# CENTRE FOR REGIONAL AND LOCAL ANALYSES

## REGIONAL INVESTMENT ATTRACTIVENESS 2012

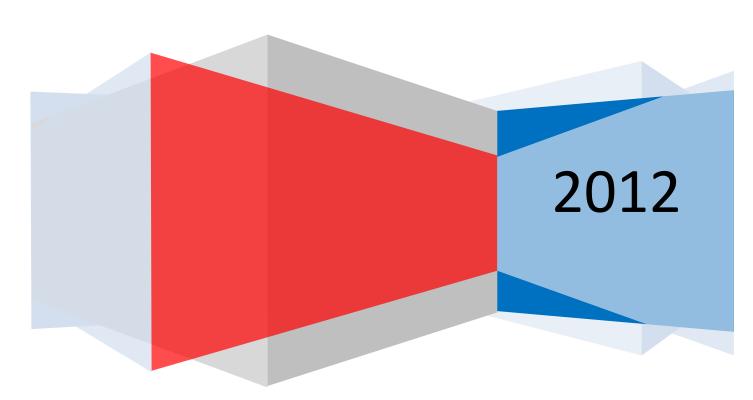
### Podlaskie voivodship

Dr hab. Hanna Godlewska-Majkowska, Ph. D. university professor at the Warsaw School of Economics

Agnieszka Komor, Ph.D.

Patrycjusz Zarębski, Ph.D.

Magdalena Typa, M.A.



Warsaw, October 2012

#### 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, under the supervision of Prof. H. Godlewska-Majkowska, Ph.D. All Authors are core members of the team that develops the methodology of calculating regional investment attractiveness in order that important characteristics of regions 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 (gminas/communes, poviats/counties, subregions, voivodships/regions). These are PAII 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 only calculated for voidoships on the basis of much more characteristics available on the regional or macroregional level. This allows us to evaluate 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, real investment attractiveness ranks are used in this report, 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 previously made.

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 organisations of entrepreneurs. A description of methodological approach to measuring investment attractiveness of Polish regions, counties and communes can be found online on the Web site of the Institute of Enterprise: <a href="www.sgh.waw.pl/instytuty/ip">www.sgh.waw.pl/instytuty/ip</a>, on the Web site of the Centre for Regional and Local Analyses, which cooperates with the Institute of Enterprise: <a href="www.caril.edu.pl">www.caril.edu.pl</a>, as well as in numerous scientific publications and expert opinions.

#### 1. The profile of regional economy of Podlaskie voivodship

Podlaskie voivodship is situated in north-eastern Poland. It borders on Lithuania and Belarus. It is a mainly agricultural region with dynamically developing food sector, chiefly food processing (milk, meet, poultry, cereals processing) and the following sectors: light industry, timber industry, construction and the manufacture of machinery and equipment.

The following phenomena can be considered the advantages of this voivodship:

- its location in the centre of Europe and in the European Union, which plays a principal role both in local transport and in a network of international transport,
- there are many express roads in this voivodship the most important of which are routes Berlin-Warsaw-Grodno-Sankt Petersburg and Warsaw-Helsinki (part of Via Baltica express road, which connects Baltic countries with Western Europe),
- a huge area of grasslands creates good conditions of farming of cattle, mainly dairy cattle,
- an opportunity of creating local biogas facilities and production of renewable energy arises because of favourable conditions for animal husbandry,
- voivodship's human capital is built by the largest universities in the region, i.e.:
- — the University of Białystok main courses of study: computer science, biology, chemistry, economics, physics, mathematics, environmental protection, law, sociology, East-Slavonic philology,
- → the Białystok University of Technology main courses of study: architecture and urban studies, industrial automatics, construction, electronics and telecommunications, electrical engineering, computer science, environmental protection engineering, mechanics and machine design, production management,
- low labours costs are accompanied by relatively high labour productivity,
- relatively high innovativeness in comparison to the level of economic development,
- there are four national parks in the region: the Białowieża National Park (a UNESCO World Heritage site), the Biebrza National Park, the Narew National Park, the Wigry National Park.

Chart 1. General characteristics of the economy of Podlaskie voivodship

Featur	re	Podlaskie v	voivodship	Poland	Share [%]					
		Marke	t Potential							
GDP per capita (Pl 2009		25,9	951	35,210	-					
Population (pers December		1,200	,982	38,538,447	3.1					
	Human Resources Potential									
Higher education graduates (perso		15,2	261	492,646	3.1					
Secondary schoo (persons) ir	_	14,4	143	421,724	3.4					
Number of employ 31 December		403,	128	13,911,203	2.9%					
Structure of employ 2011			culture 23.6% ndustry 23.4% services 53%		agriculture 12.7% industry 30.6% services 56.7%					
Investment ou	tlays and capita	al of companies w	ith foreign capi	tal participation in th	e voivodship					
Investment outlays 2010		515	5.8	61,600.3	0.8					
Capital of compani in 201		536	5.8	0.3						
	Specia	al economic zone	s (SEZs) in the	voivodship						
	EZ, subzone: Gra g SEZ, subzone:	• .	ity), Białystok (c	ity), Grajewo (city)						
		Investment	attractiveness							
Potential investr	nent attractivenes dvantages evalua	*								
Real investment at										
Poviats and gn			the Potential Atonomy	tractiveness Index for	the national					
Poviats	Class A		Bia	łystok (city),						
roviats	Class B			city), Łomża (city)						
Gminas**	Class A			wieckie (1), Brańsk (1) odlaski (1), Siemiatycze						
Giinius	Class B			Wasilków (3), Łapy (3), cz (3), Juchnowiec Koś						

In 2009 Podlaskie voivodship made a contribution of 2.3% to the GDP of Poland. Calculated per capita, it amounted to PLN 25.951 with the average for Poland PLN 35,210. With this result the voivodship occupies the fourteenth place in the country. The GDP growth rate in the period 2003-2009 amounted to 152,9%, while the national average reached 168.5%.

In comparison with the whole country the structure of employment in the voivodship is characterised by a relatively low share of the service sector (53%) whereas a share of the agricultural and industrial sectors is respectively 23.6% and 23.4% (CSO, RDB 2012).

The number of inhabitants of the voivodship amounts to 1.200.982 (as of 2011), which makes up 3.1% of the population of Poland. The age structure of the voivodship in 2010 was as follows: 14.8% of the population at pre-reproductive age, 67.5% at reproductive age and 17.6% at post-reproductive age (for Poland, respectively, 15.1%, 68.1% and 16.8%). The registered unemployment rate in the voivodship in August 2012 was 13.9%, compared to 12.4% in Poland<sup>1</sup>. The average gross monthly remuneration in enterprises sector in the first six months of 2012 amounted to PLN 3,121.3, which is 84.7% of average remuneration in Poland.

The main potential for human capital creation in the voivodship is constituted by 18 higher education institutions in which 50.9 thousand students study, which makes up 2.9% of all students Poland-wide. Moreover 3.5 % of pupils of secondary schools attend technikum schools and 2.2% vocational schools.

The voivodship's strategic sectors mentioned in the strategy of regional development include above all: the manufacture of food, the manufacture of machinery and equipment, timber industry and the manufacture of furniture as well as tourism.

Preferential conditions of conducting business activities are offered in this voivodship i.a. by the following 2 special economic zone (in Polish: Specjalne Strefy Ekonomiczne, hence abbreviation SSE):

- Suwalska SSE (Suwałki special economic zone), subzone: Grajewo, the city of Suwałki, the city of Białystok, the city of Grajewo,
- Tarnobrzeska SSE (Tarnobrzeg special economic zone), subzone: Łapy.

\_

<sup>&</sup>lt;sup>1</sup> The unemployment rate in voivodships, subregions and poviats in August 2012 is based on the data of Central Statistical Office.

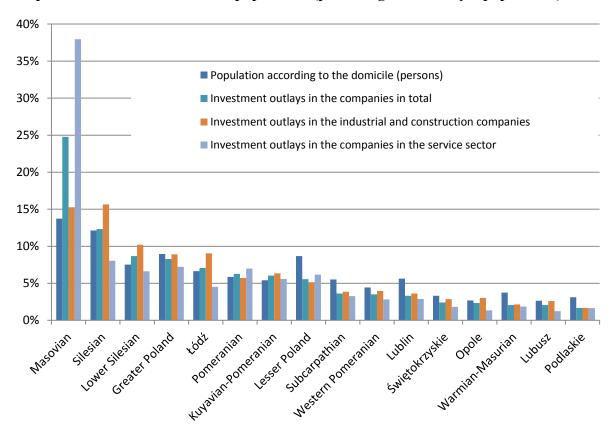
#### 2. Region's rank in terms of investment attractiveness in Poland

Podlaskie voivodship is characterised by a low level of universal investment attractiveness, which manifests itself in its rank (Class E) according to the main potential investment attractiveness index for the whole national economy PAI 2\_GN.<sup>2</sup>

The investment attractiveness can also be defined on the basis of indices of real investment attractiveness (RAI), based on such microclimates as: tangible assets productivity, labour productivity, self-financing of self-government territorial unitsand investment outlays. The region received rather low ranks of RAI indices. It has to be noted however that it was moved to the Class E, when it comes to real attractiveness of industrial investments.

Potential and real investment attractiveness is reflected in the decisions of investors on business location. This is shown in Exhibit 1.

Exhibit 1. Regional structure of investment outlays in the companies in 2010 in comparison with the share in the population (percentage of country's population)



Note: these are the most up-to-date data.

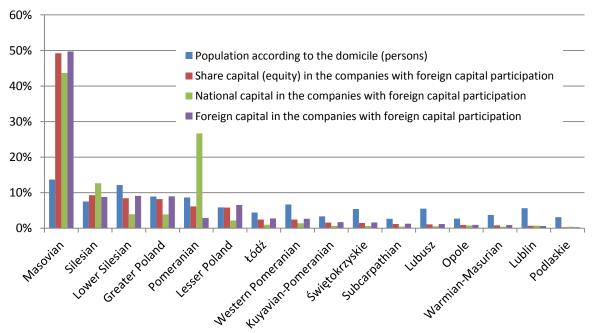
Source: Authors on the basis of the Local Data Bank (downloaded 23.10.2012)

<sup>&</sup>lt;sup>2</sup> Section C –manufacturing industry, section G – trade and repair, section I – hotels and restaurants, section M- professional, scientific and technical activities. A description of methodological approach to measuring investment attractiveness of Poland's regions, poviats and gminas can be found on the Web site: http://www.investmazovia.com/metodyka.html

Podlaskie region ranked last in 2010 in Poland when it comes to investment outlays in companies (1.67% of its total value in all voivodships). This result is very low, considering that its share in country's population equals 3.1%. This applies both to industrial and construction companies as well as services.

This indicates that the cost-driven potential of this region is underestimated by both national and foreign investors. This conclusion is based on the analysis of accumulated share capital in the companies with foreign capital participation - see Exhibit 2.

Exhibit 2. Regional structure of capital in the companies with foreign capital participation in comparison with a share in population (% national population)



Note: these are the most up-to-date data.

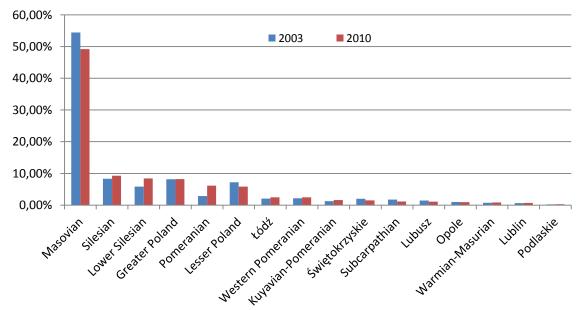
Source: Authors on the basis of the Local Data Bank (downloaded 23.10.2012)

As the exhibit implies, Podlaskie voivodship is not competitive in the foreign investments market, as its share in the basic capital of foreign capital participation in 2010 was below 0.5%.

In the years 2003-2010 the weak competitive rank on the direct foreign investments market slightly improved from 0.22% to 0.28% - see Exhibit 3.

However, the competitive position measured as a number of employees of entities with foreign capital participation decreased from 0.66% to 0.6%.

Exhibit 3. Regional competitive rank in terms of investments with foreign capital participation according to the value of share capital of the companies with foreign capital participation in 2003 and 2010 (percentage of national representation)



Source: Authors on the basis of the Local Data Bank (downloaded 23.10.2012).

Other regions of Eastern Poland are in a comparable situation as investors tend to consider them little attractive. An opportunity for Podlaskie voivodship might be investment areas thoroughly prepared by self-government territorial units which are characterised by high investment attractiveness, in particular for medium-sized companies operating in the industry and service sector.

#### 3. Internal diversification of regional investment attractiveness

#### **Poviats (counties)**

The following poviats are considered most attractive in Podlaskie voivodship: the city of Białystok, the city of Łomża, the city of Suwałki - see Chart 2.

Chart 2. Potential investment attractiveness of poviats of Podlaskie voivodship for the national economy and selected sections

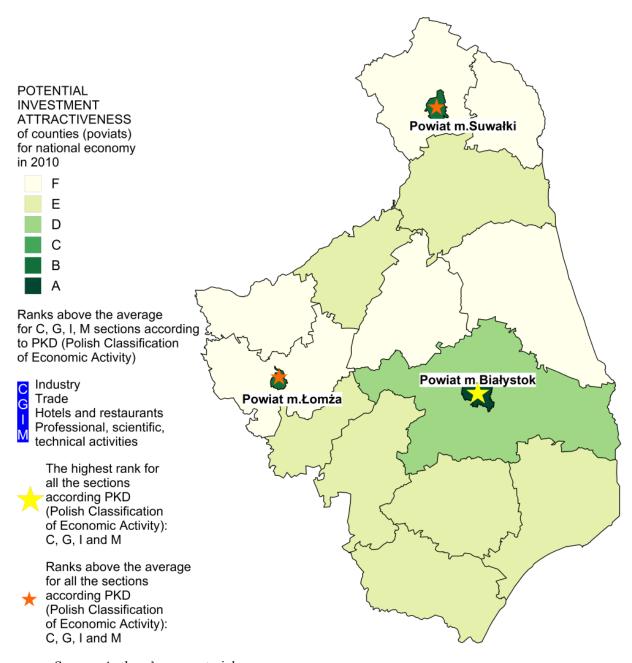
Poviat	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
The city of Białystok	0,380	A	A	A	A	A
The city of Łomża	0,303	В	В	В	A	A
The city of Suwałki	0,299	В	В	С	С	В

Source: Authors' own materials.

Enumerated poviats characterize high investment attractiveness. The following poviat should be distinguished: the city of Białystok as this unit attained Class A in their potential investment attractiveness for all sections of the national economy under scrutiny in this research.

Synthetic evaluation of potential investment attractiveness of poviats of Podlaskie voivodship is presented in Exhibit 4.

Exhibit 4. Spatial diversification of potential investment attractiveness of poviats of Podlaskie voivodship with consideration of the most attractive sections



Source: Authors' own materials.

#### **Gminas (counties)**

Like poviats, gminas are also very much diversified in terms of investment attractiveness. The highest ranked gminas are: Białystok (1), Wysokie Mazowieckie (1), Brańsk (1), Hajnówka (1), Łomża (1), Sejny (1), Bielsk Podlaski (1), Siemiatycze (1), Suwałki (1). It is also reflected in their high ranks (Class A or B) for all analysed sections – see Chart 3.

Chart 3. Potential investment attractiveness of gminas of Podlaskie voivodship for the national economy and selected sections

Gmina	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Białystok (1)	0,290	A	A	A	A	A
Wysokie Mazowieckie (1)	0,254	A	A	A	A	A
Brańsk (1)	0,243	A	A	A	В	A
Hajnówka (1)	0,238	A	A	A	В	A
Łomża (1)	0,235	A	A	A	A	A
Sejny (1)	0,230	A	A	A	A	В
Bielsk Podlaski (1)	0,230	A	A	В	В	A
Siemiatycze (1)	0,228	A	A	В	В	A
Suwałki (1)	0,228	A	A	В	В	A

(1) – urban commune, (2) – rural commune, (3) – rural-urban commune

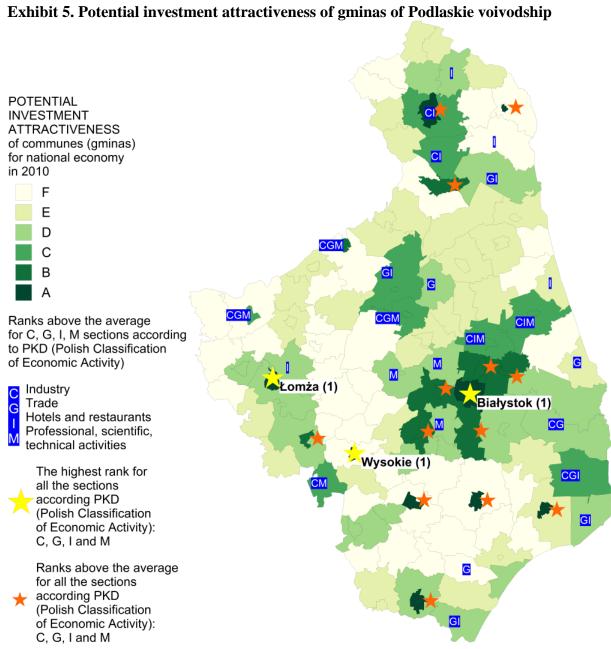
Source: Authors' own material.

Attractive are also such gminas which belong to Class B according to the PAI1\_GN index as: Zambrów (1), Supraśl (3), Wasilków (3), Łapy (3), Grajewo (1), Augustów (1), Choroszcz (3), Juchnowiec Kościelny (2). The location-specific advantages are also universal in these gminas, which makes them attractiveness for all kinds of business activity in question.

In reference to the sections mentioned below the following gminas of Class C should be distinguished:

- Czarna Białostocka (3), Michałowo (3), Sokółka (3), Narewka (2), Kolno (1), Czyżew-Osada (2), Nowinka (2), Mońki (3), Suwałki (2) for section C,
- Juchnowiec Kościelny (2), Michałowo (3), Krynki (3), Kolno (1), Mielnik (2), Milejczyce (2), Jaświły (2), Mońki (3) for section G,
- Łapy (3), Supraśl (3), Kuźnica (2), Sokółka (3), Zambrów (1), Giby (2), Suwałki (2),
   Szypliszki (2) dla sekcji I,
- Choroszcz (3), Czarna Białostocka (3), Dobrzyniewo Duże (2), Turośń Kościelna (2), Tykocin (3), Sokółka (3), Czyżew-Osada (2), Mońki (3) for section M.

Synthetic evaluation of potential investment attractiveness of gminas of Podlaskie voivodship is presented in Exhibit 5.



Source: Authors' own materials.

### 4. Voivodship's institutional support for investors and entrepreneurs

The development of business surrounding in a region is a vital component of its investment attractiveness. The institutions that support entrepreneurship, pro-investment solutions, research commercialization and innovativeness are of special importance. Among the voivodeship's business-supporting institutions one should mention: Park Naukowo – Technologiczny Polska – Wschód in Suwałki, Podlaska Fundacja Rozwoju Regionalnego in Białystok, Klaster Otoczenia Instytucji Biznesu, Izba Przemysłowo – Handlowa Białystok, Business Centre Club Loża Białostocka, Podlaski Klub Biznesu Białystok, Podlaski Związek Pracodawców in Białystok, Izba Rzemieślnicza i Przedsiębiorczości in Białystok, Łomżyńska Izba Przemysłowo – Handlowa, Fundacja Rozwoju Przedsiębiorczości in Suwałki, Agencja

Rozwoju Regionalnego ARES Suwałki, Stowarzyszenie Euroregion Niemen in Suwałki, Podlaski Fundusz Poręczeniowy Sp. z o.o. in Białystok, Agencja Rozwoju Regionalnego in Łomża, Stowarzyszenie Wspierania Edukacji i Rynku Pracy in Łomża, Centrum Promocji Innowacji i Rozwoju in Białystok, Stowarzyszenie Klaster Spożywczy 'Naturalnie z Podlasia', Podlaski Klaster Obróbki Metali, Klaster Zielonych Technologii, Podlaski Klaster Bielizny, Polski Wschodni Klaster Medyczny, Akademickie Inkubatory Przedsiębiorczości (business incubator) at the University of Białystok and Wyższa Szkoła Finansów i Zarządzania, Białostocki Park Naukowo – Technologiczny, Wschodni Klaster Budowlany.

Park Naukowo – Technologiczny Polska – Wschód w Suwałkach (Technology and Research Park – East in Suwałki). The park offers investment areas with full amenities, especially to innovating businesses operating in the field of advanced technologies – IT systems, telecommunication networks, electronic, material engineering, healthcare technologies and medical engineering, environment protection technologies, renewable energy technologies, automatics, measuring and laboratory equipment and precision mechanics. The Park houses a Technology Incubator aimed at innovating businesses. The Incubator offers office, research and production space, access to laboratories, training rooms, expert advice, IT services, legal, tax and EU funding advice. It enables its members to take part in workshop developing managerial skills. The park operates the project of North-Eastern Digital Education Cluster project as well. (www.park.suwalki.pl/, 03.10.2012.).

Podlaska Fundacja Rozwoju Regionalnego w Białymstoku. (Podlaski Regional Development Foundation in Białystok). The Foundation cooperates with the Enterprise Europe Network centre, which offers free services for businesses pertaining to seeking an external cooperation and technology transfer partners, informing the European Commission on problems of business functioning in Europe, organising international meetings and trade missions, IT and consulting services. The foundation operates a Loan Fund, which offers micro-loans for S&M Enterprises and persons starting a business in the voivodeship. The Collateral Fund offers loan collaterals, while the Capital Fund offers a possibility of acquiring venture capital for investment purposes. (www.pfrr.pl/, 03.10.2012.).

Klaster Otoczenia Instytucji Biznesu. (Business Institutions Surrounding Cluster) offers financial, legal, marketing, advertisement, accounting, website management, market and competition analysis and training services (utilising e-learning and related to acquiring external funding, creation and management of databases, quality management). A vast spectrum of services is made possible by a wide range of entities being part of the cluster -businesses, societies and research institutions. (<a href="http://www.biznesklaster.pl/company/33-klaster-instytucji-otoczenia-biznesu/">http://www.biznesklaster.pl/company/33-klaster-instytucji-otoczenia-biznesu/</a>, 03.10.2013.).

#### Special economic zones in Podlaskie voivodeship - effects

There are two special economic zones (SSE) in Podlaskie voivodeship: Suwalska and Tarnobrzeska. At the end of 2011 the areas of SSE were part of 3 cities and 2 gminas (counties). (Exhibit 6).

Suwałki (1) Suwałki (2) Grajewo (1) Białystok (1) PAI1 GOSPODARKA Łapy (3) **NARODOWA** F Ε D C В Gminy na terenie, których działa SSE

Exhibit 6. The location of SSE in Podlaskie voivodeship

Source: Authors' own calculations.

First SSE were established in 1996 in Suwałki, the next in 2005. The enterprises operating in the zones have until 2011 invested 736 million PLN which constitutes 1% of all economic zone capital expenditures in Poland. In the same period the enterprises have created 2,6 thousand jobs, which constitutes 2% of all new jobs created in economic zones - cf. Chart 4.

Chart 4. Effects of special economic zone functioning at the end of 2011.

SSE/ Gmina	Leading industries (capital expenditure larger than 20% of overall capital expenditure in the subzone)	New jobs created	Cumulated capital expenditure in million PLN	
Suwalska SSE, Białystok (1)	Paper, synthetic materials	0	14,4	
Suwalska SSE, Grajewo (1)	Wood products	146	392,9	
Tarnobrzeska SSE, Łapy (3)	No investors			
Suwalska SSE, Suwałki (2)	Data unavailable			
Suwalska SSE, Suwałki (1)	Machinery, wood products	2.465	328,7	

Source: Authors' own calculations based on PAIiIZ data.

Largest investments have been made in Grajewo: PFLEIDERER Sp. z o.o. (Germany, construction) and Suwałki: SIDO Sidorek, Wróblewski Sp. J. (food products), Gasstech Przedsiębiorstwo Produkcyjne Spółka z o. o (metal), Recman Sp. J.(clothing), VTS Plant Sp. z o. o. (machinery), Aquael Sp. z o. o. (precision mechanics).

The SSE development plans assumes to attract investors that would make use of the resource and labour pool of the voivodeship e.g. from the agricultural and food-processing, wood and construction industries – in Suwalska SSE.

#### '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 given by the communal authorities. The subject of this study of investment attractiveness is: an audit of Web sites and audit of e-contact in Polish and English with communal authorities. The effect of this study 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 in their assistance. The research is carried out using the mystery client method. In this year's edition all gminas belonging to Class A according to the PAI 2010 index were subject to query.

As a result 70 gminas have been distinguished; this includes 1 gmina situated in Podlaskie voivodship.

Chart 5. Gmina in Podlaskie voivodship distinguished as 'A' Commune

Gmina	Poviat	Audit of Web sites	Audit of e- contact in Polish	Audit of e- contact in English	Sum
Białystok (1)	Białystok	6,5	4	4,5	15

Source: Authors' own materials.

The city of Białystok found itself in the ranking mainly because of very well-prepared answers to e-mails in Polish and English. Each e-mail contained exhaustive answers to the questions raised and contained investment offer with an indication of potential source of support for investments.

#### 5. Region's strengths and weaknesses

Podlaskie 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 composing potential and real investment attractiveness, they can be grouped into strengths (microclimates ranking A, B or C) and weaknesses (microclimates ranking D, E or F) – see Chart 6.

Chart 6. Strengths and weaknesses of Podlaskie voivodship

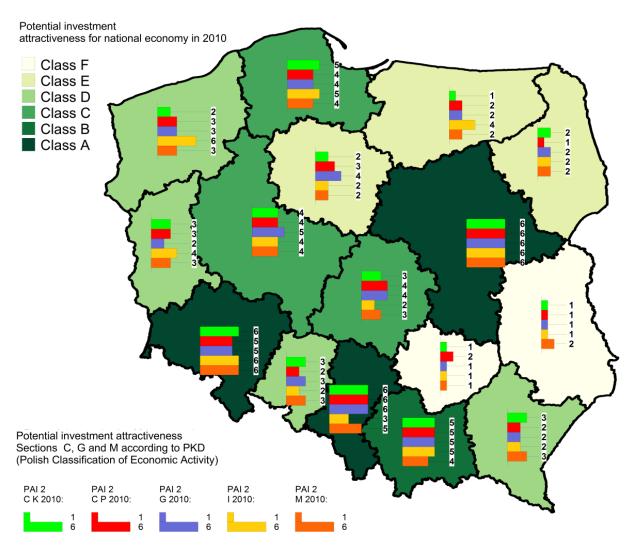
Strengths of the region according to the microclimates by IP SGH	Weaknesses of the region according to the microclimates by IP SGH								
National economy									
Microclimate Social Capital Class c	Microclimate Human Resources Class D Microclimate Technical Infrastructure Class F Microclimate Social Infrastructure Class D Microclimate Market Class E Microclimate Administration/Governance Class D Microclimate Innovativeness Class F Labour productivity in enterprises Class D								
	Returns on tangible assets Class D Profitability of enterprises Class F Self-financing of self-government units Class F Investment outlays Class F								
Capital inter	nsive industry								
Microclimate Social Infrastructure Class C Microclimate Social Capital Class C Microclimate Administration/Governance Class C	Microclimate Human Resources Class D Microclimate Technical Infrastructure Class E Microclimate Market Class E Microclimate Innovativeness Class F Returns on tangible assets Class D Labour productivity in enterprises Class E Self-financing of self-government units Class F Investment outlays Class F								
Labour inter	nsive industry								
Microclimate Social Capital Class C	Microclimate Human Resources Class F Microclimate Technical Infrastructure Class F Microclimate Social Infrastructure Class D Microclimate Market Class F Microclimate Administration/Governance Class E Returns on tangible assets Class D Labour productivity in enterprises Class E Self-financing of self-government units Class F Investment outlays Class F								
	ade								
Microclimate Social Infrastructure Class B Microclimate Social Capital Class C	Microclimate Human Resources Class F Microclimate Technical Infrastructure Class F								

Returns on tangible assets Class C	Microclimate Market Class E
	Microclimate Administration/Governance Class E
	Labour productivity in enterprises Class E
	Self-financing of self-government units Class F
	Investment outlays Class E
To	ourism
Returns on tangible assets Class C	Microclimate Human Resources Class D
	Microclimate Technical Infrastructure Class F
	Microclimate Social Infrastructure Class E
	Microclimate Social Capital Class D
	Microclimate Market Class E
	Microclimate Administration/Governance Class E
	Labour productivity in enterprises Class D
	Self-financing of self-government units Class F
	Investment outlays Class E
Professional, scientification	ic and technical activities
Microclimate Social Capital Class C	Microclimate Human Resources Class D
	Microclimate Technical Infrastructure Class F
	Microclimate Social Infrastructure Class D
	Microclimate Market Class E
	Microclimate Administration/Governance Class D
	Microclimate Innovativeness Class F
	Returns on tangible assets Class D
	Labour productivity in enterprises Class E
	Self-financing of self-government units Class F
	Investment outlays Class F

Source: Authors on the basis of the results of research of the Institute of Enterprise of the Warsaw School of Economics (IP SGH).

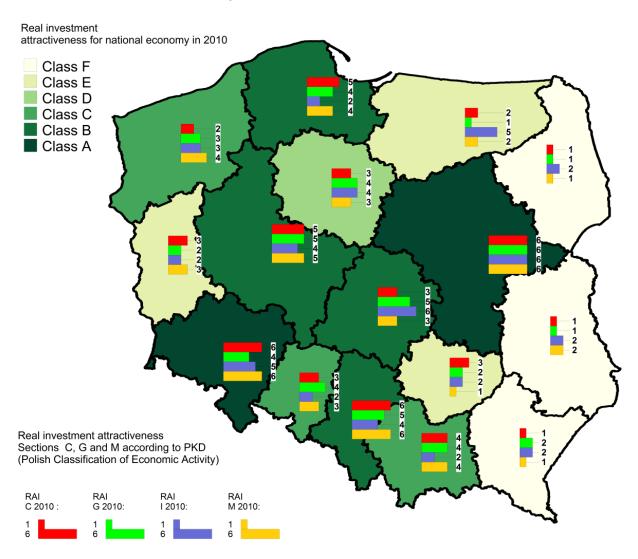
#### **APPENDIX**

Exhibit 1. Potential investment attractiveness of Polish voivodship broken down by basic sections of the national economy



Source: Authors' own materials.

Exhibit 2. Real investment attractiveness of Polish voivodship broken down by basic sections of the national economy



Source: Authors' own materials.

Chart 1. List of investment attractiveness indices for voivodships

Voivodship	LOWER SILESIAN	KUYAVIAN-POMERANIAN	LUBLIN	LUBUSZ	ŁÓĐŹ	LESSER POLAND	MASOVIAN	OPOLE	SUBCARPATHIAN	PODLASKIE	POMERANIAN	SILESIAN	ŚWIĘTOKRZYSKIE	WARMIAN-MASURIAN	GREATER POLAND	WESTERN POMERANIAN
PAI1 GN	A	Е	F	C	D	C	A	Е	D	Е	В	A	F	D	В	С
PAI2 GN	A	E	F	D	C	В	A	D	D	E	C	A	F	E	C	D
RAI GN	A	D	F	E	В	C	A	C	F	F	В	В	E	E	В	C
PAI1 C	A	D	F	C	C	C	A	D	E	Е	В	A	F	E	C	C
PAI2 C KAPITAŁ	A	E	F	D	D	В	A	D	D	Е	В	A	F	F	C	E
PAI2 C PRACA	В	D	F	D	C	В	A	E	E	F	C	A	E	E	C	D
RAI C	A	D	F	D	D	C	A	D	F	F	В	A	D	E	В	E
PAI1 G	A	E	F	C	D	В	A	D	E	F	В	A	F	C	C	C
PAI2 G	В	C	F	E	C	В	A	D	E	Е	C	A	F	E	В	D
RAI G	C	C	F	E	В	C	A	C	E	F	C	В	E	F	В	D
PAI1 I	В	E	F	В	E	В	A	E	D	E	В	D	F	В	C	A
PAI2 I	A	E	F	C	E	В	A	E	E	E	В	D	F	C	C	A
RAI I	В	C	E	E	A	E	A	E	E	E	Е	C	E	В	C	D
PAI1 M	A	E	F	C	D	C	A	D	D	F	В	В	F	D	В	C
PAI2 M	A	E	E	D	D	C	A	D	D	E	C	В	F	E	C	D
RAI M	A	D	Е	D	D	C	A	D	F	F	C	A	F	Е	В	С

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

Chart 2. Potential investment attractiveness of poviats of Podlaskie voivodship for the national economy and selected sections

Poviats (counties)	PAI1_GN	PAI1_GN _Classes	PAI1_C_ Classes	PAI1_G_ Classes	PAI1_I_ Classes	PAI1_M_ Classes
The city of Białystok	0,380	A	A	A	A	A
The city of Łomża	0,303	В	В	В	A	A
The city of Suwałki	0,299	В	В	С	С	В
białostocki	0,243	D	D	Е	D	D

Source: See Chart 1.

Chart 3. Potential investment attractiveness of gminas of Podlaskie voivodship for the national economy and selected sections

Gmina (commune)	PAI1_GN	PAI1_GN_classes	PAI1_C_ classes	PAI1_G_ classes	PAI1_I_ classes	PAI1_M_ classes
Białystok (1)	0,290	A	A	A	A	A
Wysokie Mazowieckie (1)	0,254	A	A	A	A	A
Brańsk (1)	0,243	A	A	A	В	A
Hajnówka (1)	0,238	A	A	A	В	A
Łomża (1)	0,235	A	A	A	A	A
Sejny (1)	0,230	A	A	A	A	В
Bielsk Podlaski (1)	0,230	A	A	В	В	A
Siemiatycze (1)	0,228	A	A	В	В	A
Suwałki (1)	0,228	A	A	В	В	A
Zambrów (1)	0,219	В	В	A	C	A
Supraśl (3)	0,214	В	В	В	C	В
Wasilków (3)	0,213	В	В	В	A	В
Łapy (3)	0,213	В	В	В	C	В
Grajewo (1)	0,212	В	В	В	D	В
Augustów (1)	0,212	В	В	В	В	В
Choroszcz (3)	0,209	В	В	В	A	С
Juchnowiec Kościelny (2)	0,205	В	В	С	В	В

Source: See Chart 1.

Note: all indices in this report have been computed on the basis of the most up-to-date data from the Local Data Bank (2012).