the Voivodship (**Fig. 3**). While in the case of Krosno, 43% of the surveyed enterprises declared they had economic ties with Slovakia, only 7% had such ties with Ukraine. An opposite situation can be observed in Przemyśl, where 34% of businesses declared cooperation with Ukraine, and only 10% - with Slovakia. Rzeszów is the only city which makes a similar use of the potential created by its border location in both directions. It is quite clear from the plans declared by the businesses which had no earlier experiences in such cooperation, that these directions of cooperation will continue, although accompanied by an increasingly diversified trade structure.

**Fig. 3.** Percentage of businesses that report business cooperation with neighboring countries

[figure 3 here]

Source: own elaboration based on survey results. Abbreviations: UA – Ukraine, SK – Slovakia.

On this basis, it can be said that the geographical location has strongly determined the structure of trade linkages. To some extent, the trends observable on the basis of statistical data, i.e. re-orientation of trade linkages towards Slovakia as a result of joint EU membership, with a decreasing role of Ukraine, have been corroborated.

This can also be seen from the evaluation of the border location for business operations; it was regarded as moderately positive in Przemyśl (with an average of 3.54 on the scale from 1 – very unfavorable, to 5 – very favorable), while the average for Rzeszów was 3.43 (**Fig. 4**). In the case of Przemyśl, a city situated closer to the border, the respondents quoted such benefits as easier access to the markets and workforce, whereas in the case of Rzeszów, the region's capital, they mentioned benefits such as easier access to programs offering supports to companies and greater investment opportunities arising from the border location. It should also be noted that the differences in the opinions expressed by businesses in both locations were relatively small.

**Fig.4.** Advantages of location as viewed by businesses (% answers)

[figure 4 here]

Source: own elaboration based on survey results.

According to business survey the key barriers obstructing trade with Ukraine include the 'black triangle' involving bureaucracy (red tape), ambiguous regulations and in effect corrupt behaviors. They are particularly acutely felt on the Ukrainian side of the border, although, obviously, are also encountered on the Polish side. It should also be noted that, on the Polish side of the border, certain improvement of the situation has been observed in comparison to the 2002 survey, visible especially in the sphere of corruption, the only category in which a smaller number of replies was recorded. This could demonstrate that the Polish administrative system has consolidated and that such behaviors are gradually eliminated; it could also point to a relative improvement in relation to the situation in Ukraine.

Another group of factors is associated with a sense of insecurity and business risks, which can also be accompanied by feelings of certain resentment on the part of the public authorities, an attitude quite frequently observed on the Ukrainian side. In this regard, the respondents' opinions had clearly deteriorated over the past decade. This could be partly due to the failures of Polish companies investing in Ukraine caused by the unfriendly attitude of the authorities (liquidation of the economic zone in Yavoriv) and the need to cover the costs of hiring security guards for industrial plants owing to attempts for their hostile takeover on the basis of Ukrainian regulations which do not ensure an equal protection of private property as do the relevant regulations in Poland.

Difficulties with crossing the border are a problem voiced by the two sides, although they are more acute on the Ukrainian side of the border and relate to both cargo and passenger traffic. Also in this regard, the sentiment of companies has drastically deteriorated despite considerable expenditure on infrastructure, which could point to other sources of these problems, associated e.g. with the way the border services operate.

By contrast, financial difficulties were not regarded as particularly acute. On the other hand, some problems were indicated in relation to the infrastructure on the Ukrainian side of the border, mainly concerning the condition of the roads. These more negative opinions on the condition of the infrastructure on the other side of the border could partly be due to the progress made in the recent years in Poland following the investment projects implemented as part of the Cohesion Policy.

### **Tentative evaluation of the activities of public authorities and the Carpathian Euroregion in supporting economic cooperation**

The CE, with its vast area (exceeding the size of Greece) and a lack of well-established institutional structures, is susceptible to disintegration processes. One of the earlier evaluations of the Euroregion's operation named the following difficulties: (Tanaka 2006, 67): *1) a crisis of self-recognition, which refers to a lack of knowledge, information and consciousness; 2) a crisis of representation, because the low-level local self-governing bodies, non-profit organizations, private enterprises are not able to send their representatives to both the Council and the national organization of the Carpathian Euroregion; 3) crisis, related to participation, because local residents are completely uninterested in the CE's issues.* In this part of the paper, we review the alternative forms of CBC support

and assess their impact on the integrity of the CE framework. We also discuss the findings from the questionnaire surveys of businesses and residents of the Podkarpackie Voivodship related to the evaluation of the activities undertaken by the public authorities in order to boost the development of CBC. This should indirectly allow for an evaluation whether the activities of the CE are visible and in what areas, in the context of the ongoing European integration processes and the leading role of the Cohesion policy in the EU Member States and given the existing limitations imposed by the existence of the external EU border and the Schengen area.

### **Alternative forms of CBC in the Carpathian Euroregion**

The amount of European funds allocated to various forms of cross-border cooperation has a direct impact on the intensity and scope of border relations. In the analyzed Euroregion, these funds comprised the INTERREG Programme financed under the Cohesion policy's Objective 3 on the one hand, and on the other, the European Neighbourhood Partnership Instrument implemented as part of the European Neighbourhood Policy. The data for the 2007-2013 period show a disproportion between the allocation for INTERREG A (comprising four countries: Hungary, Poland, Romania and Slovakia) and three ENPI programs established in the region (covering seven countries: Poland-Belarus-Ukraine, Hungary-Romania-Slovakia-Ukraine, Moldova-Romania-Ukraine). The former amounted to EUR 607 million, while the latter - to EUR 396 million. Thus, cross-border cooperation programs further disintegrate the macro-region and give preferences to intra-EU cooperation, instead of developing links across the external EU border. The introduction of the ENPI extended the territorial scope of cooperation with the external partners (Belarus, Moldova). Given the limited funds available under this instrument, the possibility to develop a meaningful program of cross-border cooperation is compromised.

Some regions included in the CE have simultaneously developed also other bilateral agreements. One of the initiatives embraced by the regional authorities is the European Grouping of Territorial Cooperation (EGTC). Unlike the Carpathian Euroregion and many other structures designed to promote cross-border cooperation, EGTC is a legal entity. Furthermore, it enables local and regional authorities to team up and develop joint actions, without requiring a prior international agreement to be ratified by the national parliaments. According to the data from February 2014, there were 11 such groups established between Hungary and Slovakia, and two between Hungary and Romania, as well as between Poland and Slovakia (Pucher, Frangenheim and Radzyner 2014). Yet another example of the bilateral agreement is the Carpathian Agency of Regional Development, established on the Polish-Slovakian border.

Furthermore, other Euroregions have been established within the Carpathian Euroregion or partially overlapping with its territory. The eastern part of the CE – two regions from Ukraine and two from Romania – joined the Upper-Prut Euroregion, an initiative established in 2000. The CE has experienced also a unique 'Euroregion within a Euroregion' phenomenon (Popescu 2008). The Kosice-Miskolc (Slovakia-Hungary) Euroregion was established within the CE in May 2000. Two years later a new Euroregion, Biharia (Romania-Hungary), was also formed inside the territory covered by the CE. This pattern might be seen as a strong argument against the effectiveness of cross-border cooperation under the CE. Smaller Euroregions are closer to the inhabitants, and are thus

superior in the sense that they provide a more manageable forum for implementing specific policies within their borders (Tanaka 2006).

Another form of lowest-level cooperation is cooperation effected within the partner city network. The survey conducted as part of the TERCO project (Płoszaj 2013; Smętkowski 2013) found that the regions making up the Carpathian Euroregion were characterized by relatively well-developed networks of partner cities situated in close proximity, which might undoubtedly encourage macroregional integration. It should be borne in mind, however, that such initiatives were predominantly focused on developing cultural and social relations, while their significance for economic relations was negligible (cf. Gorzelak and Zawalińska 2013).

### **Activities of public authorities as viewed by the respondents**

Given the many initiatives aimed to support CBC at various levels of the hierarchy, it is important to know how they are evaluated by the beneficiaries, and from the perspective of the expanding economic cooperation - in particular by small and medium-sized enterprises. Their evaluation based on the empirical studies carried out in the Podkarpackie Voivodship is summarized below. Even though they can hardly be regarded as representative for the entire Euroregion owing to the marked differences in the local and regional contexts, their opinions can still provide a sound basis for formulating tentative conclusions, given the relatively deepest involvement of the Polish office in this regard.

The overall evaluation of the activities of public authorities aimed to support the development of cross-border interactions for companies was rather negative in the analyzed region. A mere 11% of businesses in Przemyśl and 15% businesses in Rzeszów declared that the public authorities support the development of foreign economic contacts (**Fig. 5**). Co-financing from the EU programs was the most significant measure in that respect. Other measures included information on the organized fairs and exhibitions, on cooperation opportunities, promotion of local businesses and assistance in establishing business contacts. In that regard, some differences could be observed between the analyzed locations. In Przemyśl, what mattered more for the respondents was promotion of enterprises by public authorities in the neighboring market, provision of information and offering administrative incentives. On the other hand, the respondents in Rzeszów regarded fairs and exhibitions, and facilitating business contacts, as more important.

**Fig. 5.** Types of supports to economic cross-border interactions (% of answers of those businesses which acknowledge such supports)

[figure 5 here]

Source: own elaboration based on survey results.

At the same time, the respondents' awareness of such institutionalized forms of cooperation as partner cities and the Carpathian Euroregion was much higher (**Fig. 6**). Knowledge of such cooperation was declared both by businesses and residents, usually at a level higher than 50%. Przemyśl was one exception, with only about 30% respondents in both groups who knew about the activities of the Carpathian Euroregion or the partner cities. Quite characteristically, however, the residents and the businesses differed in their evaluation of benefits arising from such a situation. Whilst the residents clearly appreciated the advantages (50-80% of the respondents, depending on the profile), only 5-15% respondents in the business sector were aware of them. Furthermore, the residents very

seldom claimed they saw no effects of such activities, whereas over half of the businesses believed that expenditure on both these types of cooperation was unnecessary.

On this basis, it can be concluded that while the respondents' evaluation of the Euroregion's activities in the sphere of social and cultural contacts was largely positive, especially among the residents, from the perspective of businesses the significance of the Euroregion's activities in the economic sphere was hardly noticed at all and poorly evaluated.

**Fig. 6.** Evaluation of institutionalized cooperation forms by businesses and residents (%)

[figure 6 here]

Source: own elaboration based on survey results.

## Conclusions

Economic cooperation in the Carpathian Euroregion has developed largely along the European Union border. This proves that the economic ties between the EU Member States have grown stronger, a process which was particularly well visible in Hungary, Slovakia and Romania. On the other hand, in the case of Ukraine the relative significance of the neighboring EU countries has so far been smaller, characterized by a definitely negative trade balance. It should also be noted that economic integration has been largely limited to trade, given the small scale of FDIs across the countries, especially in view of the aggregate influx of inward capital into these countries. This indicates that the stage of CBC development is not particularly advanced, which could also lead to the weakening of the role of the border regions compared to the core regions of the respective countries. One example here is the Polish region where a process of peripheralization has taken place regarding the share in foreign trade volume. This can be viewed as indirect proof of the growing role of the core regions in the dynamically expanding trade. Such peripheralization mainly came as a result of the regions' weaker linkages with the eastern partners, notably Ukraine, which has not been fully compensated by an increase in trade exchange with other Central and Eastern European countries which joined the European Union. Furthermore, based on the studies encompassing the Polish part of the Euroregion, it can be assumed that the directions of linkages of SMEs operating in those regions were strongly determined geographically. This can point to difficulties posed by poor accessibility within the Euroregion and the existence of a barrier in the form of the Carpathian mountain range. In addition, these enterprises, despite the opportunities they saw in the border location, constantly encountered barriers in cross-border cooperation, visible mainly in the relations with Ukraine, a non-EU country. These barriers were associated mainly with the so-called 'black triangle', involving bureaucracy (red tape), ambiguous regulations and in effect corrupt behaviors, an obstacle which, in the businesses' opinion, has become even more insurmountable in the last decade. This, coupled with greater risks accompanying investments in Ukraine, discouraged enterprises from developing economic cooperation in the eastern direction. Very likely, similar processes occurred in the remaining regions, as is indirectly proved by their even stronger (compared to the Polish region) peripheralization with regard to the average national rate of growth measured by GDP per capita.

The activities of the European Union and other actors at the national, regional and local levels have served to strengthen the cooperation between the EU

Member States rather than to overcome the barrier posed by the external EU border. This was partly due to the fact that considerably more funds for CBC development were available under the INTERREG Programme funded from Cohesion policy's Objective 3 compared to funds allocated to this purpose by the European Neighbourhood and Partnership Instrument (ENPI). The latter extended the territorial scope of cooperation even further, by including Belarus and Moldova. This trend has been sustained by some EGTC initiatives, which thrived particularly at the Hungarian-Slovakian and Hungarian-Romanian borders, also because of the presence of a numerous Hungarian minority in these two countries. There were also some bilateral initiatives which took the form of smaller Euroregions or regional development agencies encompassing subregions situated along the borders, and which in many cases were undertaken by the local actors. Similarly, partner city cooperation, despite the well-developed cross-border contacts, did not significantly affect economic integration processes with the non-EU partners owing to relatively small funding available and a focus on social and cultural activities.

In this context, it can be said that many initiatives aimed to expand economic contacts and led by the Carpathian Euroregion had a rather marginal impact for the macroregion at large. Leaving aside the question of their effectiveness or efficiency, they had poor visibility from the perspective of SMEs which were not able to see any significant benefits that could be derived from them. This could be a consequence of a disproportion between the budget allocation and the scale of the macroregion rather than of misguided or ill-considered activities. In effect, the Euroregion's economic cooperation went largely unnoticed, compared to other pro-development activities implemented by the EU Member States and their regions as part of the Cohesion policy. This invites the question whether the Euroregion's economic objectives can realistically be achieved on the macroregional scale.

To sum up, the border regions of Poland, Slovakia, Hungary, Romania and Ukraine made an ambitious attempt to build an institutional environment supporting socio-economic development processes in the form of the Carpathian Euroregion. So far, as a result of objective factors such as global metropolization processes, integration processes taking place within the EU and a number of barriers impeding cross-border cooperation with Ukraine, two concurrent processes can be observed: disintegration of this area in terms of economic interactions on the one hand, and on the other, bilateral integration albeit on a smaller spatial scale. This means that the new institution has proved to be too weak, and the adopted co-governance model has not been able to successfully respond to the external challenges in that regard. In such a situation, either the objectives of the Carpathian Euroregion relating to economic integration need to be reformulated and place a greater emphasis on social and cultural aspects of cooperation, involving other actors in the coordination of activities in the economic sphere, or this organization needs to be sufficiently strengthened to meet the existing challenges, with an active participation of actors at different levels of the hierarchy.

## **Acknowledgements**

The paper was written in collaboration with Tymoteusz Wronka, who participated in gathering the relevant information and Dorota Szmajda, who co-translated the text.

## References

Association of the Carpathian Euroregion Poland. 2014. Szczegółowy raport z działalności Stowarzyszenia Euroregion Karpacki Polska (Annual Report of the Association). Association of the Carpathian Euroregion Poland, [www.karpacki.pl](http://www.karpacki.pl)

Association of the Carpathian Euroregion Poland. 2013. Working Document regarding The Carpathian Euroregion Development Strategy "Carpathian Horizon 2020", Version 1.0. Secretariat of the Carpathian Convention, [www.carpathianconvention.org](http://www.carpathianconvention.org)

Association of the Carpathian Euroregion Poland. 2011. Mapa rozwoju regionalnego w Euroregionie Karpackim (Map of the regional development in the Carpathian Euroregion). Association of the Carpathian Euroregion Poland, [www.karpacki.pl](http://www.karpacki.pl)

Blatter, J. 2004. 'From spaces of place' to 'spaces of flows'? Territorial and functional governance in cross-border regions in Europe and North America, *International Journal of Urban and Regional Research* 28, no. 3: 530–548.

Borshch, O. 2012. Cross-border cooperation as a development factor for borderline territories of Ukraine. *European Journal of Law and Economics*, 2014, 37, no. 3: 529-544.

Brenner N., 1999. Globalisation as reterritorialisation: The re-scaling of urban governance in the European Union. *Urban Studies* 36, no. 3: 431-451.

Chabanna, M. 2013. Cross-border governance in the Carpathian Euroregion: Institutional dimension of decision-making. *Eurotimes* 16: 79-93.

De Sousa, L. 2013. Understanding European cross-border cooperation: A framework for analysis. *Journal of European Integration* 35, no. 6: 669-687.

Dimitrov, M., Petrakos, G., Totev, S., and Tsiapa, M. 2003. Cross-border cooperation in Southeastern Europe. *Eastern European Economics*, 41, no. 6: 5-25.

Garcia-Duran, P., Mora, T. and Millet, M. 2011. Measuring the impact of EU support for crossborder regional cooperation. *Journal of Contemporary European Research* 7, no. 3: 345-362.

Gorzela, Grzegorz and Zawalińska, Katarzyna. (eds.) 2013. *European Territories: From Cooperation to Integration?* Warsaw: Wydawnictwo Naukowe Scholar.

Helble, M. 2007. Border effect estimates for France and Germany combining international trade and intranational transport flows. *Review of World Economics* 143, no. 3: 433-463.

Keating, Michael. 1998. *The New Regionalism in Western Europe: Territorial Restructuring and Political Change*, Northampton: Edward Elgar Publishing.

- Krätke, S. 1999. Regional integration or fragmentation? The German-Polish border region in a new Europe. *Regional Studies* 33, no.7: 631-641.
- Lepik, K. L. 2009. Euroregions as mechanisms for strengthening cross-border cooperation in the Baltic Sea region. *Trames* 3/2009: 265-284.
- Lundquist, K. J., and Trippel, M. 2013. Distance, proximity and types of cross-border innovation systems: A conceptual analysis. *Regional Studies* 47, no. 3: 450-460.
- Medeiros, E. 2011. (Re) defining the Euroregion concept. *European Planning Studies* 19, no. 1: 141-158.
- Niebuhr, A., and Stiller, S. 2002. *Integration effects in border regions: a survey of economic theory and empirical studies* (No. 179). HWWA discussion paper.
- Nitsch, V. 2000. National borders and international trade: evidence from the European Union. *Canadian Journal of Economics/Revue canadienne d'économique* 33, no. 4: 1091-1105.
- Piattoni, S. 2009). Multi-level governance: a historical and conceptual analysis. *European Integration*. 31(2), 163–180.
- Perkmann, M. 2003. Cross-border regions in Europe significance and drivers of regional cross-border co-operation. *European Urban and Regional Studies* 10, no. 2: 153-171.
- Petrakos, G., and Topaloglou, L. 2008. Economic geography and European integration: the effects on the EU's external border regions. *International Journal of Public Policy* 3, no. 3: 146-162.
- Płoszaj, Adam. 2013. Two faces of territorial cooperation in Europe: Twinning cities and European territorial cooperation programme. In: *European Territories: From Cooperation to Integration?*, ed. G. Gorzelak and K. Zawalińska, 69-96, Warsaw: Wydawnictwo Naukowe Scholar.
- Popescu, G. 2008. The conflicting logics of cross-border reterritorialization: Geopolitics of Euroregions in Eastern Europe. *Political Geography* 27, no. 4: 418-438.
- Pucher, J., Frangenheim, A., Radzyner, A. 2014. EGTC Monitoring Report 2013 - Towards the New Cohesion Policy. European Union, <http://cor.europa.eu/en/documentation/studies/Documents/EGTC-monitoring-report-2013.pdf>
- Resmini, L. 2003. Economic integration, industry location and frontier economies in transition countries. *Economic Systems* 27, no.2: 205-221.
- Scott, James, Alan Sweedler, Paul Ganster and Wolf-Dieter Eberwein. 1996. *Border regions in functional transition: European and North American perspectives on transboundary interaction*. Erkner: IRS

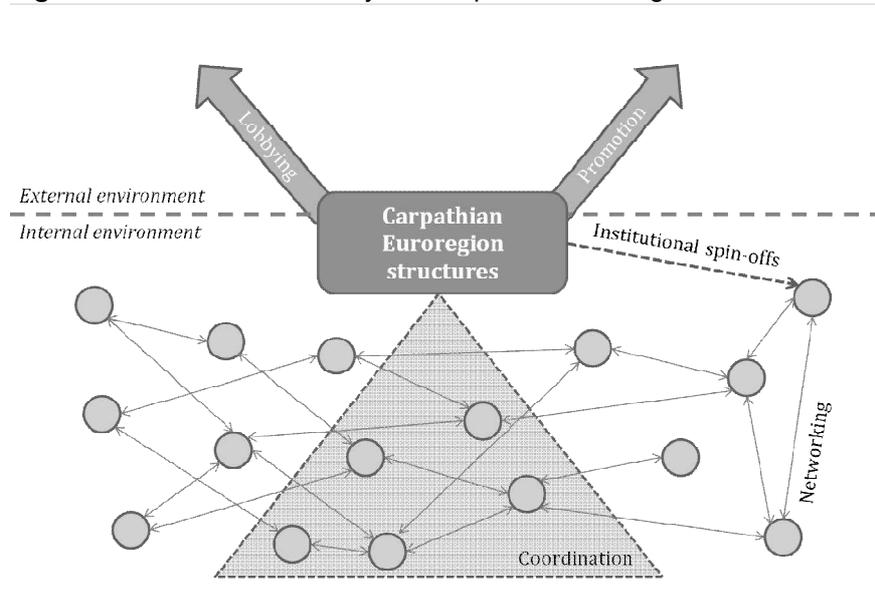
Smełkowski, Maciej. 2013, Typologies of regions according to determinants and types of territorial co-operation. In: Gorzelak, G. and Zawalińska, K. (eds.) 2013. *European Territories: From Cooperation to Integration?*, Warsaw: Wydawnictwo Naukowe Scholar.

Smełkowski M., Kozak M., Constantin D., Goschin Z. 2015, *Development Problems in CEE Regions – Peripherality of Border Regions*, GRINCOH working paper, [grincoh.eu/working-paper-series](http://grincoh.eu/working-paper-series)

Tanaka, H. 2006. Carpathian Euroregion and cross-border governance. *The Journal of Comparative Economic Studies* 2/2006: 59-80.

Timothy, Dallen J. 2005. *Shopping tourism, retailing, and leisure*. Buffalo: Channel View Publications.

**Fig. 1.** Activities undertaken by the Carpathian Euroregion



Source: own elaboration.

**Tab. 1.** Scale of disparities between the analyzed parts of the Carpathian Euroregion

Regions forming the CE	GDP per capita [EUR]		GDP per capita [country=100]	
	2004	2011	2004	2011
Hungary	5463	6706	67.3	63.4
Poland	3730	6499	69.8	67.7
Romania	2191	4089	77.9	66.0
Slovakia	4663	8683	73.8	67.8
Ukraine	711	1611	69.1	62.9

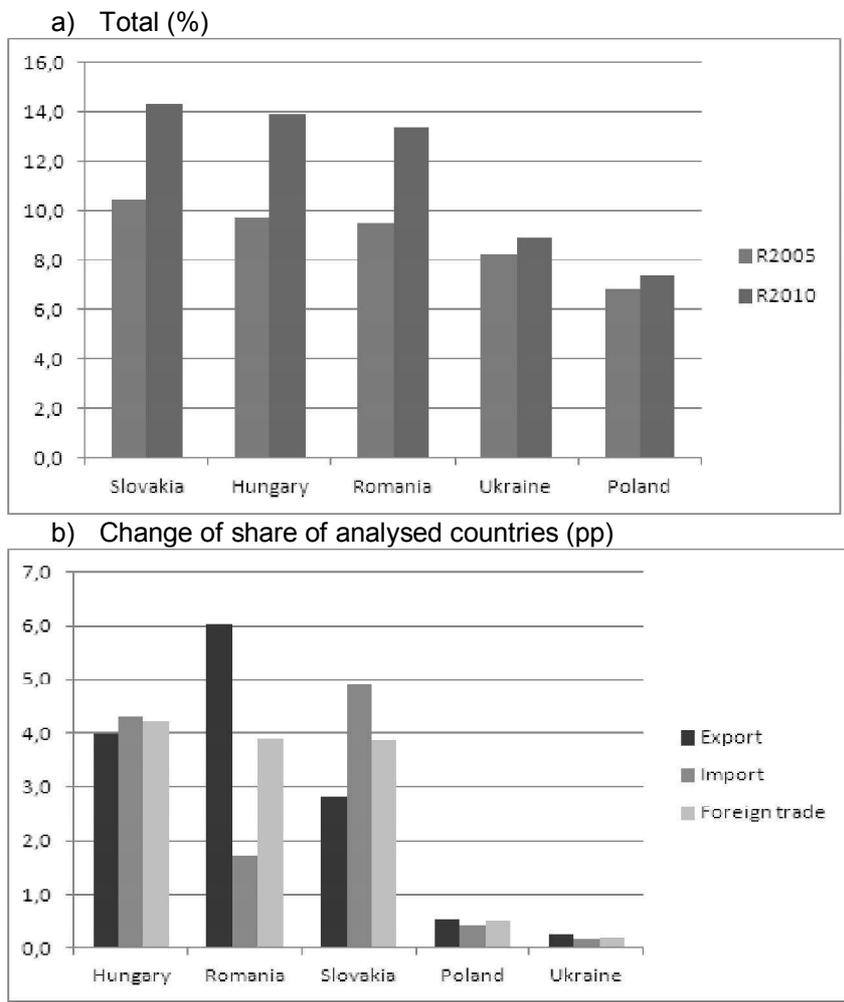
Source: own elaboration based on Eurostat data.

**Tab. 2.** Trade flows between countries in 2010 [%]

Per cent of total foreign trade		Poland	Romania	Slovakia	Ukraine	Hungary	All 5 countries
OF	Poland		1.0	2.4	1.7	2.3	7.4
	Romania	3.0		1.4	2.6	6.4	13.4
	Slovakia	6.3	1.2		0.9	5.9	14.3
	Ukraine	4.1	2.1	0.8		2.0	8.9
	Hungary	4.2	4.1	4.1	1.5		13.9

Source: own elaboration based on UNCTAD data.

**Fig. 2. Share of analysed countries in foreign trade**



Source: own elaboration based on UNCTAD data.

**Tab. 3.** Polish and Hungarian FDI outflow 2005-2010 [million USD]

2005-2010 FDI Stock		Destination				
		Poland	Hungary	Ukraine	Romania	Slovakia
Source	Hungary	404		1271	481	310
	Poland		296	892	470	80

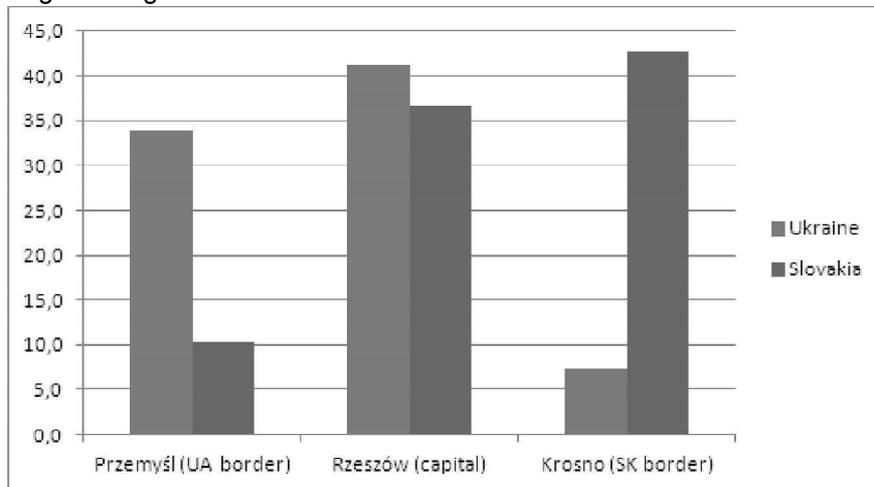
Source: own elaboration based on UNCTAD data.

**Tab. 4. Role of the Podkarpackie Voivodship in foreign trade**

Indicators	2000	2006	2010	Change 2006-2010 (pp)
<b>EXPORT</b>				
Share of total imports	4.0	3.5	3.3	-0.2
- exports to RU-BY-UA (% total)	n/a	15.5	13.3	-2.2
- exports to CEEC (% total)	n/a	12.8	15.0	2.2
In relation to PL average (pp)				
- exports to RU-BY-UA	n/a	7.2	5.9	-1.4
- exports to CEEC	n/a	0.8	-1.0	0.8
<b>IMPORT</b>				
Share of total imports	4.1	3.6	2.4	-1.2
- imports to RU-BY-UA (% total)	n/a	5.5	5.0	-0.5
- imports to CEEC (% total)	n/a	12.3	15.0	2.7
In relation to PL average (pp)				
- imports to RU-BY-UA	n/a	-2.6	-5.8	-3.2
- imports to CEEC	n/a	3.4	4.0	0.6

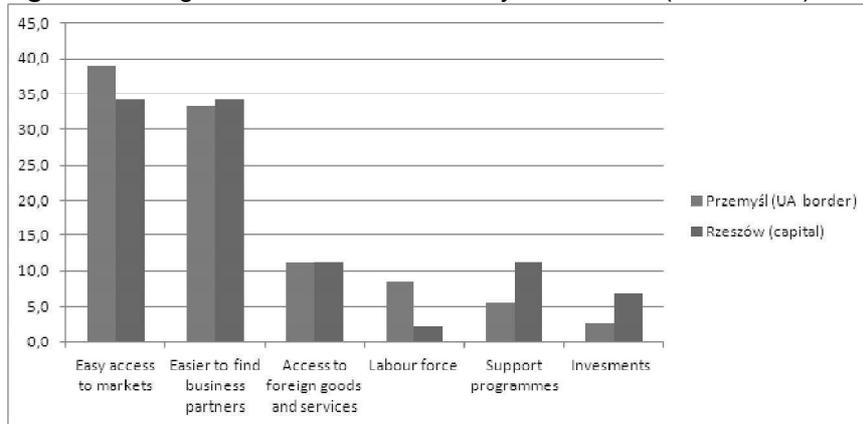
Source: own elaboration based on GUS (*Główny Urząd Statystyczny*, Central Statistical Office in Poland). Acronyms: PL – Poland, RU – Russia, BY – Belarus, UA – Ukraine, CEEC – Central and Eastern European Countries.

**Fig. 3.** Percentage of businesses that report business cooperation with neighbouring countries



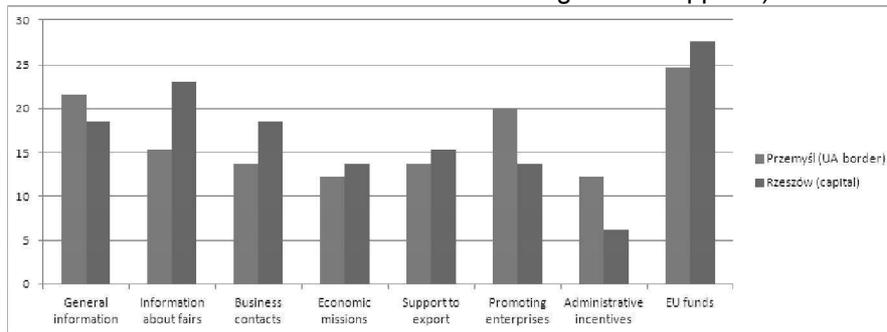
Source: own elaboration based on survey results. Abbreviations: UA – Ukraine, SK – Slovakia.

**Fig.4.** Advantages of location as viewed by businesses (% answers)



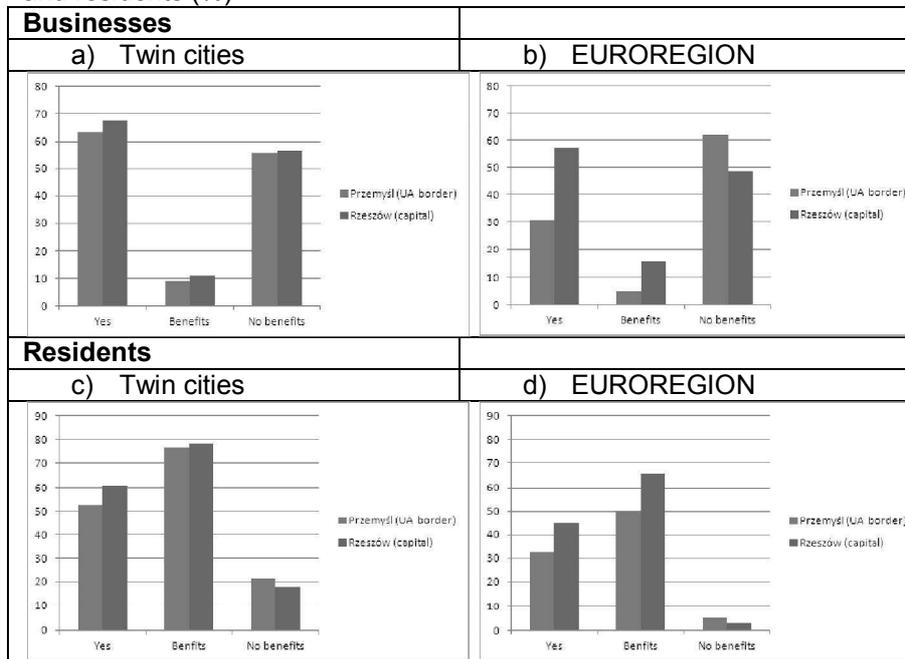
Source: own elaboration based on survey results.

**Fig. 5.** Types of supports to economic cross-border interactions (% of answers of those businesses which acknowledge such supports)



Source: own elaboration based on survey results.

**Fig. 6.** Evaluation of institutionalised cooperation forms by businesses and residents (%)



Source: own elaboration based on survey results.

## **List of figures**

**Fig. 1.** Activities undertaken by the Carpathian Euroregion

**Fig. 2.** Share of analysed countries in foreign trade

**Fig. 3.** Percentage of businesses that report business cooperation with neighbouring countries

**Fig. 4.** Advantages of location as viewed by businesses (% answers)

**Fig. 5.** Types of supports to economic cross-border interactions (% of answers of those businesses which acknowledge such supports)

**Fig. 6.** Evaluation of institutionalised cooperation forms by businesses and residents (%)

## **List of tables**

**Tab. 1.** Scale of disparities between the analyzed parts of the Carpathian Euroregion

**Tab. 2.** Trade flows between countries in 2010 [%]

**Tab. 3.** Polish and Hungarian FDI outflow 2005-2010 [million USD]

**Tab. 4.** Role of the Podkarpackie Voivodship in foreign trade