CENTRE FOR REGIONAL
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REGIONAL INVESTMENT ATTRACTIVENESS 2013

Subcarpathian voivodship

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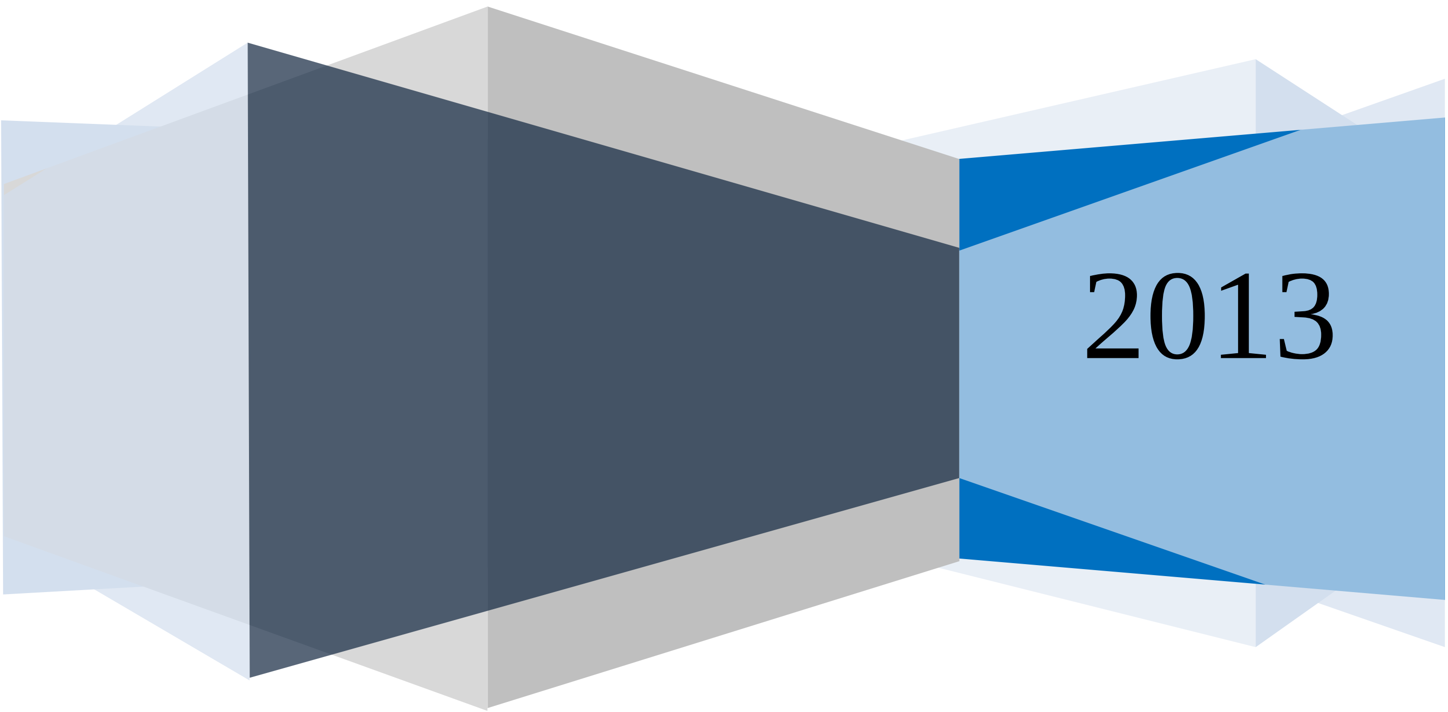


Warsaw, October 2013

Introduction

This report has been prepared thanks to the application of results of scientific research conducted since 2002 by the Institute of Enterprise, Collegium of Business Administration of the Warsaw School of Economics (WSE), under the supervision of H. Godlewska-Majkowska, Ph.D., university professor at the WSE. All the Authors are the core members of a team that develops methodology of calculating regional investment attractiveness in order that characteristics of regions, which are important to investors, are captured as closely as possible, both in general terms and from a point of view of specificity of a given kind of business activity as well as a size of investment.

Potential investment attractiveness (PAI) indices measure the location-specific advantages of regions. In their simplified version they are calculated for territorial units of various levels of statistical division of the country (communes – Polish: *gmina*, counties – Polish: *powiat*, subregions, voivodships/regions). These are PAI1 indices, which refer to the whole regional/national economy (PAI1_GN) and selected sections: C – manufacturing industry, G – trade and repair, I – tourism and catering, M – professional, scientific and technical services.

Besides, some indices are calculated only for the voidoships, on the basis of characteristics available only on the regional or macroregional level which allows evaluating their investment attractiveness in a much broader context. These are PAI2 indices, which are calculated both from a general point of view and with reference to the above mentioned sections of the economy (PAI2_C, PAI2_G, PAI2_I, PAI2_M).

What is more, ranks of real investment attractiveness, which relates to the inflow of capital (in the form of investments) and the effects of investments considered from a point of view of productivity and returns on the outlays made, are used in this report.

The measurements in use are subject to annual review thanks to consulting them with foreign investor assistance institutions and direct contact to territorial self-government units as well as organizations of entrepreneurs. A description of methodological approach to measuring investment attractiveness of Polish regions, counties and communes can be found online on the website of the Centre for Regional and Local Analyses, which cooperates with the Institute of Enterprise: www.caril.edu.pl, as well as in numerous scientific publications and expert opinions.

1. The profile of regional economy of Subcarpathian voivodship

Subcarpathian voivodship is situated in south-eastern Poland. It borders Slovakia (in the south) and the Ukraine (in the east). The region is endowed with rich deposits of such resources as: sulphur, oil and natural gas as well as mineral resources like gypsum, sandstones and limestone currently extracted in active modern mines. The main sectors of economy are agriculture, industry, extraction, the manufacture of food, the manufacture of pharmaceuticals, aviation and IT industries.

The main advantages of the voivodship are:

- developing aviation industry,
- well-established manufacture of pharmaceuticals, IT and food industry,
- Subcarpathian Science and Technology Park in Rzeszów,
- good transport connections: international airport, A4 highway, main transport corridors of the TINA network running through the voivodship,
- natural resources like sulphur, oil and natural gas, mineral resources extracted mainly in its mountainous southern part: sandstones, limestone, gypsum (including gypsum alabaster), ceramic loams, sands (including sands suitable for glass-making) and gravel as well as peat, mineral and thermal waters,
- large areas of forests make the voivodship an important producer of timber and give an opportunity of using wood biomass for the production of renewable energy,
- the accessibility of well-skilled management and technical staff, in particular in aviation, manufacture of electric machinery and manufacture of chemicals and chemical products (the Rzeszów University of Technology is the largest technical higher education institution of south-eastern Poland with the only training centre for civil pilots in Poland).

The general characteristics of the Subcarpathian voivodship are presented in Table 1.

Table 1. General characteristics of the economy of Subcarpathian voivodship

Feature	Subcarpathian voivodship	Poland	Share [%]
Market Potential			
GDP per capita 2010. (PLN/person)	24,973.0	37,096	-
Population (persons) on 31 December 2012	2,129,951	38,533,299	5.5
Human Resources Potential			
Higher education institutions graduates (persons) in 2012	20,174	484,999	4.2
Secondary schools graduates (persons) in 2012	28,713	421,317	6.8
Number of employed persons on 31 December 2012	794,727	13,911,203	5.7
Structure of employed persons 2012	agriculture 32.7% industry 24.8% services 42.5%	agriculture 17.1% industry 27.4% services 55.5%	
Investment outlays and capital of companies with foreign capital participation in the voivodship			
Investment outlays (PLN m) in 2011	1,177.8	73,704.4	1.6

Capital of companies (PLN m) in 2011	2,234.5	194,160.6	1.2

Special economic zones (SEZs) in the voivodship*
– Kraków SEZ, subzone: gm. Boguchwała, m. Krosno, – Mielec SEZ, subzone: gm. Dębica, gm. Głogów Małopolski, gm. Jarosław, gm. Kolbuszowa, gm. Leżajsk, gm. Ostrów, gm. Ropczyce, gm. Trzebownisko, gm. Zagórz, m. Dębica, m. Jarosław, m. Krosno, m. Leżajsk, m. Lubaczów, m. Mielec, m. Rzeszów, m. Sanok – Tarnobrzeg SEZ, subzone: gm. Gorzyce, gm. Jasło, gm. Jedlicze, gm. Nisko, gm. Nowa Dęba, gm. Orły, gm. Rymanów, m. Jasło, m. Przemyśl, m. Przeworsk, m. Stalowa Wola, m. Tarnobrzeg,

Distinguishing investment attractiveness ratings PAI _2 and RAI (class A, B and C)	
Potential investment attractiveness PAI_2	Capital-intensive industry Class C Education Class C
Real investment attractiveness RAI	

Counties and communes distinguished according to the Potential Attractiveness Index for the national economy (PAI1_GN)		
Counties	Class A	Krosno, Przemyśl, Rzeszów, Tarnobrzeg,
	Class B	
Communes	Class A	Jasło (1), Krościenko Wyżne (2), Sanok (1), Krosno (1), Jarosław (1), Lubaczów (1), Przeworsk (1), Przemyśl (1), Łańcut (1), Czarna (2), Ostrów (2), Rzeszów (1), Dębica (1), Dębica (2), Leżajsk (1), Mielec (1), Stalowa Wola (1), Tarnobrzeg (1)
	Class B	Dukla (3), Iwonicz-Zdrój (3), Jedlicze (3), Miejsce Piastowe (2), Solina (2), Radymno (1), Kolbuszowa (3), Łańcut (2), Ropczyce (3), Boguchwała (3), Głogów Małopolski (3), Krasne (2), Trzebownisko (2), Nowa Sarzyna (3), Nisko (3), Gorzyce (2), Nowa Dęba (3)

Source: Authors' own calculations.

* On the above list and further in the report *gm.* is a Polish abbreviation for *gmina* – commune and *m.* is an abbreviation for *miasto* – city. If there is information *city* following the name of the county, it indicates a commune which has a status of a city and carries out county's tasks is mentioned (a city county). Otherwise the counties include more than one commune (land counties).

Additional information: (1) – urban commune, (2) – rural commune, (3) – urban-rural commune.

In 2010 Subcarpathian voivodship made a contribution of 3.7% to the GDP of Poland. Calculated per capita, it amounted to PLN 24,973 with the average for Poland PLN 37,096. With this result the voivodship takes the 16th place in the country. The GDP growth rate in the voivodship in the years 2003-2010 amounted to 158.5% while the average for Poland amounted to 168%. In comparison with the whole country the structure of employment in the voivodship is characterised by a relatively low share of the service sector (42.5%) whereas a share of the agricultural and industrial sectors are respectively 32.7% and 24.8% (Central Statistical Office, Regional Data Bank 2013).

The number of inhabitants of the voivodship amounts to 2,129,951 (as of 2013), which is 5.5% of the population of Poland. The age structure in the voivodship in 2012 was as follows: 19.5% of the population at pre-productive age, 63.9% at productive age and 17.8% at post-productive age (for Poland it was 18.3%, 63.9% and 17.8% respectively). The registered unemployment rate in the voivodship amounted to 15.5% in August 2013, compared to 13%

in Poland. The average monthly gross wages and salaries in enterprises sector in the first half-year of 2013 amounted to PLN 3136, which is 83.2% of the average for Poland.

The main potential for human capital creation in the voivodship lies in 15 higher education institutions in which there are 68 thousand students studying, which makes up 4.1% of all students in Poland. Moreover, 5.9% of the secondary school students in the voivodship attend vocational schools and 6.7% attend technical schools.

The voivodship's strategic sectors mentioned in the strategy of regional development include above all: aviation, electromachinery, foods, chemistry and tourism.

Preferential conditions of conducting business activities are offered in the voivodship i.a. in the following special economic zones:

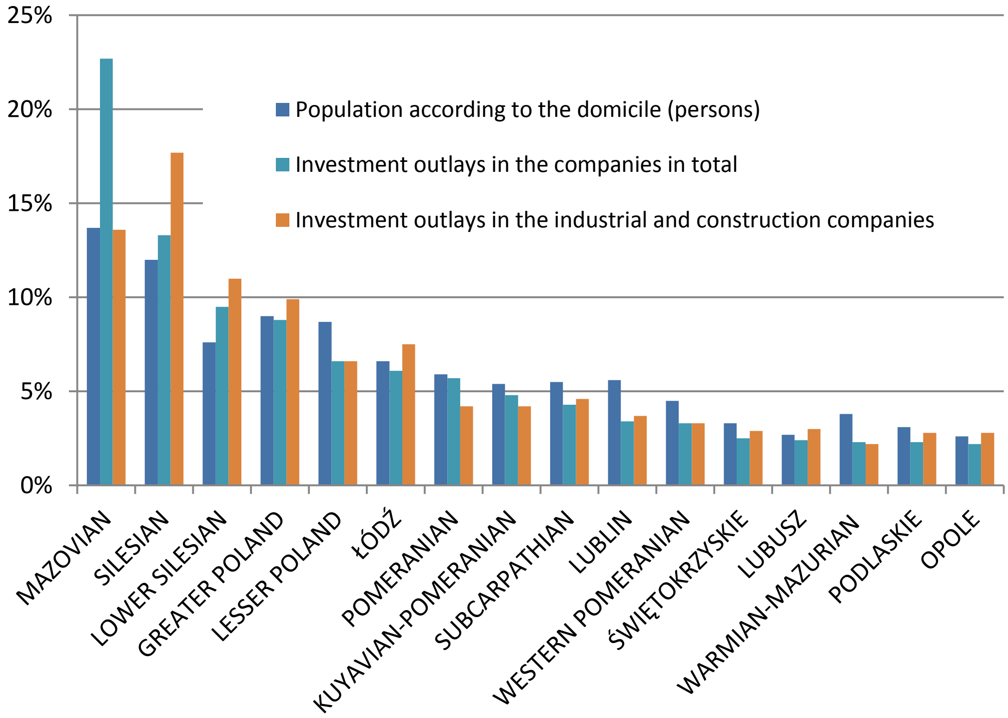
- Kraków SEZ, subzone: gm. Boguchwała, m. Krosno,
- Mielec SEZ, subzone: gm. Dębica, gm. Głogów Małopolski, gm. Jarosław, gm. Kolbuszowa, gm. Leżajsk, gm. Ostrów, gm. Ropczyce, gm. Trzebownisko, gm. Zagórz, m. Dębica, m. Jarosław, m. Krosno, m. Leżajsk, m. Lubaczów, m. Mielec, m. Rzeszów, m. Sanok,
- Tarnobrzeg SEZ, subzone: gm. Gorzyce, gm. Jasło, gm. Jedlicze, gm. Nisko, gm. Nowa Dęba, gm. Orły, gm. Rymanów, m. Jasło, m. Przemyśl, m. Przeworsk, m. Stalowa Wola, m. Tarnobrzeg.

2. Region's rank in terms of investment attractiveness in Poland and in the European Union

Subcarpathian voivodship is characterised by a relatively low level of overall investment attractiveness, which is indicated by its rank (class D) according to the main potential investment attractiveness index calculated for the whole regional economy PAI 2_GN. [1] The voivodship was for the first time ranked C when it comes to labour-intensive industry and professional, science and technical activities which is connected to increasing localization advantages of the region.

Investment attractiveness can also be evaluated on the basis of indices of real investment attractiveness (RAI), which are based on microclimates such as: return on tangible assets, labour productivity, self-financing of self-government territorial units and investment outlays. The region was ranked low in terms of RAI indices. These ranks have not increased significantly. Potential and real investment attractiveness was reflected in the decisions of investors on business location. This is shown in Chart 1.

Chart 1. Regional structure of investment outlays in the companies in 2011 in comparison with the share in the country's population

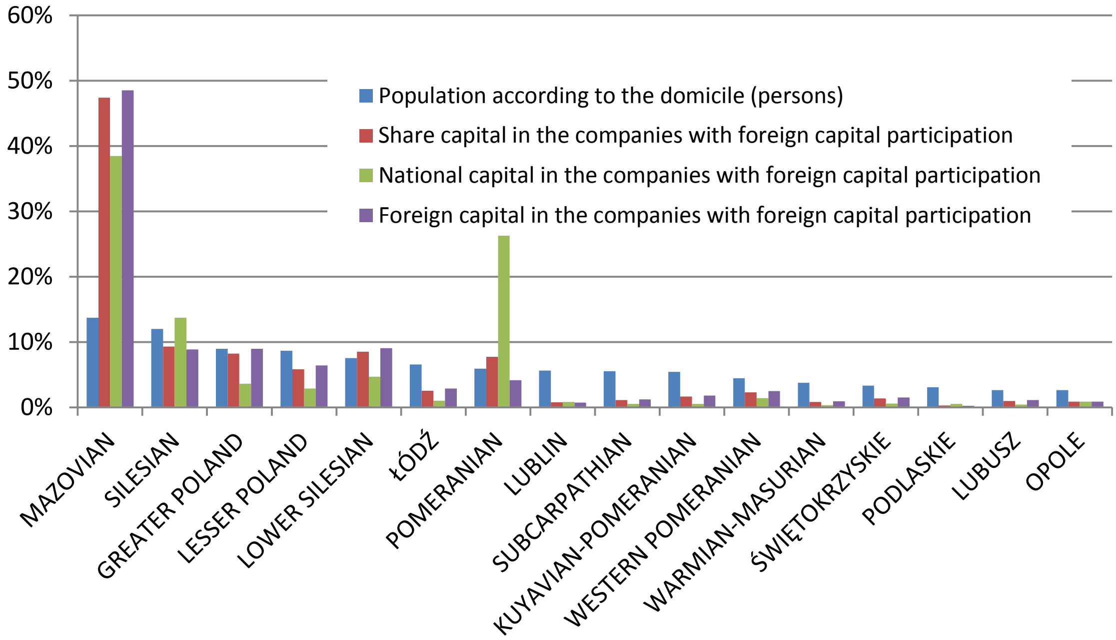


Note: these are the most up-to-date data.
Source: Authors on the basis of the Local Data Bank (downloaded 13 November 2013).

[1] Section C – manufacturing industry, section G – trade and repair, section I – hotels and restaurants, section M – professional, scientific and technical activities. Methodological description of calculation of investment attractiveness of Polish regions, counties and communes can be found on the website of Institute of Entrepreneurship, Collegium of Business and Administration, Warsaw School of Economics: http://kolegia.sgh.waw.pl/pl/KNoP/struktura/IP/publikacje

In 2011 r. in Subcarpathian region 4.3% of total companies' investment outlays in Poland were made, which gave the voivodship the 9th place. This is 2 places higher than in 2009. The progress can be assessed positively but the voivodship's share in the total value of investment outlays is smaller than the region's share in country's population (5.5%) could suggest. This applies equally to industry and to services. This conclusion can also be drawn from analysing regional structure of capital in the companies with foreign capital participation – see Chart 2.

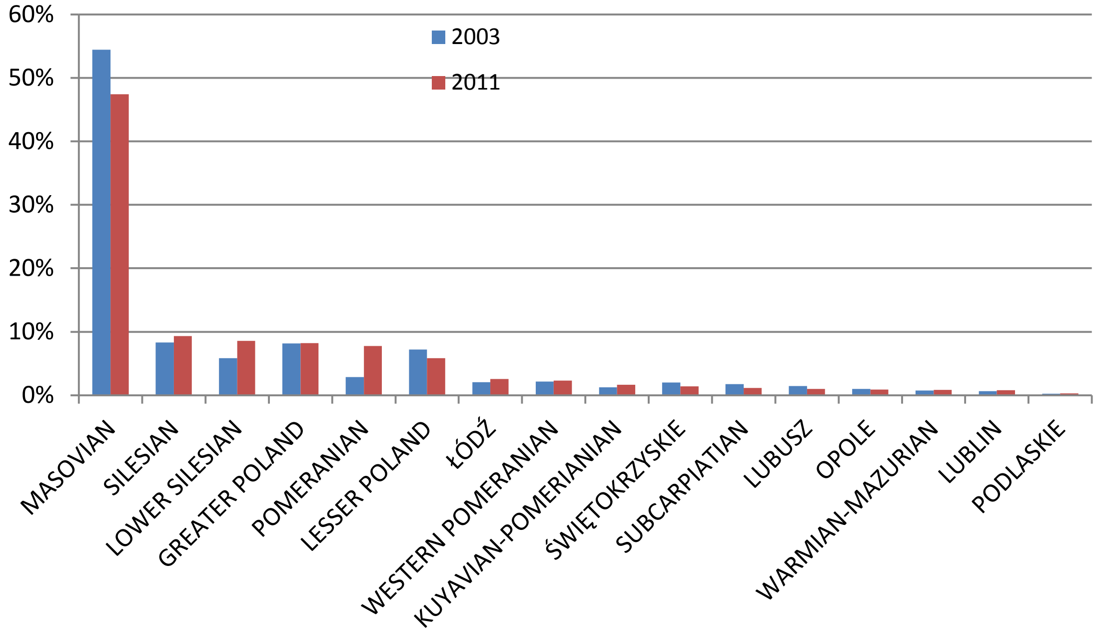
Chart 2. Regional structure of capital in the companies with foreign capital participation in comparison with a share in population



Note: These are the most up-to-date data.
Source: Authors on the basis of the Local Data Bank (downloaded 13 November 2013).

Only 1.2% value of the whole share capital invested in Poland was invested in Subcarpathian voivodship in the analysed period which is too little in comparison to the region's share in Poland's population. This applies both to Polish and foreign capital. In the years 2003-2011 the voivodship's position on the foreign direct investment market slightly decreased as its share felt from 1.73% to 1.15%. This indicates that the voivodship does not make use of its cost competitive advantages when it comes to labour (see Chart 3).

Chart 3. Regional competitive rank in terms of investments with foreign capital participation according to the value of share capital in the companies with foreign capital participation in 2003 and 2011 (% of total value for Poland)



Source: Authors on the basis of the Local Data Bank (downloaded 13 November 2013).

An opportunity for Subcarpathian voivodship might be investment sites thoroughly prepared by self-government territorial units, utilizing location's advantages.

Subcarpathian voivodship is concerned as a potential business localization in comparison with the other European regions. When it comes to innovativeness, market and human capital factors, the voivodship took the 252nd place of 270 regions in the EU and was ranked Class F – see Table 2 in the Appendix.

Subcarpathian voivodship has competitive advantage when it comes to human capital, ranked class C. Despite its low rank it still can compete with lower ranked regions such as: **in Greece:** Peloponnisos; **in Romania:** Vest, Nord-Vest, Centru, Sud-Est, Sud-Vest Oltenia, Nord-Est and Sud - Muntenia; **in Hungary:** Dél-Alföld; Észak-Alföld; **in Italy**: Basilicata, Calabria; **in Bulgaria:** Severen tsentralen, Yugoiztochen, Yuzhen tsentralen, Severozapaden; **in Slovakia**: Východné Slovensko; **in Portugal:** Alentejo, Região Autónoma dos Açores and Centro (PT).

3. Internal diversification of regional investment attractiveness

Counties

The following counties are considered the most attractive in Subcarpathian voivodship: Krosno (city), Przemyśl (city), Rzeszów (city), Tarnobrzeg (city), Stalowa Wola, Tarnobrzeg, Kolbuszowa, Lesko – see Table 2.

Table 2. Potential investment attractiveness of counties of Subcarpathian voivodship for the national economy and selected sections

County	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Rzeszów (city)	0.345	A	A	A	A	A
Krosno (city)	0.344	A	A	A	A	A
Przemyśl (city)	0.331	A	A	A	B	A
Tarnobrzeg (city)	0.315	A	A	B	B	A
Stalowa Wola	0.251	C	C	B	C	C
Tarnobrzeg	0.242	C	C	C	D	D
Kolbuszowa	0.241	C	D	D	F	C
Lesko	0.241	C	C	C	A	D

Source: Authors' own calculations.

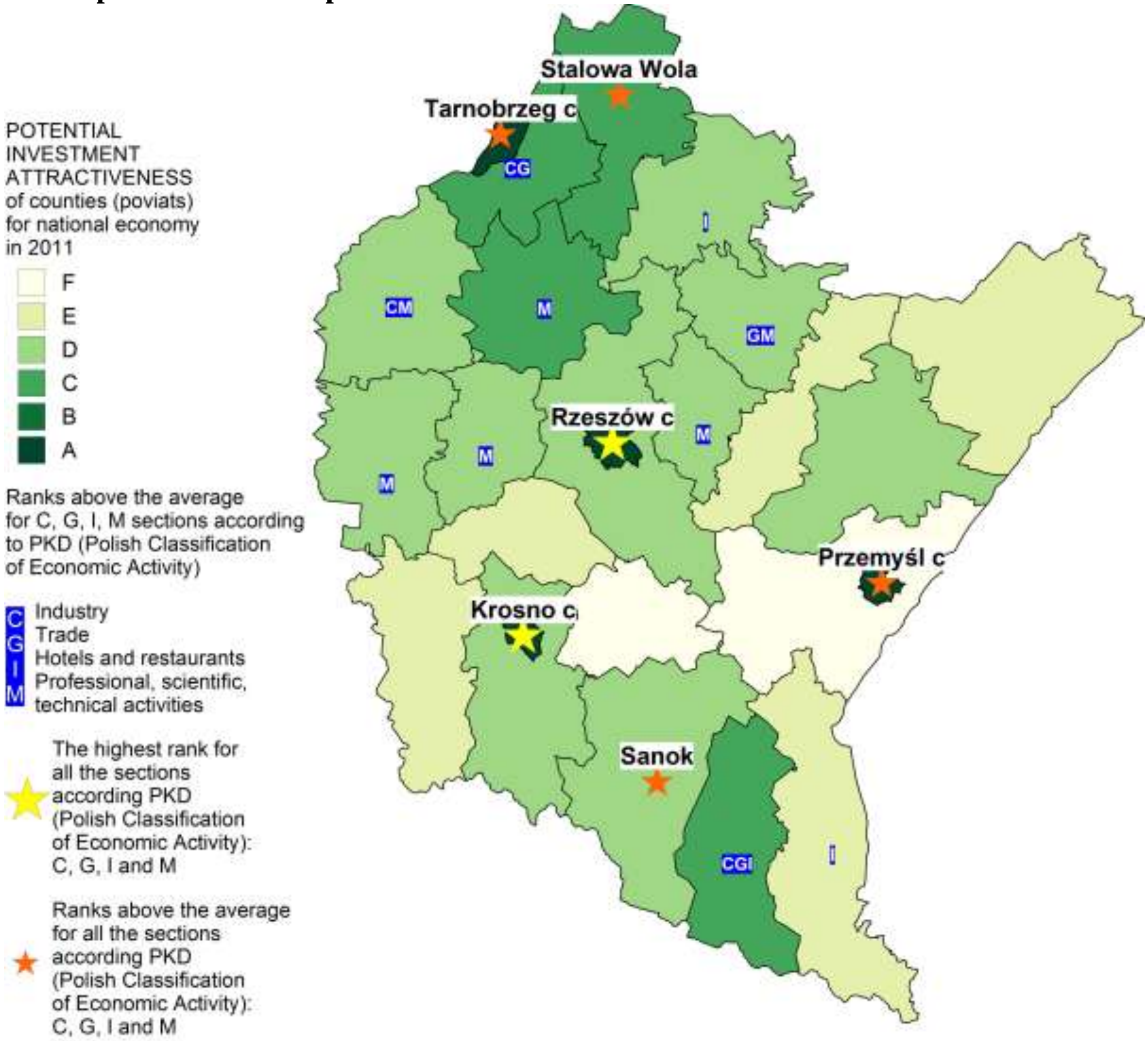
The counties mentioned above (beyond Stalowa Wola, Tarnobrzeg, Kolbuszowa, Lesko) are characterized by very high investment attractiveness. The following city counties should be distinguished: Rzeszów, Krosno as these units were ranked class A in their potential investment attractiveness for all sections of the national economy analysed in this research.

In reference to the sections mentioned below the following counties should be additionally distinguished:

- Stalowa Wola, Tarnobrzeg, Lesko, Mielec, Sanok (Class C) for section C,
- Tarnobrzeg, Lesko, Sanok, Leżajsk (Class C) for section G,
- Stalowa Wola, Sanok, Nisko, Bieszczady (Class C) for section I and Stalowa Wola, Kolbuszowa, Mielec, Ropczyce-Sędziszów, Sanok, Łańcut, Leżajsk, Dębica for section M.

Synthetic evaluation of potential investment attractiveness of counties of Subcarpathian voivodship is presented in Chart 4.

Chart 4. Spatial diversification of potential investment attractiveness of counties of Subcarpathian voivodship with consideration of the most attractive sections



Source: Authors' own materials.
Note: "c" stands for city county.

<u>Communes</u>

Like counties, the Subcarpathian communes are also very much diversified in terms of investment attractiveness. The highest ranked communes are: Jasło (1), Krościenko Wyżne (2), Sanok (1), Krosno (1), Jarosław (1), Lubaczów (1), Przeworsk (1), Przemyśl (1), Łańcut (1), Czarna (2), Ostrów (2), Rzeszów (1), Dębica (1), Dębica (2), Leżajsk (1), Mielec (1), Stalowa Wola (1), Tarnobrzeg (1). It is also reflected in their high ranks (class A or B) for all the analysed sections – see Table 3.

Table 3. Potential investment attractiveness of communes of Subcarpathian voivodship for the national economy and selected sections

Commune	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Rzeszów (1)	0.258	A	A	A	B	A
Krosno (1)	0.256	A	A	A	B	A
Mielec (1)	0.252	A	A	A	B	A
Sanok (1)	0.249	A	A	A	A	A
Łańcut (1)	0.246	A	A	A	B	A
Przemyśl (1)	0.245	A	A	A	B	A
Jasło (1)	0.245	A	A	A	C	A
Dębica (1)	0.244	A	A	A	B	A
Ostrów (2)	0.243	A	A	A	B	A
Tarnobrzeg (1)	0.243	A	A	A	C	A
Leżajsk (1)	0.239	A	A	A	A	A
Przeworsk (1)	0.237	A	A	A	C	A
Jarosław (1)	0.236	A	A	A	D	A
Stalowa Wola (1)	0.235	A	A	A	B	A
Krościenko Wyżne (2)	0.226	A	A	A	C	A
Dębica (2)	0.223	A	B	C	D	A
Lubaczów (1)	0.220	A	A	A	D	A
Czarna (2)	0.218	A	B	C	E	A
Jedlicze (3)	0.214	B	B	C	C	A
Trzebownisko (2)	0.214	B	B	B	C	A
Radymno (1)	0.213	B	B	B	D	A
Kolbuszowa (3)	0.213	B	B	C	E	A
Krasne (2)	0.213	B	B	B	E	B
Boguchwała (3)	0.212	B	B	B	C	A
Nowa Dęba (3)	0.210	B	B	B	C	A
Głogów Małopolski (3)	0.209	B	B	B	B	A
Dukla (3)	0.208	B	B	B	A	B
Gorzyce (2)	0.207	B	B	B	E	B
Miejsce Piastowe (2)	0.205	B	B	B	D	B
Nisko (3)	0.204	B	B	B	A	B
Ropczyce (3)	0.204	B	B	C	C	A
Solina (2)	0.202	B	B	B	A	C
Iwonicz-Zdrój (3)	0.201	B	B	B	B	B
Nowa Saroyan (3)	0.199	B	C	B	D	B
Łańcut (2)	0.198	B	C	C	D	B

(1) – urban commune, (2) – rural commune, (3) – urban-rural commune.
Source: Authors' own calculations.

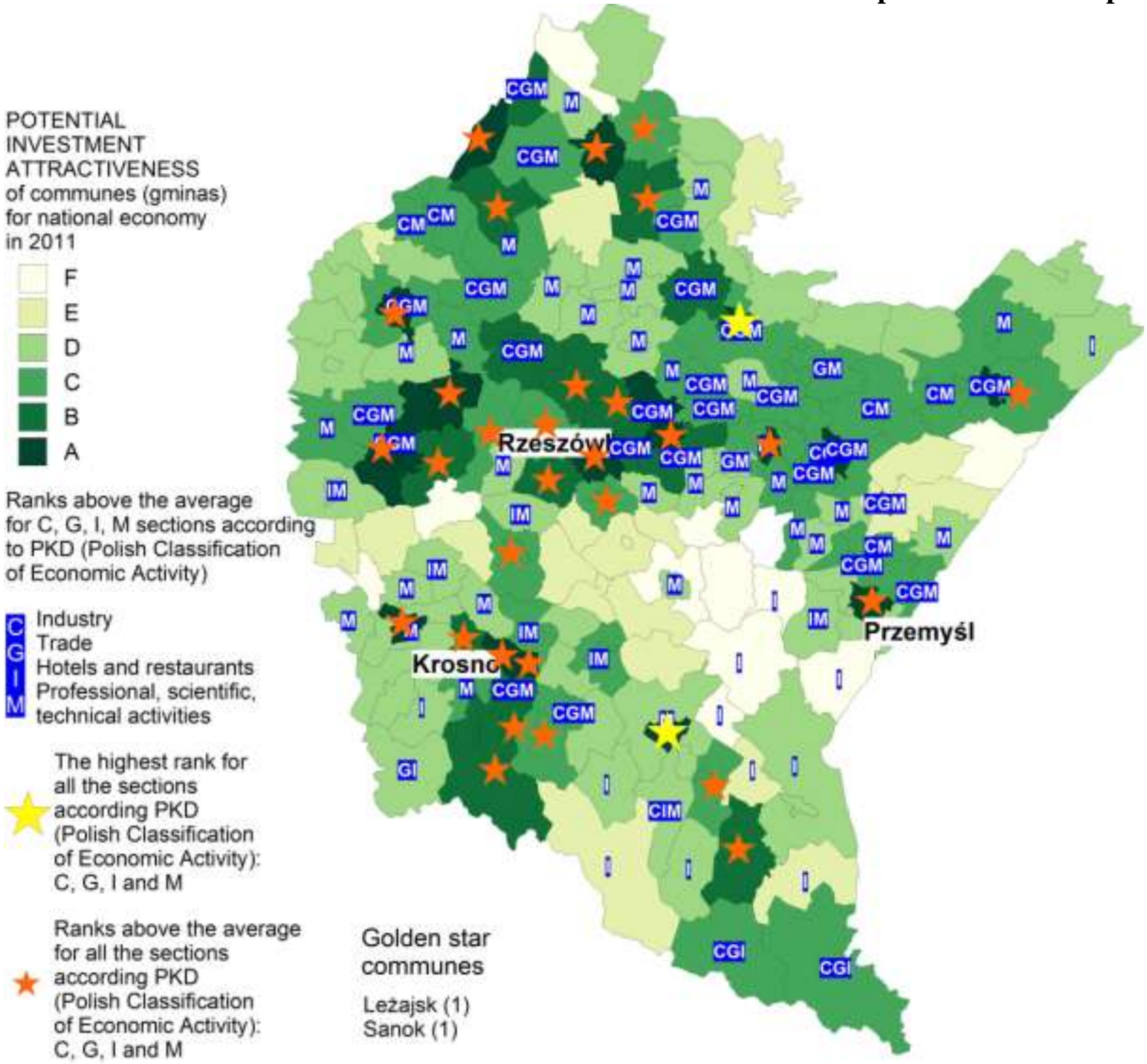
Attractive communes are also the class B communes according to the PAI1_GN index. Among these communes are: Dukla (3), Iwonicz-Zdrój (3), Jedlicze (3), Miejsce Piastowe (2), Solina (2), Radymno (1), Kolbuszowa (3), Łańcut (2), Ropczyce (3), Boguchwała (3), Głogów Małopolski (3), Krasne (2), Trzebownisko (2), Nowa Sarzyna (3), Nisko (3), Gorzyce (2), Nowa Dęba (3). The location-specific advantages are also universal for these communes, which makes them attractive for all kinds of business activity concerned in this research. However, this characteristic cannot be found in all of the communes that belong to Class C. Only a few Class C communes fulfil this condition:Łapanów (2), Rzezawa (2), Żegocina (2), Kocmyrzów-Luborzyca (2), Gdów (2), Tymbark (2), Kamionka Wielka (2), Stary Sącz (3), Jordanów (1), Sucha Beskidzka (1) – see Table 3 in the Appendix.

In reference to the particular sections taken into consideration in this research the following communes of Class C should be distinguished:

- Lutowiska (2), Rymanów (3), Besko (2), Zagórz (3), Cisna (2), Lesko (3), Jarosław (2), Pawłosiów (2), Wiązownica (2), Lubaczów (2), Oleszyce (3), Medyka (2), Orły (2), Żurawica (2), Tryńcza (2), Cmolas (2), Białobrzegi (2), Łańcut (2), Żołynia (2), Sędziszów Małopolski (3), Świlcza (2), Tyczyn (3), Strzyżów (3), Żyraków (2), Leżajsk (2), Nowa Sarzyna (3), Mielec (2), Padew Narodowa (2), Rudnik nad Sanem (3), Pysznica (2), Baranów Sandomierski (3), Grębów (2) - for section C,
- Krempna (2), Jedlicze (3), Rymanów (3), Besko (2), Cisna (2), Lesko (3), Jarosław (2), Pawłosiów (2), Lubaczów (2), Medyka (2), Żurawica (2), Gać (2), Sieniawa (3), Tryńcza (2), Cmolas (2), Kolbuszowa (3), Białobrzegi (2), Czarna (2), Łańcut (2), Żołynia (2), Ropczyce (3), Sędziszów Małopolski (3), Świlcza (2), Tyczyn (3), Strzyżów (3), Dębica (2), Żyraków (2), Leżajsk (2), Mielec (2), Rudnik nad Sanem (3), Pysznica (2), Grębów (2) - for section G,
- Brzozów (3), Jasło (1), Jedlicze (3), Krościenko Wyżne (2), Bukowsko (2), Horyniec-Zdrój * (2), Bircza (2), Fredropol (2), Krzywcza (2), Przeworsk (1), Ropczyce (3), Sędziszów Małopolski (3), Boguchwała (3), Świlcza (2), Trzebownisko (2), Tyczyn (3), Czudec (2), Frysztak (2), Strzyżów (3), Pilzno (3), Pysznica (2), Nowa Dęba (3), Tarnobrzeg (1) - for section I,
- Brzozów (3), Jasło (2), Kołaczyce (3), Skołyszyn (2), Chorkówka (2), Korczyna (2), Wojaszówka (2), Sanok (2), Zagórz (3), Lesko (3), Solina (2), Chłopice (2), Pruchnik (3), Rokietnica (2), Roźwienica (2), Wiązownica (2), Cieszanów (3), Lubaczów (2), Krasiczyn (2), Stubno (2), Gać (2), Kańczuga (3), Sieniawa (3), Tryńcza (2), Cmolas (2), Majdan Królewski (2), Niwiska (2), Raniżów (2), Dzikowiec (2), Markowa (2), Rakszawa (2), Iwierzyce (2), Dynów (1), Chmielnik (2), Kamień (2), Sokołów Małopolski (3), Czudec (2), Frysztak (2), Czarna (2), Pilzno (3), Grodzisko Dolne (2), Leżajsk (2), Padew Narodowa (2), Przecław (3), Jeżowe (2), Rudnik nad Sanem (3), Ulanów (3), Pysznica (2), Zaleszany (2), Baranów Sandomierski (3), Grębów (2) - for section M.

Synthetic evaluation of potential investment attractiveness of communes of Subcarpathian voivodship is presented in Chart 5.

Chart 5. Potential investment attractiveness of communes of Subcarpathian voivodship



Source: Authors' own calculations.

4. Voivodship's institutional support for investors and entrepreneurs

The development of business supporting institutions in a region is a vital component of its investment attractiveness. The institutions that support entrepreneurship, pro-investment solutions, research commercialization and enterprises' innovativeness are of special importance. Among the voivodship's business-supporting institutions that influence the voivodship's economic development the following ones should be mentioned (excluding scientific research institutions):

- chambers of commerce: Podkarpacka Izba Gospodarcza in Krosno, Izba Rolnicza Województwa Podkarpackiego, Regionalna Izba Gospodarcza in Sanok, Regionalna Izba Gospodarcza in Stalowa Wola, Regionalna Izba Gospodarcza w Przemyślu, Tarnobrzeg Izba Przemysłowo-Handlowa, Izba Przemysłowo-Handlowa in Rzeszów, Izba Rzemieślnicza in Rzeszów,
- associations (including business centres): Podkarpacki Klub Biznesu in Rzeszów, Centrum Promocji Biznesu in Rzeszów, Centrum Wspierania Biznesu przy Stowarzyszeniu Promocji Przedsiębiorczości in Rzeszów, Leżajske Stowarzyszenie Rozwoju,
- business incubators: Inkubator Technologiczny Podkarpackiego Parku Naukowo Technologicznego AEROPOLIS in Rzeszów, Preinkubator Akademicki Podkarpackiego Parku Naukowo Technologicznego AEROPOLIS in Rzeszów, Inkubator Przedsiębiorczości IN-MARR in Mielec, Inkubator Technologiczny in Stalowa Wola,
- technology parks, science parks, industrial parks: Podkarpacki Park Naukowo-Technologiczny AEROPOLIS in Rzeszów, Stare Miasto Park in Leżajsk, Mielec Park Przemysłowy,
- consulting centres (including personal consulting and agricultural consulting): Podkarpacki Ośrodek Doradztwa Rolniczego in Boguchwał, Centrum Doradztwa Gospodarczego in Świlcza,
- financial institutions (guarantee funds): Podkarpacki Fundusz Poręczeń Kredytowych Sp. z o.o. in Rzeszów,
- others: Rzeszowska Agencja Rozwoju Regionalnego S.A., Mielec Agencja Rozwoju Regionalnego S.A. Tarnobrzeg Agencja Rozwoju Regionalnego S.A., Bieszczadzka Agencja Rozwoju Regionalnego S.A. in Ustrzyki Dolne, Agencja Rozwoju Regionalnego "Karpaty" S.A. in Krosno, Agencja Rozwoju Regionalnego MARR S.A. in Mielec, Przemyska Agencja Rozwoju Regionalnego S.A.

Subcarpathian Chamber of Commerce *(Podkarpacka Izba Gospodarcza)* **in Krosno** helps to find sources of financing companies from domestic and foreign funds, offers economic consulting (including finance, law, taxes, public contracts, quality management, technology audit and tranfer) and intermediary, trainings (on teamwork, interpersonal communication, negotiations, sales techniques and team management, project management, diversity management and change management), accounting office's services, preparing of offers for buying vouchers used in the local trade and services networks, promotion services (including website preparation and management), helps at looking for business partners on domestic and international markets, helps at building databases of companies, rents conference halls. A part of the services can be offered via Internet. (http://www.pigkrosno.pl/, 04 November 2013)
Subcarpathian Business Club in Rzeszów *(Podkarpacki Klub Biznesu)* offers consulting services, organizes trainings, seminars and conferences on economic issues, promotes club's members and organizes lobbying. It also operates information system in order to facilitate establishing business contacts and a loan fund. The fund offers financial resources to support micro-, small and medium enterprises from Subcarpathian voivodship that can be used as

investment and turnovers means for development. The Club operates a system of joint purchases ("Grupy Zakupowe") in order to lower the operating costs (the offer includes fuel, energy, telecommunication, group insurance, stationaries, chemical, automobiles, post services, advertisements, recycling). The Club runs also a Sales Platform and a Platform "Klubowicze – Klubowiczom", which enable selling to all parties (the former) and only to members of the Club (the latter). As part of the Grupy Zakupowe, the Club has created an Employee Grupa Zakupowa, which allows the employees of Club members to favourably buy products in special distribution points. (www.pkb.net.pl/, 04 November 2013)

Subcarpathian Research and Technology Park AEROPOLIS *(Podkarpacki Park Naukowo Technologiczny AEROPOLIS)* **in Rzeszów** offers investments sites with full amenities (green fields), of which some are a part of Euro Park Mielec SEZ. Services supporting the enterprises in the park are also offered such as help at looking for sources of financing. The park is a sector park connected with regional traditions of aviation industry. The park operates the Academic Preincubator, which promotes the entrepreneurship of students, graduates and research staff of higher education institutions in the voivodship. The preincubator is an entity that operates on behalf of its member would-be-entrepreneurs. It offers expertise (in the field of management, marketing, finances) and allows a person that has an idea for a business to take actions that will enable the creation of his or her firm. The incubator offers office and production space as well as technical infrastructure on preferential conditions. The incubator is targeted mainly at micro-, middle- and small-sized companies from hi-tech businesses in the fields of air, IT, automotive, electromachinery, biotechnology and chemical industries. The Park plans to launch workshops and laboratories for Rzeszów universities and offers IT and consulting services that support innovativeness as part of a Technology Transfer Centre, which acts as an intermediary between research and business sectors. The TTC supports creating clusters, especially in air, electro-machinery, wood, chemical and food-processing industries. (www.aeropolis.com.pl/, 04 November 2013)

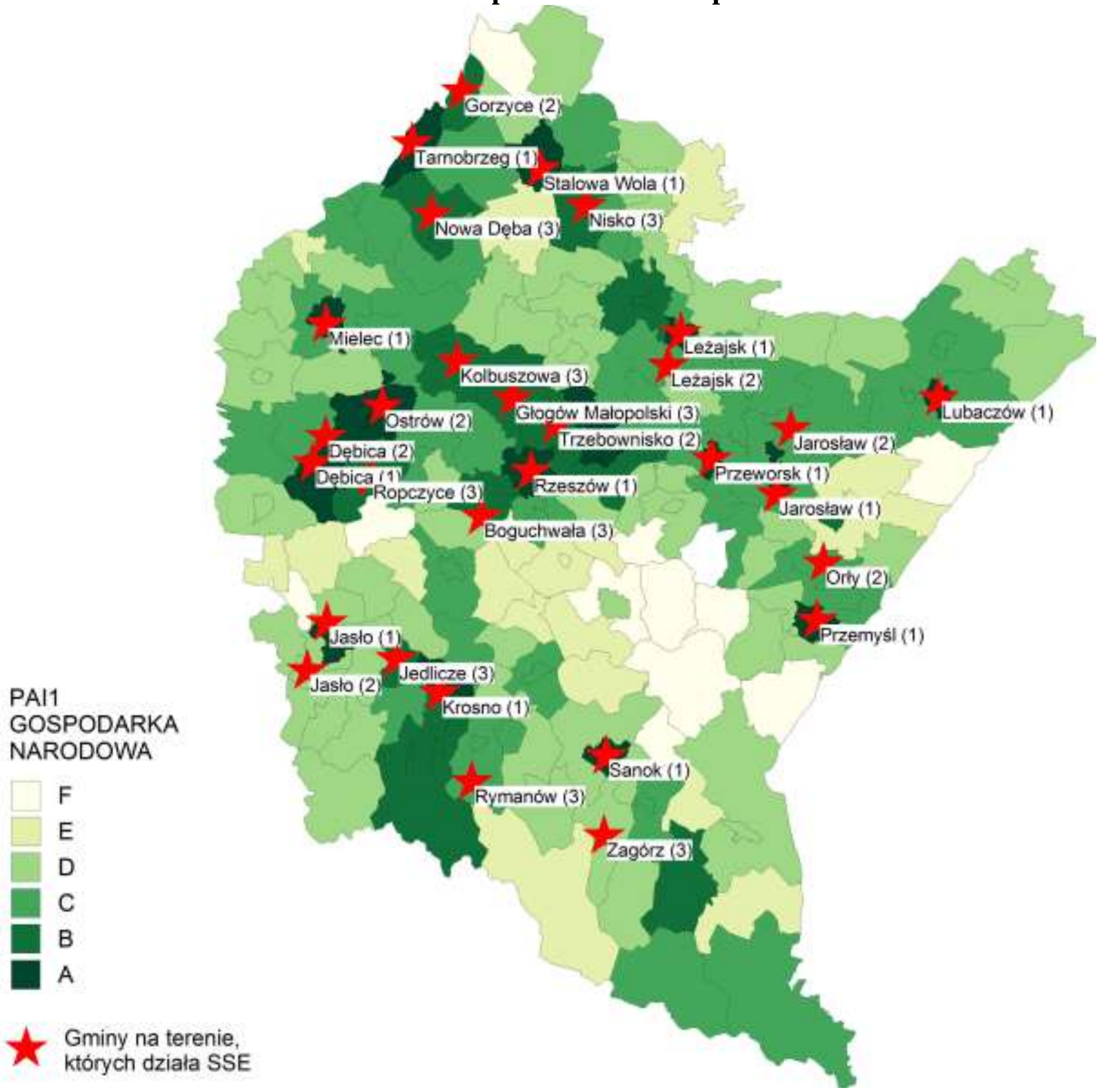
Subcarpathian Loan Guarantee Fund LLC *(Podkarpacki Fundusz Poręczeń Kredytowych Sp. z o.o.)* **in Rzeszów** offers financial support for Subcarpathian micro-, small and medium enterprises and public benefit organizations. The programme includes granting loan guarantees given by the financing institutions cooperating with the fund. By decreasing risk it enables the entrepreneurs easier access to financial means from these financial institutions. The guarantees can be granted to micro-, small and medium entrepreneurs who have their seat or start a business in the area of Subcarpathian voivodship and have creditworthiness. The fund grants guarantees up to 70% of the loan value. (http://www.pfpk.com/, 04 November 2013)

Rzeszów Regional Development Agency Inc. *(Rzeszowska Agencja Rozwoju Regionalnego S.A.)* operates a Centre for Training, Organisation and International Cooperation, which offers trainings in the field of EU funding, marketing etc.), an Economic Cooperation Centre, which offers advice on acquiring EU funding, business plan preparation, feasibility studies and preparation of financing application documentation, a Technology Transfer, Innovativeness and Informatisation Centre, which offers IT, consulting services, supports cluster formation, Entrepreneurship Development Centre, which offers advice on business creation for micro and S&M Enterprises, Investor Service Centre, which offers legal advice and investment consulting, feasibility studies, offer and demand databases. The agency also operates a loan fund for small enterprises from Subcarpathian voivodship and a Centre of Transborder Cooperation (in Przeworsk) which aims at supporting transborder cooperation in the Carpathian Euroregion and offers consulting on EU funds for this kind of cooperation (organizing trainings, seminars, conferences and operating economic offers database) (www.rarr.rzeszow.pl/, 04 November 2013)

Special economic zones in Subcarpathian voivodship – effects

There are 3 special economic zones (SEZs) in Subcarpathian voivodship: Mielec SEZ, Tarnobrzeg SEZ and Kraków SEZ. At the end of 2012 the areas of the SEZs were parts of 12 cities and 17 communes – see Chart 6.

Chart 6. The location of SEZs in Subcarpathian voivodship



Note: Red stars indicate communes with SEZ subzones within their areas.
Source: Authors' own calculations.

The first SEZ areas were brought into life in 1995. The investment outlays made by SEZ companies operating in the communes of Subcarpathian by the end of 2012 amounted to 7 PLN billon, which made 8% of all investment outlays made in the Polish SEZs. In the same time the SEZ companies in the region created 22.5 thousand new jobs which made 12% of all jobs created in the Polish SEZs (see Table 4).

Table 4. Effects of special economic zone functioning at the end of 2012

SEZ / Subzone	County, Commune	Leading industries (at least 20% share of revenue or employment	Cumulated capital expenditure in million PLN (end of 2012)	Jobs number (end of 2012)
Tarnobrzeg / Jasło	Jasło, Jasło (1)	wood, wood and cork products, except furniture; articles of straw and plaiting materials, other non-metallic mineral products, furniture	124.27	432
Tarnobrzeg / Jasło	Jasło, Jasło (2)	no investors yet		
Tarnobrzeg / Jasło	Krosno, Jedlicze (3)	Coke, briquette and similar solid fuels from coal and peat, refined petroleum products	33.03	20
Tarnobrzeg / Jasło	Krosno, Rymanów (3)	wood, wood and cork products, except furniture; articles of straw and plaiting materials, other non-metallic mineral products,	25.81	191
Mielec / Sanok	Sanok, Sanok (1)	wood, wood and cork products, except furniture; articles of straw and plaiting materials	22.01	201
Mielec / Zagórz	Sanok, Zagórz (3)	rubber and plastic products, machinery and equipment n.e.c.,	24.31	65
Kraków, Mielec / Krosno	Krosno (city), Krosno (1)	rubber and plastic products	15.00	22
Mielec / Jarosław	Jarosław, Jarosław (1)	no investors yet		
Mielec / Jarosław	Jarosław, Jarosław (2)	no investors yet		
Mielec / Lubaczów	Lubaczów, Lubaczów (1)	machinery and equipment n.e.c.	7.39	33
Tarnobrzeg / Przemyśl	Przemyśl, Orły (2)	no investors yet		
Tarnobrzeg / Przemyśl	Przemyśl (city), Przemyśl (1)	fabricated metal products (except machinery and equipment)	5.00	10
Mielec / Kolbuszowa	Kolbuszowa, Kolbuszowa (3)	no investors yet		
Mielec / Ostrów	Ropczyce-Sędziszów, Ostrów (2)	fabricated metal products (except machinery and equipment)	0.65	
Mielec / Ropczyce	Ropczyce-Sędziszów, Ropczyce (3)	manufacture of other transport equipment	3.05	
Kraków / Boguchwała	Rzeszów, Boguchwała (3)	machinery and equipment n.e.c.	0.85	
Mielec / Głogów Małopolski	Rzeszów, Głogów Małopolski (3)	rubber and plastic products, metals,	271.74	1,701
Mielec / Trzebownisko	Rzeszów, Trzebownisko (2)	machinery and equipment n.e.c., manufacture of other transport equipment,	641.35	1,186
Mielec / Rzeszów	Rzeszów (city), Rzeszów (1)	manufacture of other transport equipment	59.90	142
Mielec / Dębica	Dębica, Dębica (1)	rubber and plastic products	264.37	206
Mielec / Dębica	Dębica, Dębica (2)	rubber and plastic products	207.32	189
Mielec / Leżajsk	Leżajsk, Leżajsk (1)	fabricated metal products (except machinery and equipment), computers, electronic and optical products	7.42	18

Mielec / Leżajsk	Leżajsk, Leżajsk (2)	other non-metallic mineral products, furniture,	0.86	10
Mielec / Mielec	Mielec, Mielec (1)	wood, wood and cork products, except furniture; articles of straw and plaiting materials	3,536.83	12,568
Tarnobrzeg / Stalowa Wola	Nisko, Nisko (3)	fabricated metal products (except machinery and equipment)	57.98	452
Tarnobrzeg / Stalowa Wola	Stalowa Wola, Stalowa Wola (1)	fabricated metal products (except machinery and equipment), machinery and equipment n.e.c., motor vehicles (excluding motorcycles), trailers and semi-trailers	1,118.91	3,378
Tarnobrzeg / Tarnobrzeg	Tarnobrzeg, Gorzyce (2)	motor vehicles (excluding motorcycles), trailers and semi-trailers	219.17	602
Tarnobrzeg / Nowa Dęba	Tarnobrzeg, Nowa Dęba (3)	basic pharmaceutical products and pharmaceutical preparations	325.52	802
Tarnobrzeg / Tarnobrzeg	Tarnobrzeg (city), Tarnobrzeg (1)	other non-metallic mineral products, fabricated metal products (except machinery and equipment), chemicals and chemical products	46.30	302

Source: Authors' own calculations based on the Ministry of Economy data.

The largest investments in voivodship's have been completed in Mielec and Stalowa Wola. In Mielec the main investments have been made in rubber and plastic products: Plastic Factory COBI S.A., Plastwag S.A., Polsko - Koreańskie PP-H JOONGPOL Sp. z o.o., PPHU Wojciech Tycner, SAMDEX Sp. z o.o., Temar Sp. z o.o., ZPTSz "PZL - Mielec" Sp. z o.o.,: ALPHA Technology Sp. z o.o. Sp. k., BASCO 2 Andrzej Nawrot i Wspólnicy Sp. J., Casmet - System Józef Małecki, DUL MAR Sp.j., Eurotech Sp. z o.o., Firma Tarapata Sp. z o.o., FPUH Mechanika Leśniak Danuta i Adam, METALPOL Sp. z o.o., PPHU P&S Sp. z o.o., REGMOT Sp. z o.o., RSM Zakł. Prod. Maszyn i Urządzeń Sp. z o.o., RETECH Sp. z o.o., SSC Sp. z o.o. Spółka Komandytowa, FPU WALDREX s.c., Yasa Motors Poland Sp. z o.o., Zakład Akcesoriów Meblowych Gładysek Sp. j., EC AvioTech Sp. o.o. (d. Zakład Narzędziowy Prodrem Sp. z o.o.), Zakład "RPOL" Roman Polit and motor vehicles: King & Fowler Polska Sp. z o.o., Kirchhoff Polska Sp. z o.o., Gardner Aerospace - Mielec Spółka z.o.o, Remog Polska Sp. z o.o., WAW Mielec Sp. z o.o., GALWEX Cebula Elwira i Wspólnicy Sp.j., Leopard Automobile-Mielec Sp. z o.o., STAMET - Stanisław Stachura, Automotive Coachbuilding and Design Sp. z o.o., Zakład Produkcyjny Kamot-Mielec S.A., Lear Corporation Poland II Sp. z o.o., MELEX A&D Tyszkiewicz Sp.j. In Stalowa Wola manufacture of metal products and aluminium processing are the main sectors: ATS Stahlschmidt & Maiworm Sp. z o.o., HSW - Zakład Kuźnia Matrycowa Sp. z o.o., MCS-METAL CLEANING SERVICE Sp. z o.o., Uniwheels Production Poland Sp. z o.o., Eurometal S.A., IWAMET Sp. z o.o., PPHU Domostal s.c., Zakład Mechaniczny "TASTA" Sp. z o.o., RAKOCZY STAL Sp. Jawna, BAGPAK Polska Sp. z o.o., WOBI STAL Sp. z o.o.

According to the SEZ development plans the voivodship aims at attracting the following kinds of investments:

- investments supporting the development of Dolina Lotnicza Cluster and investments from electro-machinery and chemical industries consistent with the industrial traditions of the region – in Kraków SEZ and Mielec SEZ

- investments form branches traditionally associated with the region – especially from chemical, construction materials, electro-machinery, aluminium processing industries – in Tarnobrzeg SEZ.

‘A’ Commune

Student Scientific Organisation for Entrepreneurship and Regional Analyses affiliated to the Institute of Enterprise of the Warsaw School of Economics, has again published the results of its research into the quality of investor assistance offered by the communal authorities.

The subject of this qualitative research of investment attractiveness is evaluation of the websites and evaluation of e-mail contact with communal authorities in two languages: Polish and English. The effect of this research is a ranking ‘A’ Commune, which is thought to distinguish best performing self-government territorial units in terms of the use of means of electronic communication to provide assistance to the customers. The research is carried out with the use of mystery client method. In this year’s edition all communes belonging to Class A and B according to the PAI 2011 index were subject to the evaluation.

As a result 90 communes were distinguished, of which 2 are situated Subcarpathian voivodship (see Table 5).

Table 5. Communes in Subcarpathian voivodship distinguished as ‘A’ Communes

Place in the ranking (for the whole country)	Commune	Evaluation of websites (score)	Evaluation of e-mail contact in Polish (score)	Evaluation of e-mail contact in English (score)	Sum
3	Krosno (1)	13.0	11.0	9.0	33.0
7	Lubaczów (1)	10.5	9.0	9.0	28.5

Source: Authors’ own calculations.

The websites of these communes have foreign language versions, and Jasło’s website also contains information on support for investors. Krosno and Lubaczów prepared model answers to e-mails both in Polish and in English, containing answers to all the questions asked and detailed information on offered support.

5. Region's strengths and weaknesses

Subcarpathian voivodship has its unique character and clear specificity which influences its strengths and weaknesses. If divided according to the main factors of location and location conditions classified into microclimates that influence potential and real investment attractiveness, they can be grouped into strengths (microclimates with ranking A, B or C) and weaknesses (microclimates with ranking D, E or F) – see Table 6.

Table 6. Strengths and weaknesses of Subcarpathian voivodship

Strengths of the region according to the microclimates by the Institute of Enterprise of the Warsaw School of Economics	Weaknesses of the region according to the microclimates by the Institute of Enterprise of the Warsaw School of Economics
National economy	
Microclimate Human Resources Class C Microclimate Social Infrastructure Class A Social Microclimate Class A Microclimate Innovativeness Class A Investment outlays Class C	Microclimate Technical Infrastructure Class F Mikroklimat rynkowy Class F Microclimate Administration/Governemt Class F Productivity of enterprises Class F Returns on tangible assets Class F Profitability of enterprises Class D Self-financing of self-government units Class F
Capital-intensive industry	
Microclimate Human Resources Class C Microclimate Social Infrastructure Class A Social Microclimate Class A Microclimate Innovativeness Class A	Microclimate Technical Infrastructure Class F Market Microclimate Class E Microclimate Administration/Governemt Class F Returns on tangible assets Class E Productivity of enterprises Class E Self-financing of self-government units Class F Investment outlays Class E
Labour-intensive industry	
Microclimate Human Resources Class C Microclimate Social Infrastructure Class A Social Microclimate Class B	Microclimate Technical Infrastructure Class F Market Microclimate Class E Microclimate Administration/Governemt Class F Returns on tangible assets Class E Productivity of enterprises Class E Self-financing of self-government units Class F Investment outlays Class E
Trade	
Microclimate Social Infrastructure Class C Social Microclimate Class C Returns on tangible assets Class B	Microclimate Human Resources Class D Microclimate Technical Infrastructure Class F Market Microclimate Class E Microclimate Administration/Governemt Class F Productivity of enterprises Class E Self-financing of self-government units Class F Investment outlays Class D
Tourism	
Microclimate Human Resources Class C Microclimate Social Infrastructure Class B Social Microclimate Class A Returns on tangible assets Class C Investment outlays Class B	Microclimate Technical Infrastructure Class F Market Microclimate Class F Microclimate Administration/Governemt Class E Productivity of enterprises Class D Self-financing of self-government units Class F
Professional, scientific and technical activities	
Microclimate Social Infrastructure Class A	Microclimate Human Resources Class D

Social Microclimate Class A Microclimate Innovativeness Class A Investment outlays Class B	Microclimate Technical Infrastructure Class F Market Microclimate Class E Microclimate Administration/Governemt Class E Returns on tangible assets Class F Productivity of enterprises Class E Self-financing of self-government units Class F

Source: Authors on the basis of the results of research of the Institute of Enterprise of the Warsaw School of Economics.

Summary

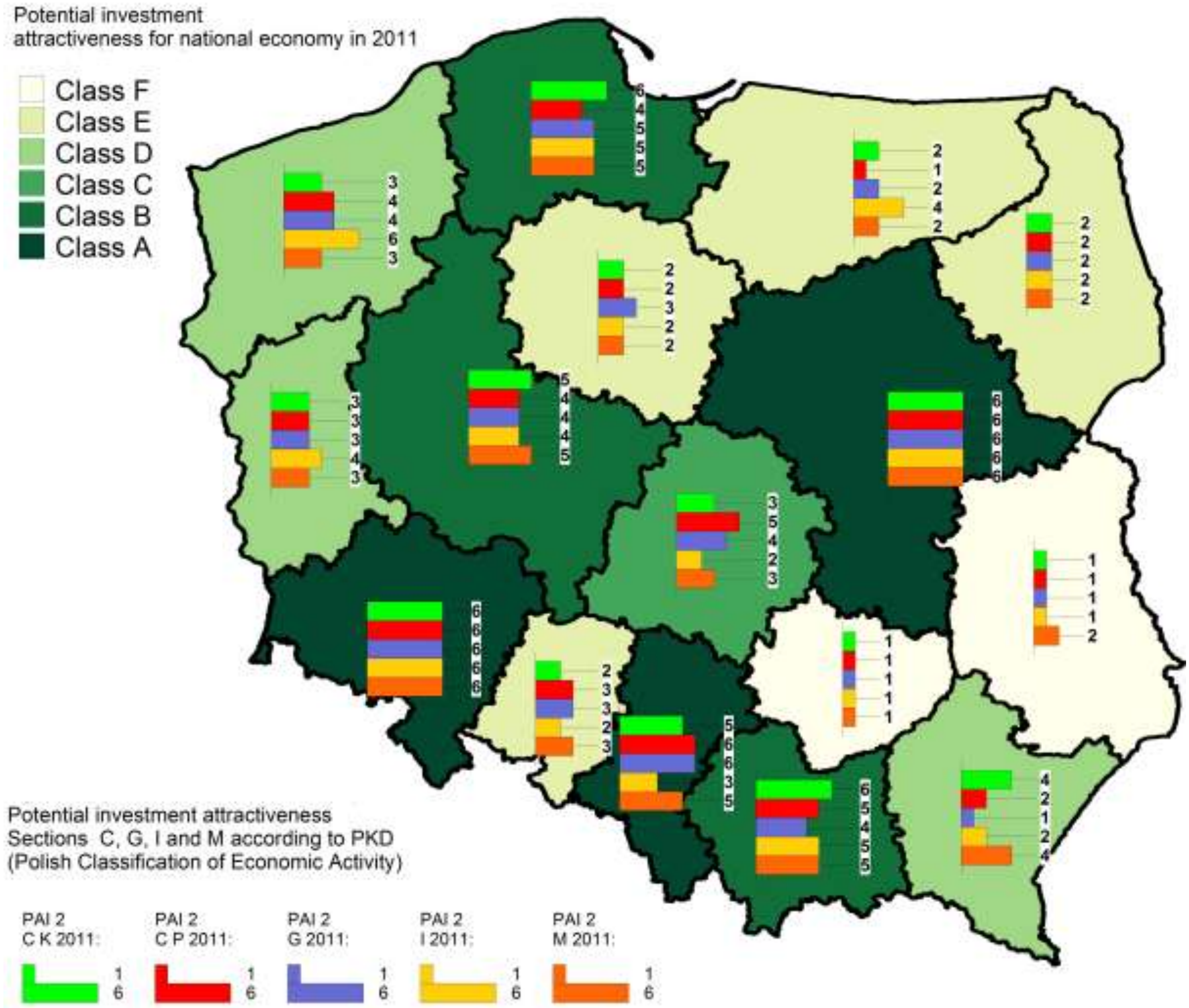
The engines of economic development of Lower Silesian voivodship are the city counties: Krosno, Przemyśl, Rzeszów, Tarnobrzeg, and land counties: Stalowa Wola, Tarnobrzeg, Kolbuszowa and Lesko as well as the special economic zones in the region.

Because of competitiveness of medium and big enterprises the voivodship has predispositions to **create interregional clusters**, especially in sectors such as: manufacture of aircraft, spacecraft and similar machinery, manufacture of motor vehicles parts and accessories, manufacture of clothes, manufacture of rubber and plastic products, manufacture of metals, manufacture of fabricated metal products, except machinery and equipment, manufacture of motor vehicles (excluding motorcycles), trailers and semi-trailers, other manufacturing, manufacture of other food products, manufacture of rubber products, manufacture of basic precious and other non-ferrous metals, manufacture of equipment, manufacture of medical and dental instruments and supplies.

It can also develop **intelligent specializations** in the high-tech sectors, basing on the competitive big and medium-sized companies, such as manufacture of aircraft, spacecraft and similar machinery, **in the middle-high-tech sectors:** manufacture of motor vehicles (excluding motorcycles), trailers and semi-trailers, manufacture of equipment, manufacture of medical and dental instruments and supplies, **in the middle-low-tech sectors**: manufacture of rubber and plastic products, manufacture of metals, manufacture of fabricated metal products except machinery and equipment and except weapons and ammunition, repair, conservation and installation of machinery and equipment**, in the low-tech sectors**: manufacture of clothes, other manufacturing excluding medical and dental instruments and supplies.

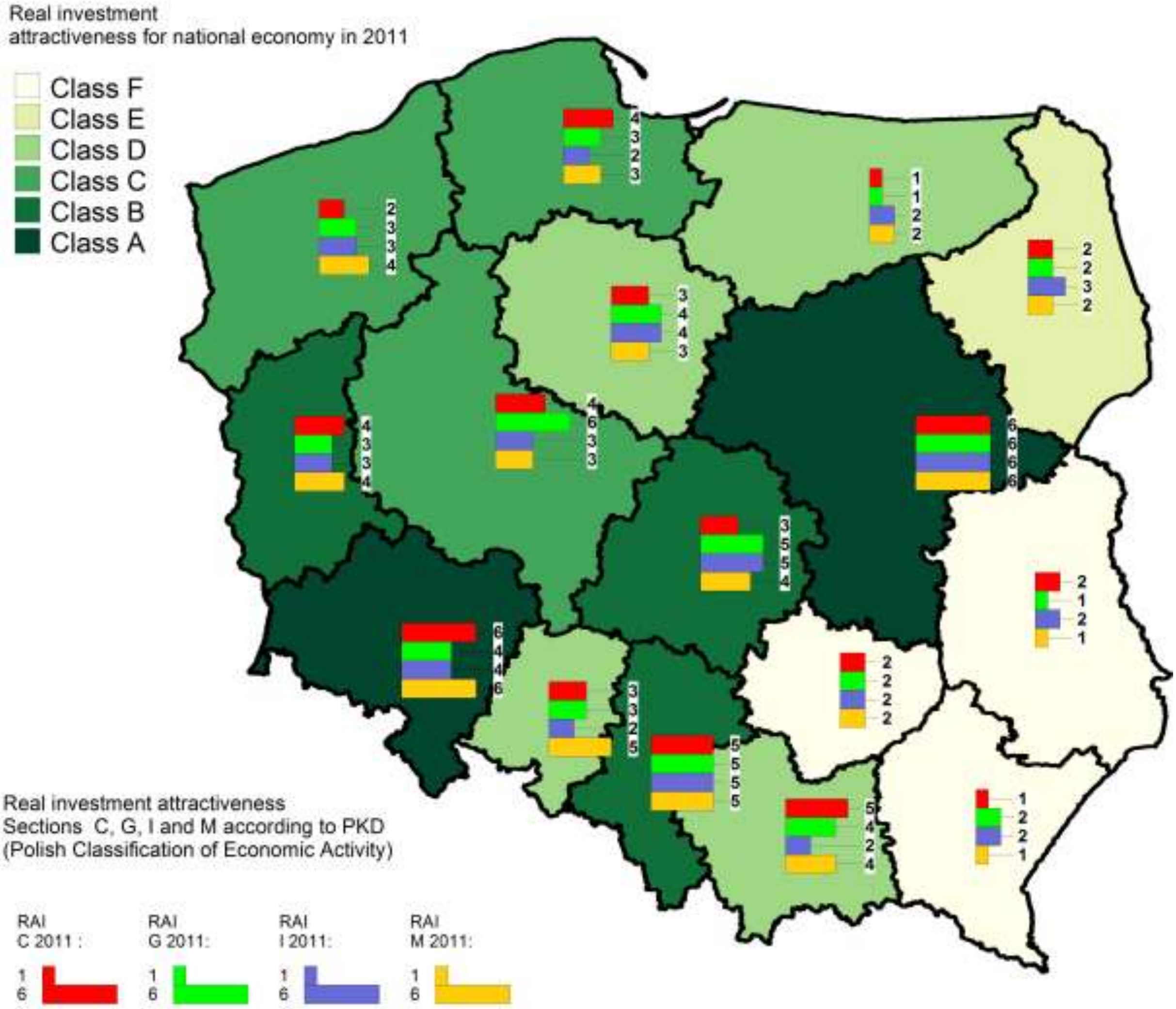
APPENDIX

Chart 1. Potential investment attractiveness of Polish voivodships by basic sections of the national economy



Source: Authors' own materials based on the research.

Chart 2. Real investment attractiveness of Polish voivodships by basic sections of the national economy



Source: Authors' own materials based on the research.

Table 1. List of investment attractiveness indices for voivodships

Voivodship	LOWER SILESIAN	KUYAVIAN-POMERANIAN	LUBLIN	LUBUSZ	ŁÓDŹ	LESSER POLAND	MAZIOVIAN	OPOLE	SUBCARPATHIAN	PODLASKIE	POMERANIAN	SILESIAN	ŚWIĘTOKRZYSKIE	WARMIAN-MASURIAN	GREATER POLAND	WESTERN POMERANIAN
PAI1 GN	A	D	F	D	D	C	A	E	D	E	B	A	F	D	B	B
PAI2 GN	A	E	F	D	C	B	A	E	D	E	B	A	F	E	B	D
RAI GN	A	D	F	B	B	D	A	D	F	E	C	B	F	D	C	C
PAI1 C	A	D	F	D	C	C	A	D	E	F	B	A	F	E	B	B
PAI2 C CAPITAL	A	E	F	D	D	A	A	E	C	E	A	B	F	E	B	D
PAI2 C LABOUR	A	E	F	D	B	B	A	D	E	E	C	A	F	F	C	C
RAI C	A	D	E	C	D	B	A	D	F	E	C	B	E	F	C	E
PAI1 G	A	F	F	B	E	B	A	D	D	F	A	C	F	C	C	B
PAI2 G	A	D	F	D	C	C	A	D	F	E	B	A	F	E	C	C
RAI G	C	C	F	D	B	C	A	D	E	E	D	B	E	F	A	D
PAI1 I	B	E	F	C	E	B	A	E	E	E	A	C	F	C	C	A
PAI2 I	A	E	F	C	E	B	A	E	E	E	B	D	F	C	C	A
RAI I	C	C	E	D	B	E	A	E	E	D	E	B	E	E	D	D
PAI1 M	A	E	F	D	D	C	A	D	D	E	B	A	F	D	B	B
PAI2 M	A	E	E	D	D	B	A	D	C	E	B	B	F	E	B	D
RAI M	A	D	F	C	C	C	A	B	F	E	D	B	E	E	D	C

Source: Authors on the basis of the results of statutory research carried out under the guidance of H. Godlewska-Majkowska.

Table 2. Potential investment attractiveness of Polish voivodships according to the EU potential investment attractiveness index PAI _UE in 2011

	Microclimate Human Capital	Microclimate Market	Microclimate Innovativeness	Composite index
Lower Silesian	B	D	D	D
Kuyavian-Pomeranian	B	E	F	E
Lublin	B	F	E	F
Lubusz	A	F	E	E
Łódź	A	E	E	E
Lesser Poland	C	E	E	E
Mazovian	A	C	B	B
Opole	C	F	E	F
Subcarpathian	C	F	E	F
Podlaskie	B	F	E	F
Pomeranian	B	D	D	D
Silesian	B	D	E	D
Świętokrzyskie	A	F	F	F
Warmian-Masurian	B	F	E	F
Greater Poland	A	E	E	E
Western Pomeranian	C	E	E	E

Source: Authors' own materials based on calculations of H. Godlewska-Majkowska and M. Czernecki, made in the course of statutory research *Investment attractiveness and enterprise localization in the global economy* (the team: H. Godlewska-Majkowska, Ph.D., university professor at the Warsaw School of Economics – head of research, P. Bartoszczuk, Ph.D., P. Zarębski, Ph.D., M. Typa, M.A., M. Czernecki, M.A.).

Table 3. Potential investment attractiveness of counties of Subcarpathian voivodship for the national economy and selected sections

County	PAI1_GN	PAI1_GN_classes	PAI1_C_classes	PAI1_G_classes	PAI1_I_classes	PAI1_M_classes
Rzeszów (city)	0,345	A	A	A	A	A
Krosno (city)	0,344	A	A	A	A	A
Przemyśl (city)	0,331	A	A	A	B	A
Tarnobrzeg (city)	0,315	A	A	B	B	A
Stalowa Wola	0,251	C	C	B	C	C
Tarnobrzeg	0,242	C	C	C	D	D
Kolbuszowa	0,241	C	D	D	F	C
Lesko	0,241	C	C	C	A	D

Source: As in Table 1.

Table 4. Potential investment attractiveness of communes of Subcarpathian voivodship for the national economy and selected sections

Commune	PAI1_GN	PAI1_GN_classes	PAI1_C_classes	PAI1_G_classes	PAI1_I_classes	PAI1_M_classes
Rzeszów (1)	0.258	A	A	A	B	A
Krosno (1)	0.256	A	A	A	B	A
Mielec (1)	0.252	A	A	A	B	A
Sanok (1)	0.249	A	A	A	A	A
Łańcut (1)	0.246	A	A	A	B	A
Przemyśl (1)	0.245	A	A	A	B	A
Jasło (1)	0.245	A	A	A	C	A
Dębica (1)	0.244	A	A	A	B	A
Ostrów (2)	0.243	A	A	A	B	A
Tarnobrzeg (1)	0.243	A	A	A	C	A
Leżajsk (1)	0.239	A	A	A	A	A
Przeworsk (1)	0.237	A	A	A	C	A
Jarosław (1)	0.236	A	A	A	D	A
Stalowa Wola (1)	0.235	A	A	A	B	A
Krościenko Wyżne (2)	0.226	A	A	A	C	A
Dębica (2)	0.223	A	B	C	D	A
Lubaczów (1)	0.220	A	A	A	D	A
Czarna (2)	0.218	A	B	C	E	A
Jedlicze (3)	0.214	B	B	C	C	A
Trzebownisko (2)	0.214	B	B	B	C	A
Radymno (1)	0.213	B	B	B	D	A
Kolbuszowa (3)	0.213	B	B	C	E	A

Krasne (2)	0.213	B	B	B	E	B
Boguchwała (3)	0.212	B	B	B	C	A
Nowa Dęba (3)	0.210	B	B	B	C	A
Głogów Małopolski (3)	0.209	B	B	B	B	A
Dukla (3)	0.208	B	B	B	A	B
Gorzyce (2)	0.207	B	B	B	E	B
Miejsce Piastowe (2)	0.205	B	B	B	D	B
Nisko (3)	0.204	B	B	B	A	B
Ropczyce (3)	0.204	B	B	C	C	A
Solina (2)	0.202	B	B	B	A	C
Iwonicz-Zdrój (3)	0.201	B	B	B	B	B
Nowa Sarzyna (3)	0.199	B	C	B	D	B
Łańcut (2)	0.198	B	C	C	D	B
Jarosław (2)	0.197	C	C	C	D	B
Tryńcza (2)	0.196	C	C	C	F	C
Świlcza (2)	0.196	C	C	C	C	B
Białobrzegi (2)	0.196	C	C	C	E	B
Medyka (2)	0.195	C	C	C	F	B
Lesko (3)	0.195	C	C	C	A	C
Żurawica (2)	0.194	C	C	C	E	B
Besko (2)	0.194	C	C	C	E	B
Żyraków (2)	0.194	C	C	C	E	B
Sędziszów Małopolski (3)	0.193	C	C	C	C	B
Pawłosiów (2)	0.192	C	C	C	E	B
Rudnik nad Sanem (3)	0.192	C	C	C	D	C
Rymanów (3)	0.192	C	C	C	B	B
Leżajsk (2)	0.189	C	C	C	E	C
Strzyżów (3)	0.188	C	C	C	C	B
Żołynia (2)	0.188	C	C	C	E	B
Pysznica (2)	0.187	C	C	C	C	C
Mielec (2)	0.187	C	C	C	E	B
Orły (2)	0.186	C	C	D	E	B
Grębów (2)	0.185	C	C	C	D	C
Tyczyn (3)	0.184	C	C	C	C	B
Lubaczów (2)	0.184	C	C	C	A	C
Oleszyce (3)	0.184	C	C	D	D	B
Zarzecze (2)	0.184	C	D	D	E	B
Cisna (2)	0.184	C	C	C	A	D
Wiązownica (2)	0.184	C	C	D	D	C
Cmolas (2)	0.183	C	C	C	E	C
Korczyna (2)	0.182	C	D	D	B	C
Padew Narodowa (2)	0.182	C	C	D	E	C
Roźwienica (2)	0.181	C	D	D	E	C
Baranów Sandomierski (3)	0.181	C	C	D	D	C
Przeworsk (2)	0.181	C	D	D	F	B
Lutowiska (2)	0.180	C	C	B	A	D

Sieniawa (3)	0.180	C	D	C	D	C
Czarna (2)	0.180	C	D	D	D	C
Majdan Królewski (2)	0.180	C	D	D	E	C
Chorkówka (2)	0.179	C	D	D	E	C
Niwiska (2)	0.179	C	D	D	E	C
Rakszawa (2)	0.179	C	D	D	E	C
Brzozów (3)	0.179	C	D	D	C	C
Cieszanów (3)	0.179	C	D	D	E	C

Source: As in Table 1.

Note: All the indices in the report have been calculated on the basis on the most up-to-date data from the Regional Data Bank (RDB), 2013.