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REGIONAL INVESTMENT ATTRACTIVENESS 2013

Mazovian voivodship

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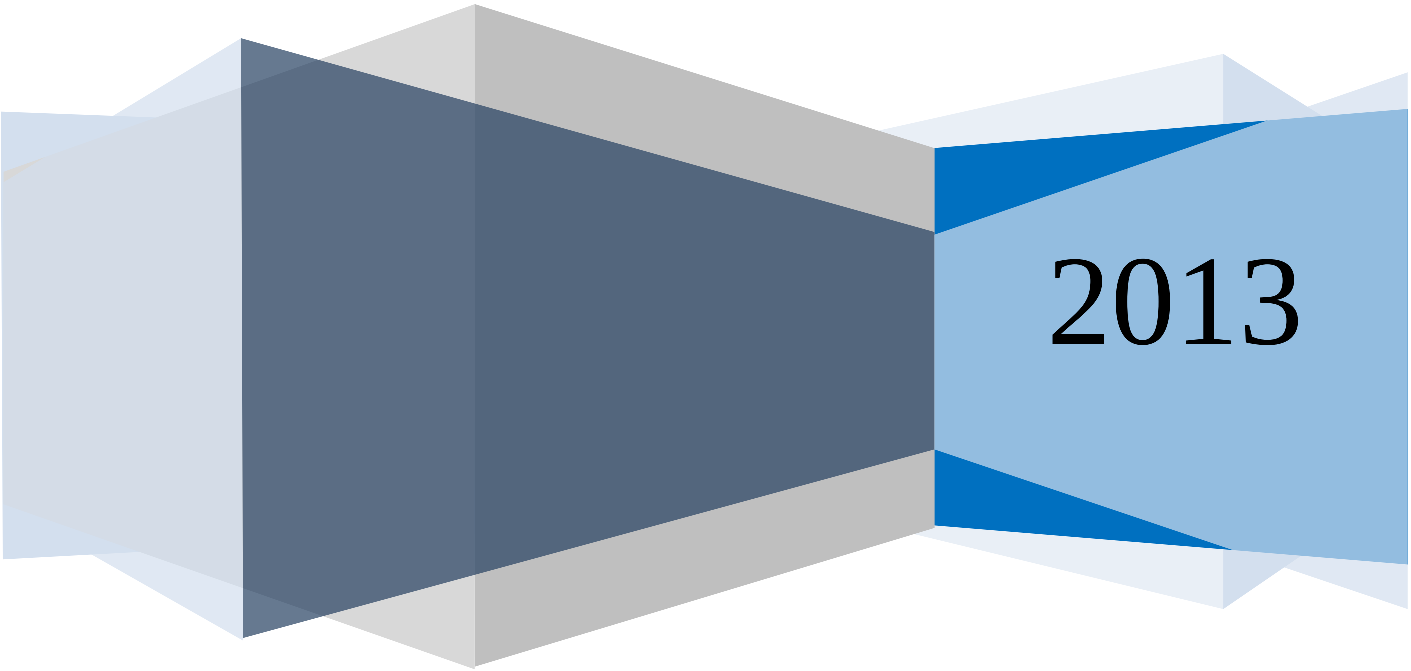


Warsaw, October 2013

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 Mazovian voivodship

Mazovian voivodship is situated in central-eastern Poland in the Mazovian Lowlands. It is the largest and most populous region of Poland. It is the most economically developed and the most attractive voivodship for investments and distances all other regions of Poland in terms of GDP per capita. A characteristic feature of the region is its servicisation, which means that in accordance with a high level of economic development modern services like financial intermediation, business services, telecommunications and education play an important role. Moreover, almost all branches of industry have developed in Mazovia, particularly manufacture of means of transportation and petrochemical industry. The main administrative centre is Warsaw, the capital city of Poland, which (together with its suburban area) is one of the most attractive investment areas in the whole country.

The advantages of the voivodship are:

- its central location at the intersection of traffic routes and in the trans-European transport corridors providing connection to the larger cities of Poland and Europe,
- Poland's largest international airport, i.e. Warsaw Chopin Airport, which handles almost 50% of the whole passenger traffic in Poland and maintains ca. 100 regular plane connections with domestic and foreign airports,
- presence of numerous higher education institutions and research establishments,[1]
- the highest GDP per capita rate in the country,
- substantial human resources, including both low-qualified workers with low wage expectations and specialists trained in various fields,
- very high labour productivity compensating a relatively high level of wages and salaries,
- presence of the Warsaw Stock Exchange, the capital centre of Central and Eastern Europe,
- investment incentives for investors offered in special economic zones.

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

Table 1. General characteristics of the economy of Mazovian voivodship

Feature	Mazovian voivodship	Poland	Share [%]
Market Potential			
GDP per capita 2010. (PLN/person)	60,359	37,096	-
Population (persons) on 31 December 2012	5,301,760	38,533,299	13.8

[1] In 2010 the Ministry of Science and Higher Education ranked in total 88 scientific establishments which represent all disciplines important for investors in the class 1, i.e. the best scientific establishments in Poland. In Masovian voivodship most distinguished were scientific establishments in such scientific disciplines as: chemical sciences and materials, chemical and process engineering (7 establishments, chiefly faculties or institutes of the Warsaw University of Technology and the Polish Academy of Sciences); electrotechnics, automatics, electronics and information technologies (9 establishments representing the Warsaw University of Technology and the Military University of Technology); economic sciences (9 establishments, chiefly establishments representing the Warsaw School of Economics); research and clinical establishments (5 establishments); biological sciences (5 establishments, chiefly the ones of the Polish Academy of Sciences).

Human Resources Potential			
Higher education institutions graduates (persons) in 2012	85,053	484,999	17.5
Secondary schools graduates (persons) in 2012	53,772	421,317	12.8
Number of employed persons on 31 December 2012	2,262,092	13,911,203	16.3
Structure of employed persons 2012	agriculture 13.3% industry 19.9% services 66.8%		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	34,734.7	73,704.4	47.1
Capital of companies (PLN m) in 2011	92,113.0	194,160.6	47.4

Special economic zones (SEZs) in the voivodship*

- Łódź SEZ, subzone: gm. Grodzisk Mazowiecki, gm. Zelów, gm. Żabia Wola, m. M.st.Warszawa, m. Płock, m. Pruszków, m. Raciąż, m. Sochaczew, m. Żyrardów
- Starachowice SEZ, subzone: gm. Iłża, gm. Szydłowiec
- Suwałki SEZ, subzone: gm. Małkinia Górna
- Tarnobrzeg SEZ, subzone: gm. Mińsk Mazowiecki, gm. Nowe Miasto nad Pilicą, gm. Ożarów Mazowiecki, gm. Pilawa, gm. Przasnysz, gm. Siedlce, gm. Wyszków, m. Pionki, m. Radom, m. Siedlce, m. Węgrów
- Warmia-Mazury SEZ, subzone: gm. Ciechanów, m. Ciechanów, m. Mława, m. Ostrołęka

Distinguishing investment attractiveness ratings PAI _2 and RAI (class A, B and C)	
Potential investment attractiveness PAI_2	National economy Class A Capital-intensive industry Class A Labour-intensive industry Class A Trade Class A Tourism Class A Education Class A
Real investment attractiveness RAI	National economy Class A Industry Class A Trade Class A Tourism Class A Professional, scientific and technical activities Class A

Counties and communes distinguished according to the Potential Attractiveness Index for the national economy (PAI1_GN)		
Counties	Class A	Płock, Ostrołęka, Siedlce, Warszawa (city) , Grodzisk Mazowiecki, Piaseczno, Pruszków, Warsaw West
	Class B	Radom, Legionowo
Communes	Class A	Ciechanów (1), Mława (1), Słupno (2), Płońsk (1), Sierpc (1), Płock (1), Maków Mazowiecki (1), Ostrów Mazowiecka (1), Sokołów Podlaski (1), Wyszków (3), Ostrołęka (1), Siedlce (1), Białobrzegi (3), Kozienice (3), Pionki (1), Radom (1), M.st.Warszawa (1), Garwolin (1), Legionowo (1), Nieporęt (2), Serock (3), Mińsk Mazowiecki (1), Halinów (3), Sulejówek (1), Nowy Dwór Mazowiecki (1), Józefów (1), Otwock (1), Kobyłka (1), Marki (1), Ząbki (1), Zielonka (1), Radzymin (3), Wołomin (3), Milanówek (1), Podkowa Leśna (1), Grodzisk Mazowiecki (3), Jaktorów (2), Grójec (3), Konstancin-Jeziorna (3), Lesznowola (2), Piaseczno (3), Tarczyn (3), Piastów (1), Pruszków (1), Brwinów (3),

		Michałowice (2), Nadarzyn (2), Raszyn (2), Sochaczew (1), Błonie (3), Izabelin (2), Łomianki (3), Ożarów Mazowiecki (3), Stare Babice (2), Żyrardów (1)
	Class B	Gostynin (1), Łosice (3), Różan (3), Rzekuń (2), Przasnysz (1), Siedlce (2), Węgrów (1), Garwolin (2), Wieliszew (2), Czosnów (2), Kołbiel (2), Góra Kalwaria (3), Mszczonów (3), Radziejowice (2)

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 Mazovian voivodship made a contribution of 22.3% to the GDP of Poland. Calculated per capita, it amounted to PLN 60,359with the average for Poland PLN 37,096. With this result the voivodship takes the first place in the country. The GDP growth rate in the voivodship in the years 2003-2010 amounted to 180.3%. 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 high share of the service sector (66.8%) whereas a share of the agricultural and industrial sectors are respectively 13.3% and 19.9% (Central Statistical Office, Regional Data Bank 2013).

The number of inhabitants of the voivodship amounts to 5,301,760 (as of 2013), which is 13.8% of the population of Poland. The age structure in the voivodship in 2012 was as follows: 18.6% of the population at pre-productive age, 62.8% at productive age and 18.6% 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 11.1% 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 4577, which is 121.4% of the average for Poland.

The main potential for human capital creation in the voivodship lies in 108 higher education institutions in which there are 312 thousand students studying, which makes up 18.6% of all students in Poland. Moreover, 9.2% of the secondary school students in the voivodship attend vocational schools and 11.3% attend technical schools.

The voivodship's strategic sectors mentioned in the strategy of regional development include above all: agriculture, construction, trade, services, tourism (especially foreign tourism), manufacture of chemicals, logistics, manufacture of food, growth of innovativeness and competitiveness of region's economy, the development of telecommunications, improvement in communications and transport in the region including civil aviation.

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

- Łódź SEZ, subzone: gm. Grodzisk Mazowiecki, gm. Zelów, gm. Żabia Wola, m. Warszawa, m. Płock, m. Pruszków, m. Raciąż, m. Sochaczew, m. Żyrardów,
- Starachowice SEZ, subzone: gm. Iłża, gm. Szydłowiec,
- Suwałki SEZ, subzone: gm. Małkinia Górna,
- Tarnobrzeg SEZ, subzone: gm. Mińsk Mazowiecki, gm. Nowe Miasto nad Pilicą, gm. Ożarów Mazowiecki, gm. Pilawa, gm. Przasnysz, gm. Siedlce, gm. Wyszków, m. Pionki, m. Radom, m. Siedlce, m. Węgrów,

- Warmia-Mazury SEZ, subzone: gm. Ciechanów, m. Ciechanów, m. Mława, m. Ostrołęka.

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

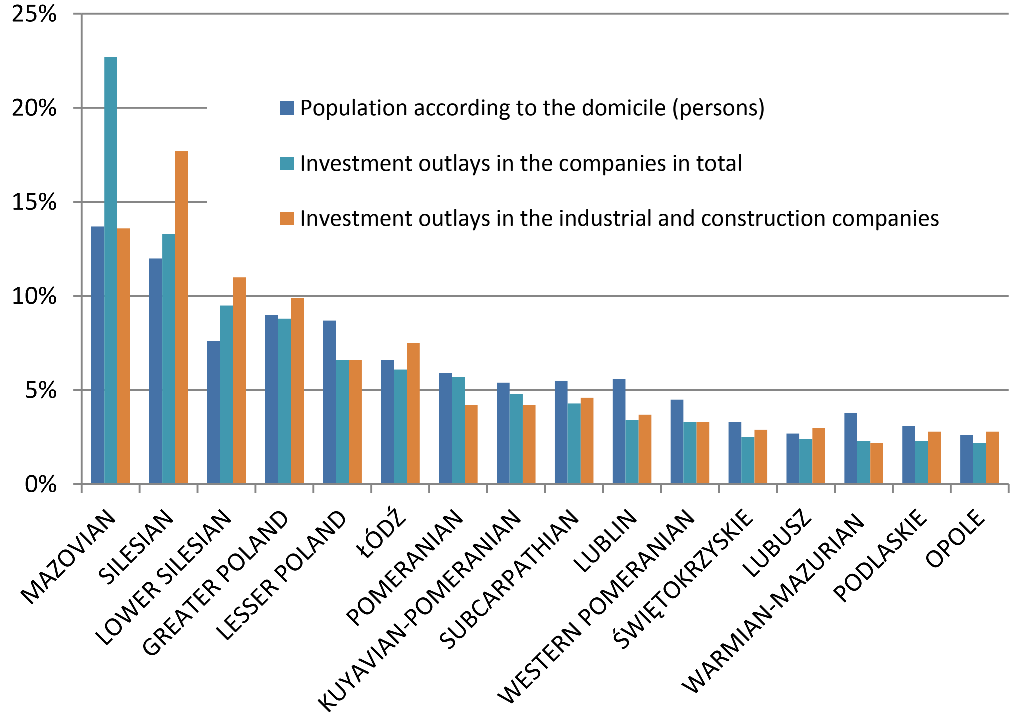
Mazovian voivodship is characterised by a very high level of overall investment attractiveness, which is indicated by the high rank (class A) according to the main potential investment attractiveness index calculated for the whole regional economy PAI 2_GN (see Chart 1 in the Appendix). The region was also ranked very high in terms of potential investment attractiveness calculated with use of PAI2 indices for the sections: capital-intensive industry (class A), labour-intensive industry (class A), trade (class A), hotels and restaurants (class A), professional, scientific and technical activities (class A).[2]

Similar to last year, Mazovian voivodship is the only Polish region that got the highest ranks both in terms of investment attractiveness for the whole economy and for all sections of national economy.

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 above the average in terms of RAI indices for the national economy (class A), manufacturing (class A), trade and repairs (class A), hotels and restaurants (class A) and professional, scientific and technical activities (class A) - see Table 2 in the Appendix. Potential and real investment attractiveness is reflected in the decisions of investors on business location. This is shown in Chart 1.

[2] 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

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



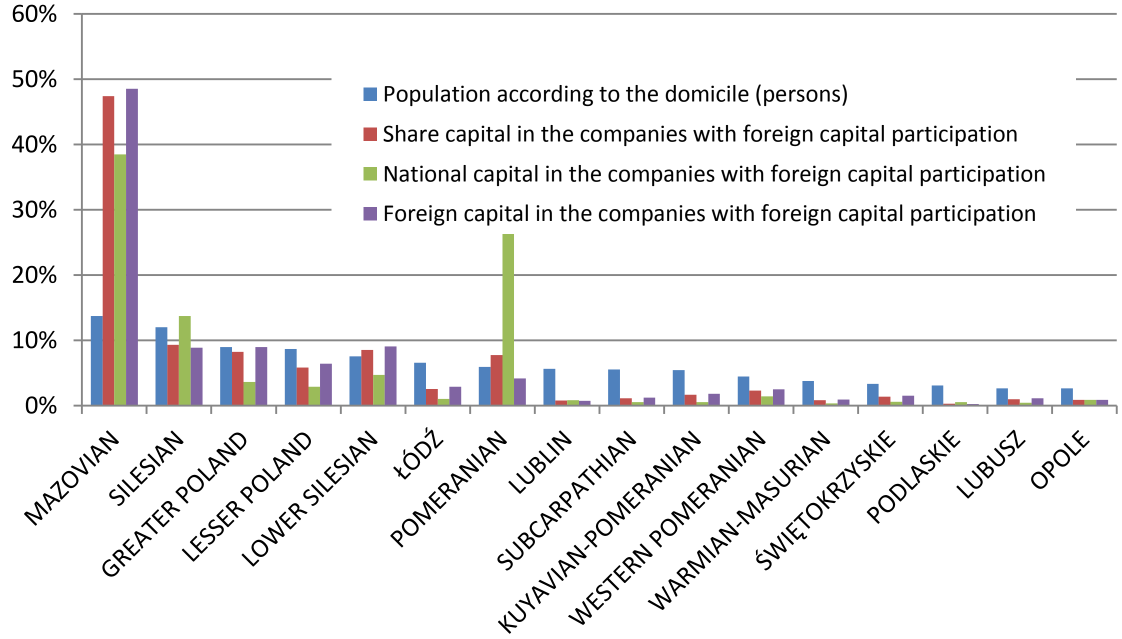
Note: these are the most up-to-date data.
Source: Authors on the basis of the Local Data Bank (downloaded 13 November 2013).

According to this chart Mazovian voivodship is competitive when it comes to investments as its share in the national investment outlays is higher than its share in the country's population could suggest. The share of this region in the country's population reaches the level of 13.7%, whereas the value of the capital in companies with foreign capital in all analysed sections represent 22.7% of the national level. These investment outlays are visible in services (38% of national capital outlays) and it indicates at the fact that the market potential of the region is appreciated by investors and that it is connected to servicisation of region's economy.

At the same time, Mazovia is the country's leader in the terms of attracting foreign direct investments but has a slightly weaker position when it comes to investments in industry and construction (13.6% of Poland's total, less than Silesian voivodship which is 17.7% of Poland's total).The same conclusion can be drawn from the analysis of the share of foreign capital accumulated in the companies – see Chart 2.

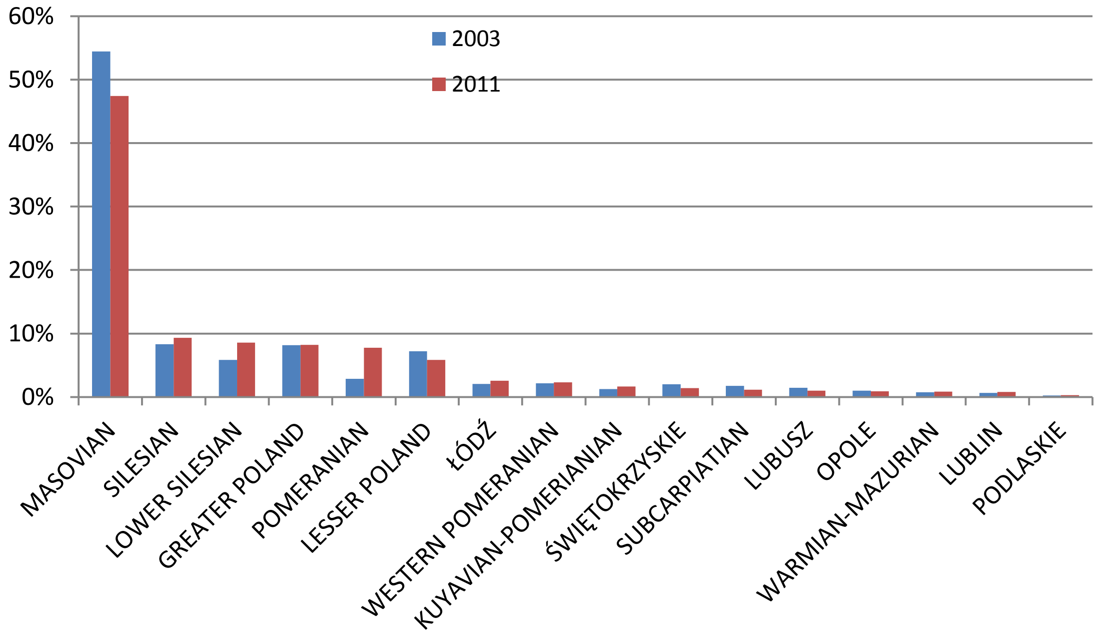
The share of Mazovian voivodship in the value of share capital in the companies with foreign capital participation amounts almost to 50%, which applies in similar extent to domestic and foreign capital of these companies. What is worth noticing, in the years 2003-2011 the voivodship's share in foreign direct investment market felt from 54% to 48.5% (see Chart 3).

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).

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).

Thus, it is of very important to make use of investment potential of Mazovian voivodship, in particular in the attractive self-government units located outside the Warsaw agglomeration..

Mazovian voivodship has a competitive advantage when it comes to human capital, ranked Class A, market microclimate, ranked class C and innovativeness, ranked Class B.

It is the only region in Poland more attractive than European regions such as: **in Germany:** Leipzig (NUTS 2006), Gießen, Unterfranken, Freiburg, Saarland, Oberpfalz, Kassel, Arnsberg, Thüringen, Detmold, Oberfranken, Brandenburg, Niederbayern, Mecklenburg-Vorpommern, Koblenz and Chemnitz (NUTS 2006); **in France:** Provence-Alpes-Côte d'Azur, Alsace, Aquitaine, Centre (FR), Bretagne, Nord - Pas-de-Calais, Haute-Normandie; **in Finland:** Ita-Suomi (NUTS 2006), Pohjois-Suomi (NUTS 2006), Åland; Länsi-Suomi, **in Spain**: Comunidad Foral de Navarra, Ciudad Autónoma de Ceuta, Principado de Asturias, Aragón, Cantabria, La Rioja, Ciudad Autónoma de Melilla, Castilla y León; **in Sweden**: Östra Mellansverige, Övre Norrland, Mellersta Norrland; **in the Netherlands:** Gelderland, Flevoland, Limburg (NL), Overijssel, Zeeland; **in the UK:** Greater Manchester, Eastern Scotland, East Anglia, Leicestershire, Rutland and Northamptonshire, East Wales, South Western Scotland, Derbyshire and Nottinghamshire, West Midlands, Kent, North Yorkshire, Essex, Lancashire Merseyside (NUTS 2006), West Yorkshire, Northumberland and Tyne and Wear, Herefordshire, Worcestershire and Warwickshire, Northern Ireland (UK), Dorset and Somerset**; in Denmark:** Midtjylland, Sjælland, Nordjylland; Syddanmark; **in Slovenia**: Zahodna Slovenija; **in Bulgaria**: Yugozapaden; **in Belgium:** Prov. Namur, Prov. West-Vlaanderen, Prov. Liège, Prov. Limburg (BE), Prov. Hainaut; **in Italy**: Liguria, Emilia-Romagna (NUTS 2006), Provincia Autonoma Trento (NUTS 2006), Veneto (NUTS 2006), Piemonte, Provincia Autonoma Bolzano/Bozen (NUTS 2006); **in Austria**: Salzburg, Tirol, Vorarlberg, Oberösterreich, Steiermark; **in the Czech Republic:** Jihovýchod, Stední Cechy, Moravskoslezsko; **in Ireland:** Border, Midland and Western.

3. Internal diversification of regional investment attractiveness

Counties

The following counties are considered the most attractive in Mazovian voivodship: Płock, Ostrołęka, Siedlce, Warszawa, Piaseczno, Pruszków, Warsaw West, Radom, Legionów – see Table 2.

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

County	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Warszawa	0.417	A	A	A	A	A
Ostrołęka	0.346	A	A	A	A	A
Siedlce	0.342	A	A	A	B	A
Pruszków	0.329	A	A	A	A	A
Płock	0.328	A	A	A	A	A
Piaseczno	0.314	A	A	A	A	A
Warsaw West	0.300	A	A	A	A	A
Grodzisk Mazowiecki	0.299	A	A	A	A	A
Radom	0.290	B	B	B	D	A
Legionów	0.283	B	B	B	A	B
Wołomin	0.257	C	C	C	C	C
Kozienice	0.249	C	C	C	D	C
Nowy Dwór Mazowiecki	0.248	C	C	C	C	D
Otwock	0.243	C	C	C	C	C

Source: Authors' own calculations.

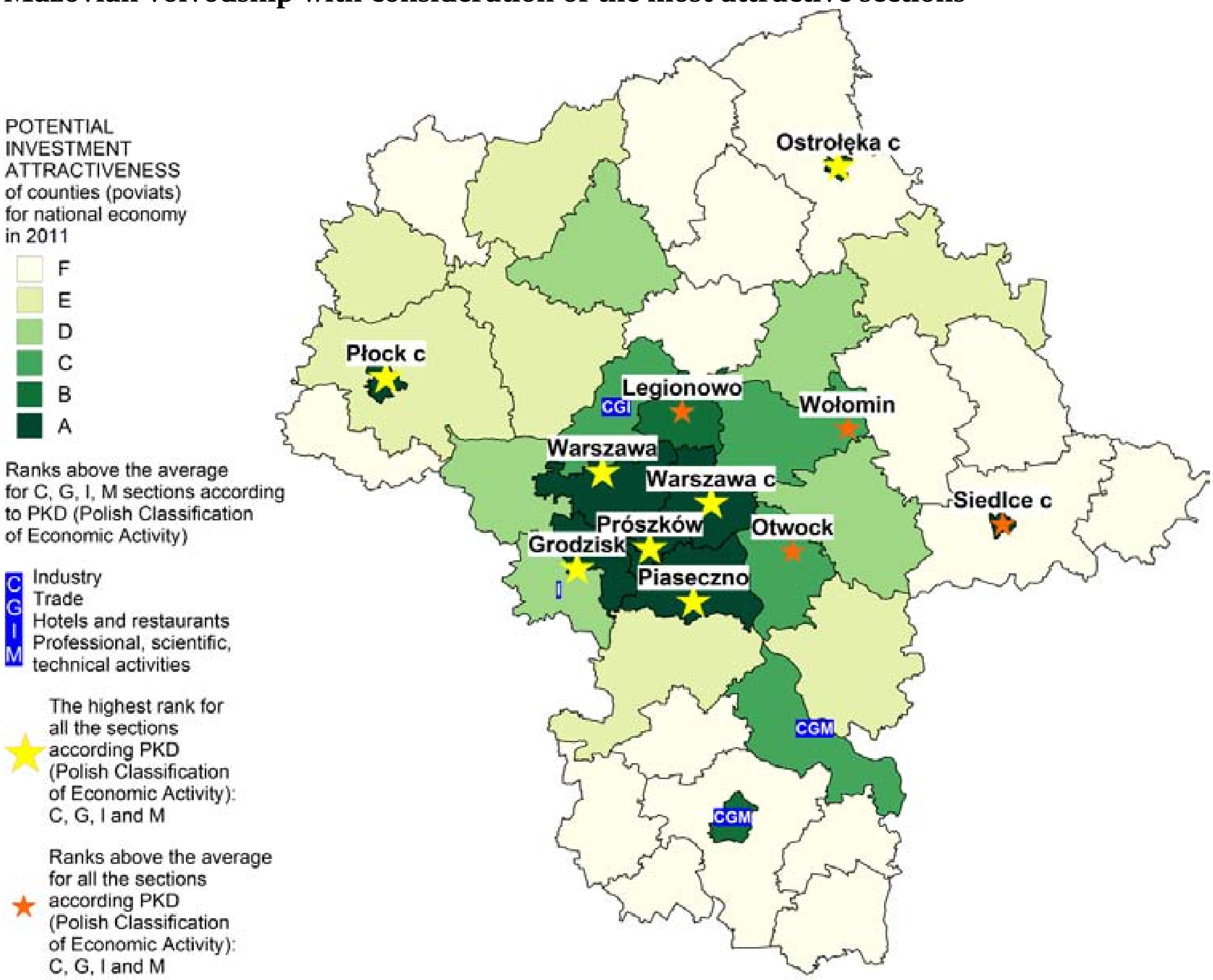
The counties mentioned above (beyond Wołomin, Kozienice, Nowy Dwór Mazowiecki and Otwock) are characterized by very high and high investment attractiveness. The following city counties should be distinguished: Warszawa, Ostrołęka, Płock and the following land counties: Pruszków, Piaseczno, Warsaw West, Grodzisk Mazowiecki 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 (all of them are land counties):

- Wołomin, Kozienice, Nowy Dwór Mazowiecki, Otwock (Class C) for section C,
- Wołomin, Kozienice, Nowy Dwór Mazowiecki, Otwock (Class C) for section G,
- Wołomin, Nowy Dwór Mazowiecki, Otwock, Żyrardów (Class C) for section I and Wołomin, Kozienice, Otwock for section M.

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

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



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

Communes

Like counties, the Mazovian communes are also very much diversified in terms of investment attractiveness. The highest ranked communes are Ciechanów (1), Mława (1), Słupno (2), Płońsk (1), Sierpc (1), Płock (1), Maków Mazowiecki (1), Ostrów Mazowiecka (1), Sokołów Podlaski (1), Wyszków (3), Ostrołęka (1), Siedlce (1), Białobrzegi (3), Kozienice (3), Pionki (1), Radom (1), M.st.Warszawa (1), Garwolin (1), Legionowo (1), Nieporęt (2), Serock (3), Mińsk Mazowiecki (1), Halinów (3), Sulejówek (1), Nowy Dwór Mazowiecki (1), Józefów (1), Otwock (1), Kobyłka (1), Marki (1), Ząbki (1), Zielonka (1), Radzymin (3), Wołomin (3), Milanówek (1), Podkowa Leśna (1), Grodzisk Mazowiecki (3), Jaktorów (2), Grójec (3), Konstancin-Jeziorna (3), Lesznowola (2), Piaseczno (3), Tarczyn (3), Piastów (1), Pruszków (1), Brwinów (3), Michałowice (2), Nadarzyn (2), Raszyn (2), Sochaczew (1), Błonie (3), Izabelin (2), Łomianki (3), Ożarów Mazowiecki (3), Stare Babice (2), Żyrardów (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 Mazovian voivodship for the national economy and selected sections

Commune	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Warszawa (1)	0.313	A	A	A	A	A
Legionowo (1)	0.295	A	A	A	B	A
Lesznowola (2)	0.294	A	A	A	A	A
Ząbki (1)	0.293	A	A	A	A	A
Mińsk Mazowiecki (1)	0.288	A	A	A	A	A
Płońsk (1)	0.283	A	A	A	B	A
Piastów (1)	0.281	A	A	A	D	A
Pruszków (1)	0.280	A	A	A	A	A
Podkowa Leśna (1)	0.276	A	A	A	A	A
Michałowice (2)	0.272	A	A	A	A	A
Ostrołęka (1)	0.269	A	A	A	B	A
Piaseczno (3)	0.265	A	A	A	A	A
Siedlce (1)	0.264	A	A	A	B	A
Pionki (1)	0.262	A	A	A	B	A
Nadarzyn (2)	0.261	A	A	A	A	A
Raszyn (2)	0.261	A	A	A	A	A
Płock (1)	0.258	A	A	A	A	A
Żyrardów (1)	0.258	A	A	A	A	A
Ożarów Mazowiecki (3)	0.257	A	A	A	A	A
Stare Babice (2)	0.256	A	A	A	A	A
Konstancin-Jeziorna (3)	0.255	A	A	A	A	A
Milanówek (1)	0.253	A	A	A	A	A
Garwolin (1)	0.253	A	A	A	B	A
Marki (1)	0.251	A	A	A	A	A
Kobyłka (1)	0.249	A	A	A	B	A
Słupno (2)	0.248	A	A	A	A	A
Nowy Dwór Mazowiecki (1)	0.248	A	A	A	B	A
Ciechanów (1)	0.245	A	A	A	C	A
Grodzisk Mazowiecki (3)	0.243	A	A	A	B	A
Radom (1)	0.243	A	A	A	C	A
Sulejówek (1)	0.241	A	A	A	B	A
Brwinów (3)	0.239	A	A	A	B	A
Nieporęt (2)	0.238	A	A	A	A	A
Ostrów Mazowiecka (1)	0.236	A	A	A	B	A
Kozienice (3)	0.236	A	A	A	B	A
Łomianki (3)	0.232	A	A	A	A	A
Józefów (1)	0.232	A	A	A	A	A
Serock (3)	0.232	A	A	A	A	A
Wyszków (3)	0.231	A	A	A	A	A

Izabelin (2)	0.231	A	A	A	A	A
Mława (1)	0.229	A	A	A	C	A
Maków Mazowiecki (1)	0.228	A	A	A	C	A
Otwock (1)	0.228	A	A	A	C	A
Sokołów Podlaski (1)	0.227	A	A	B	C	A
Radzymin (3)	0.227	A	A	A	A	B
Tarczyn (3)	0.226	A	A	A	A	B
Błonie (3)	0.225	A	A	B	D	A
Sierpc (1)	0.221	A	A	A	C	A
Wołomin (3)	0.221	A	A	B	D	A
Jaktorów (2)	0.220	A	B	B	D	B
Zielonka (1)	0.220	A	B	B	A	A
Białobrzegi (3)	0.219	A	A	B	B	B
Halinów (3)	0.219	A	A	A	B	B
Sochaczew (1)	0.218	A	A	A	C	A
Grójec (3)	0.218	A	A	A	B	A
Czosnów (2)	0.217	B	A	B	A	B
Wieliszew (2)	0.213	B	B	B	B	B
Garwolin (2)	0.207	B	B	D	D	B
Siedlce (2)	0.207	B	B	B	B	C
Rzekuń (2)	0.206	B	B	B	B	C
Różan (3)	0.205	B	B	B	B	C
Kołbiel (2)	0.204	B	B	B	C	C
Przasnysz (1)	0.202	B	B	B	C	B
Radziejowice (2)	0.202	B	B	B	A	C
Węgrów (1)	0.202	B	B	C	C	B
Gostynin (1)	0.201	B	B	C	C	B
Góra Kalwaria (3)	0.201	B	B	C	C	B
Łosice (3)	0.198	B	B	B	C	C
Mszczonów (3)	0.198	B	C	C	C	C

(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: Gostynin (1), Łosice (3), Różan (3), Rzekuń (2), Przasnysz (1), Siedlce (2), Węgrów (1), Garwolin (2), Wieliszew (2), Czosnów (2), Kołbiel (2), Góra Kalwaria (3), Mszczonów (3), Radziejowice (2). The location-specific advantages are also universal for these communes, which makes them attractive for all kinds of business activity concerned in this research.

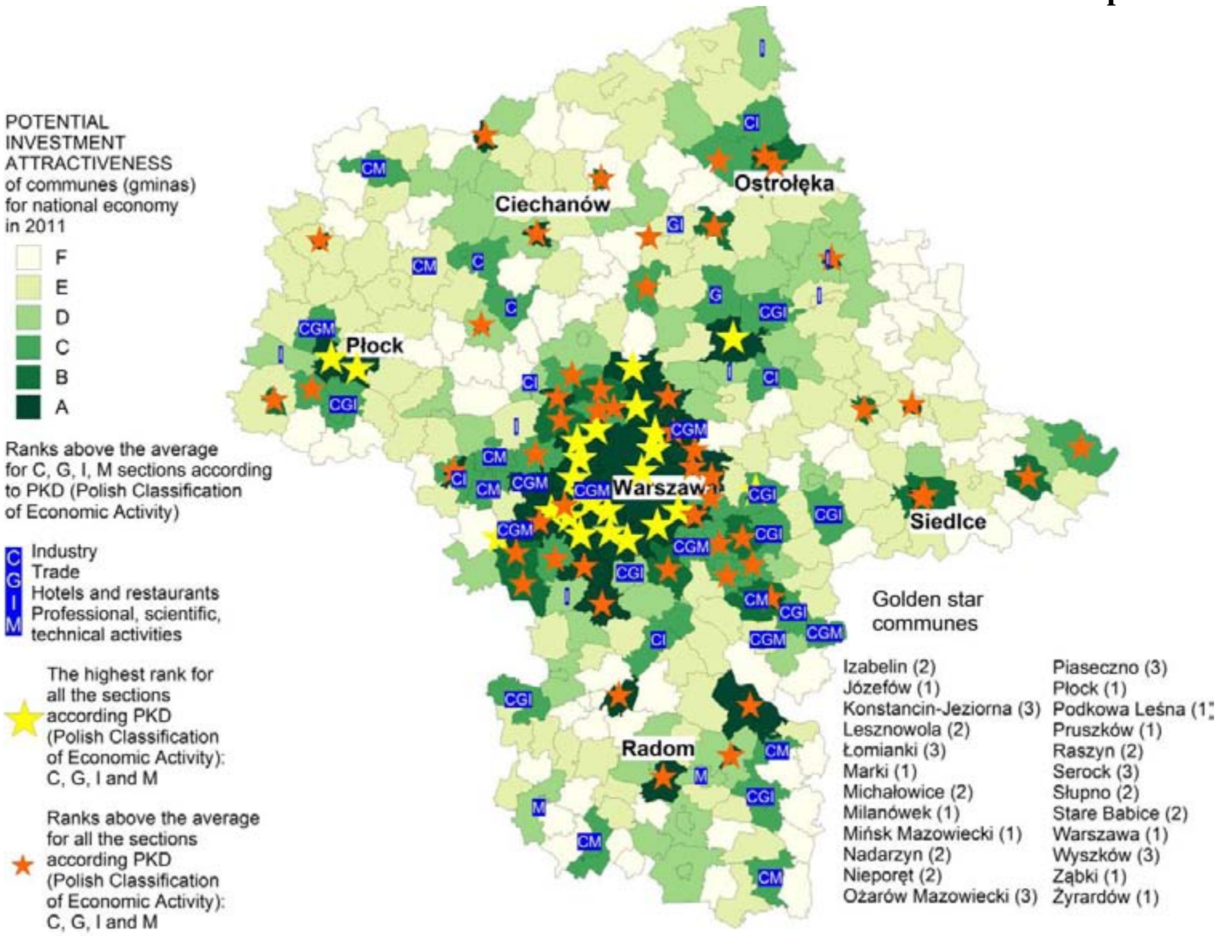
However, this characteristic cannot be found in all of the communes that belong to Class C. Only a few Class C communes fulfil this condition: Wielka Nieszawka (2), Osie (2) – see Table 3 in the Appendix.

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

- Glinojeck (3), Gąbin (3), Łąck (2), Stara Biała (2), Raciąż (1), Sochocin (2), Żuromin (3), Lelis (2), Olszewo-Borki (2), Pułtusk (3), Brańszczyk (2), Garbatka-Letnisko (2), Lipsko (3), Szydłowiec (3), Zwoleń (3), Łaskarzew (1), Górzno (2), Pilawa (3), Żelechów (3), Mińsk Mazowiecki (2), Mrozy (2), Siennica (2), Pomiechówek (2), Zakroczym (3), Celestynów (2), Karczew (3), Osieck (2), Jadów (2), Żabia Wola (2), Nowe Miasto nad Pilicą (3), Warka (3), Prażmów (2), Sochaczew (2), Teresin (2), Kampinos (2), Leszno (2), Mszczonów (3) - for section C,
- Gostynin (1), Gąbin (3), Łąck (2), Stara Biała (2), Czerwonka (2), Olszewo-Borki (2), Pułtusk (3), Węgrów (1), Brańszczyk (2), Rząśnik (2), Zwoleń (3), Łaskarzew (1), Górzno (2), Pilawa (3), Żelechów (3), Mińsk Mazowiecki (2), Mrozy (2), Siennica (2), Pomiechówek (2), Celestynów (2), Karczew (3), Wiązowna (2), Nowe Miasto nad Pilicą (3), Góra Kalwaria (3), Leszno (2), Mszczonów (3) - for section G,
- Ciechanów (1), Gostynin (1), Mława (1), Gąbin (3), Nowy Duninów (2), Sierpc (1), Łosice (3), Maków Mazowiecki (1), Czerwonka (2), Lelis (2), Łyse (2), Olszewo-Borki (2), Brok (3), Przasnysz (1), Pułtusk (3), Sokołów Podlaski (1), Węgrów (1), Zabrodzie (2), Zwoleń (3), Radom (1), Górzno (2), Mrozy (2), Leoncin (2), Pomiechówek (2), Zakroczym (3), Otwock (1), Celestynów (2), Kołbiel (2), Jadów (2), Pniewy (2), Warka (3), Góra Kalwaria (3), Sochaczew (1), Mszczonów (3) - for section I,
- Łąck (2), Stara Biała (2), Raciąż (1), Żuromin (3), Łosice (3), Sarnaki (2), Różan (3), Olszewo-Borki (2), Rzekuń (2), Siedlce (2), Garbatka-Letnisko (2), Lipsko (3), Przysucha (3), Jedlnia-Letnisko (2), Szydłowiec (3), Łaskarzew (1), Pilawa (3), Żelechów (3), Pomiechówek (2), Celestynów (2), Karczew (3), Kołbiel (2), Osieck (2), Żabia Wola (2), Teresin (2), Kampinos (2), Mszczonów (3), Radziejowice (2) - for section M.

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

Chart 5. Potential investment attractiveness of communes of Mazovian 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: Izba Gospodarcza Regionu Płockiego, Mazowiecka Izba Gospodarcza in Ciechanów, Izba Przemysłowo-Handlowa Ziemi Radomskiej, Izba Rzemiosła i Małej Przedsiębiorczości in Radom, Ogólnopolska Izba Branży Skórzanej in Radom, Warszawska Izba Gospodarcza, Mazowiecka Izba Rzemiosła i Przedsiębiorczości in Warszawa, Izba Rzemieślnicza Mazowsza Kurpi i Podlasia, Izba Gospodarcza Producentów i Operatorów Urządzeń Rozrywkowych in Józefów, Ogólnopolska Izba Gospodarcza Producentów Mebli in Warszawa, Polska Izba Przemysłu Chemicznego - Związek Pracodawców in Warszawa, Polska Izba Paliw Płynnych in Warszawa, Cukrownicza Izba Gospodarcza, Izba Gospodarcza Przemysłu Elektrotechnicznego, Izba Gospodarcza Rękodzieła Ludowego i Artystycznego Cepelia, Krajowa Izba Gospodarcza Elektroniki i Telekomunikacji, Krajowa Izba Opakowań, Polska Izba Konstrukcji Stalowych, Polska Izba Motoryzacji, Polska Izba Przemysłowo-Handlowa Budownictwa, Polska Izba Przemysłu Farmaceutycznego i Wyrobów Medycznych POLFARMED, Polska Izba Systemów Alarmowych, Geodezyjna Izba Gospodarcza, Izba Gospodarcza CIEPŁOWNICTWO POLSKIE, Izba Gospodarcza Energetyki i Ochrony Środowiska, Izba Gospodarcza Medycyna Polska, Izba Gospodarcza Transportu Lądowego, Izba Kupców i Przemysłowców, Izba Projektowania Budowlanego, Krajowa Izba Budownictwa, Ogólnopolska Izba Gospodarcza Recyklingu, Polska Izba Druku, Polska Izba Gospodarcza Transportu Samochodowego i Spedycji, Polska Izba Ochrony Osób i Mienia, Polska Izba Handlu, Izba Gospodarcza Komunikacji Miejskiej, Polska Izba Informatyki i Telekomunikacji, Izba Przedsiębiorców Branży Biurowo-Szkolnej, Izba Przemysłowo-Handlowa Inwestorów Zagranicznych, Izba Gospodarcza Farmacja Polska, Krajowa Rada Drobiarstwa - Izba Gospodarcza in Warszawa, Izba Architektów RP, Krajowa Izba Gospodarczo-Rehabilitacyjna,
- associations (including business centres): Naczelna Organizacja Techniczna Federacja Stowarzyszeń Naukowo-Technicznych, Stowarzyszenie Inżynierów i Techników Komunikacji RP branch in Warszawa, Stowarzyszenie Polskich Energetyków, Polskie Stowarzyszenie Sprzedaży Bezpośredniej, "Bfb" - Stowarzyszenie Bezpieczne Finanse Biznesu, "Centrum Scota" Stowarzyszenie Na Rzecz Rozwoju Regionalnego, "Ekoland" Stowarzyszenie Producentów Żywności Metodami Ekologicznymi Zarząd Główny, "IAA" Międzynarodowe Stowarzyszenie Reklamy w Polsce, "Krajowa Unia Producentów Soków" Stowarzyszenie, "Norwegian Business Forum" Stowarzyszenie, "Polalarm" Ogólnopolskie Stowarzyszenie Inżynierów i Techników Systemów Zabezpieczeń, "Polalda" Stowarzyszenie Polskich Dyspozytorów Lotniczych, "Polbisco" Stowarzyszenie Polskich Producentów Wyrobów Czekoladowych i Cukierniczych, "Polska Rada Centrów Handlowych" Stowarzyszenie, "Polskie Stowarzyszenie Classes Laser", "Polski Instytut Kontroli Audytu i Kontrolingu - Stowarzyszenie Zawodowe", "Procax" Polskie Stowarzyszenie Upowszechniania Komputerowych Systemów, SAR-Stowarzyszenie Komunikacji Marketingowej", "Stowarzyszenie Dystrybutorów Papieru", Stowarzyszenie Europejskie Centrum Arbitrażu", Stowarzyszenie Informatyków Polskich", Stowarzyszenie Verum Prawo Dla Przedsiębiorców", Agencja Promocyjno-Usługowa Stowarzyszenia Polskich Wynalazców i Racjonalizatorów "Pro Inventor" Sp. z o.o., ,

Stowarzyszenie "Radomskie Centrum Przedsiębiorczości", Stowarzyszenie Rozwoju Aktywności Społecznej, Stowarzyszenie Rozwoju Społeczno – Gospodarczego,

- business incubators: Akademickie Inkubatory Przedsiębiorczości, Akademicki Inkubator Technologiczny, Akademickie Inkubatory Przedsiębiorczości przy Politechnice Warszawskiej, Fundacja Akademickie Inkubatory Przedsiębiorczości przy SGGW, Akademicki Inkubator Przedsiębiorczości przy Akademii Podlaskiej, Akademickie Inkubatory Przedsiębiorczości przy Płockim Parku Przemysłowo-Technologicznym, Akademickie Inkubatory Przedsiębiorczości przy Szkole Głównej Handlowej, Akademickie Inkubatory Przedsiębiorczości przy Uniwersytecie Warszawskim, Akademickie Inkubatory Przedsiębiorczości przy Wyższej Szkole Handlu i Prawa im. Ryszarda Łazarskiego, Akademickie Inkubatory Przedsiębiorczości przy Wyższej Szkole Informatyki Stosowanej i Zarządzania,
- technology parks, science parks, industrial parks: Płocki Park Przemysłowo-Technologiczny,
- consulting centres (including personal consulting and agricultural consulting): Centrum Doradztwa Rolniczego w Brwinowie, Centrum Doradztwa Rolniczego branch in Radom, Mazowiecki Ośrodek Doradztwa Rolniczego in Warszawa, Ośrodek Doradztwa Finansowego i Konsumenckiego in Warszawa,
- financial institutions (guarantee funds): Mazowiecki Regionalny Fundusz Pożyczkowy Sp. z o. o., FIRMA 2000 Sp. z o.o., Fundacja Gospodarcza im. Karola Marcinkowskiego, Fundacja Małych i Średnich Przedsiębiorstw, Fundacja na Rzecz Rozwoju Polskiego Rolnictwa, Fundacja Poszanowania Energii, Instytut Technologii Eksploatacji - Państwowy Instytut Badawczy in Radom, Izba Rzemieślnicza Mazowsza, Kurpi i Podlasia in Warszawa, Misters Audytor Adviser Sp. z o.o., Sekwencja Spółka z Ograniczoną Odpowiedzialnością, The Quality Of Life Ireneusz Kozera, Wastech Recycling sp. z o.o., Zakład Doskonalenia Zawodowego w Płocku, Zakład Doskonalenia Zawodowego in Warszawa,
- others: Związek Pracodawców Warszawy i Mazowsza,Agencja Rozwoju Mazowsza S.A., Agencja Rozwoju Regionalnego Sp. z o.o. in Ostrołęka.

Polish Federation of Engeneering Associations – NOT *(Naczelna Organizacja Techniczna Federacja Stowarzyszeń Naukowo-Technicznych)* offers services including expertises and technical opinions, measurements and laboratory research, design works, technical consulting, installations, boot-ups, equipment maintenance and repair and operating manuals preparation, implementation works, trainings (including technical personnel trainings and trainings for managers, also including trainings in cooperation with foreign partners) and foreign internships for young personnel, granting specialization degrees for engineers and technicians, granting qualifications certificates for translators of technical texts, granting certificates for technical surveyors, giving opinions on law acts on different fields of economy, organizing scientific-technical events such as congresses, conferences, symposia, meetings, seminars, exhibitions, shows, theme days, competitions concerning technical knowledge and inventions. (http://www.not.org.pl/not/index.php?option=com_content&task=view&id=41&Itemid=69, 30 October 2013)

Academic Business Incubators *(Akademickie Inkubatory Przedsiębiorczości)* operate at 31 universities in Poland. In the incubators there are more than 1400 firms. Incubators' aim is supporting entrepreneurship by assistance at setting new businesses and developing them (small and medium enterprises) and creating innovative business ideas that should build competitive advantage of the Polish economy. The incubators' offer involves 3 areas: firm, knowledge and community and includes i.a.: simplified business registration, offices and rooms, legal and accounting services, free of charge trainings and mentoring, help at looking for business partners, information services concerning raising funds for running a business. (http://nowa.inkubatory.pl/, 30 October 2013)

Płock Techno-Industrial Park (*Płocki Park Przemysłowo-Technologiczny*) is an investment area of over 200 ha with a valid spatial development plan. It offers office spaces and training and conference rooms to rent. The offer for industrial investors includes investment areas for production-services and industrial-production businesses. The Park attracts investors by means of an assistance package which includes real estate tax exemptions for investing in the park and for R&D businesses. It offers support in the form of technical consulting, architectural planning, advice on EU funding, assistance in preparing and carrying out an investment as well as other consulting services. The investments in the park are to get the status of investments in the special economic zone which means it is possible to apply for income tax exemption. The park also offers help at acquiring human resources by organizing recruitment and trainings according to investors' needs. The park's offer is targeted at investors of modern services operating in Business Processes Outsourcing Centres (BPO) and Shared Service Centres (SSC). Realization of a new building is planned to constitute an area for localisation of Corporate Services Centre objects which will offer products and services related to financial processes, knowledge processes, accounting, IT, human resources management, sales and purchases. (www.pppt.pl/, 30 October 2013)

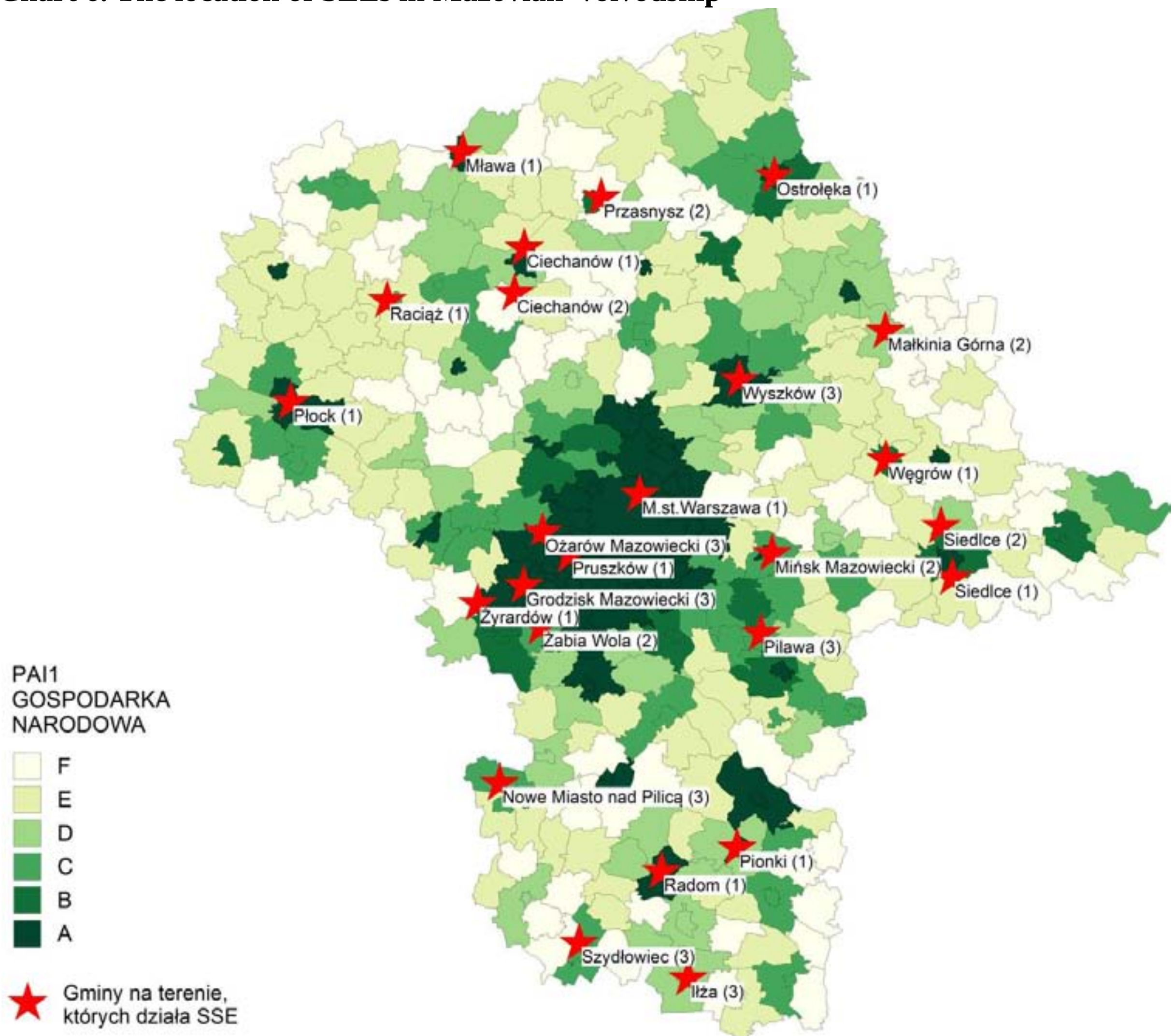
Union of Warsaw and Mazovian Employers *(Związek Pracodawców Warszawy i Mazowsza)* takes part in creating law regulations and supports building of capital market i.a. by taking part in Sejm committees. The union offers training and consulting services for firms in the field of acquiring capital for realisation of economic projects, pre-project audits and preparations for introducing monitoring and project management systems, business plans and international cooperation. The union supports the innovativeness of enterprises (by advising on applying for financing innovations, diagnosis of innovativeness level, technological audits, innovativeness consulting) as well as the cooperation projects (advice on cooperation strategies - cooperation networks, clusters, consortia, support related to acquiring EU funding, coordination of clusters and networks). The union supports companies at products' exports to Russia. It also takes part in a pilot project on entrepreneurship support for students and graduates by granting preferential loans. (www.zpwim.pl/, 30 October 2013)

Mazovia Development Agency Plc. (Agencja Rozwoju Mazowsza S.A.) is aimed at e-Development Strategy of Mazovia, development of human capital, economic promotion of the region, servicing investors and exporters as well as with projects related to revitalisation and consulting. The agency runs its projects by its internal units: Investor and Exporter Service Centre (it offers two online databases: Made in Mazovia – a database of Mazovian exports offers and a database of investment sites), EU Funds and Trainings Department (it offers trainings and consulting on raising EU funds), Information Society Department (it runs the e-Development Strategy of Mazovia's projects), Revitalisation and Consulting Department (it works on revitalization of cities, post-industrial areas, post-military areas, landlocked water areas as well as on development and implementation of city polices in Mazovian voivodship). (www.armsa.pl/, 30 October 2013)

Special economic zones in voivodship – effects

There are 5 special economic zones (SEZs) in Mazovian voivodship: Łódź SEZ, Starachowice SEZ, Suwałki SEZ, Warmia-Mazury SEZ and Tarnobrzeg SEZ. At the end of 2012 the areas of the SEZs were parts of 12 cities and 13 communes – see Chart 6.

Chart 6. The location of SEZs in Mazovian 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 2001. The investment outlays made by SEZ companies operating in the communes of Mazovia by the end of 2012 amounted to PLN 3.1 billon, which made 27% of all investment outlays made in the Polish SEZs. In the same time the SEZ companies in the region created 7 thousand new jobs which made 4% 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)
Warmia-Mazury / Ciechanów	Ciechanów, Ciechanów (1)	publishing activities	87.25	159
Warmia-Mazury / Ciechanów	Ciechanów, Ciechanów (2)	food products	137.48	88
Warmia-Mazury / Mława	Mława, Mława (1)	computers, electronic and optical products	523.06	2,837
Łódź / Raciąż	Płońsk, Raciąż (1)	food products	80.00	76
Łódź / Płock	Płock (city), Płock (1)	rubber and plastic products	91.79	63
Suwałki / Małkinia	Ostrów Mazowiecka, Małkinia Górna (2)	other non-metallic mineral products	249.94	155
Tarnobrzeg/ Przasnysz	Przasnysz, Przasnysz (2)	no investors yet		
Tarnobrzeg / Siedlce	Siedlce, Siedlce (2)	no investors yet		
Tarnobrzeg / Węgrów	Węgrów, Węgrów (1)	rubber and plastic products	17.42	6
Tarnobrzeg / Radom	Wyszków, Wyszków (3)	printing and reproduction of recorded media	225.30	966
Warmia-Mazury / Ostrołęka	Ostrołęka (city), Ostrołęka (1)	food products	1.71	
Tarnobrzeg / Siedlce	Siedlce (city), Siedlce (1)	machinery and equipment n.e.c.	243.30	398
Tarnobrzeg / Radom	Radom, Pionki (1)	furniture	2.94	61
Starachowice / Iłża	Radom, Iłża (3)	no investors yet		
Starachowice / Szydłowiec	Szydłowiec, Szydłowiec (3)	paper and paper products	35.31	186
Tarnobrzeg / Radom	Radom (city), Radom (1)	beverages, machinery and equipment n.e.c.,	516.20	1,292
Łódź / Warszawa	capital city of Warszawa, capital city of Warszawa (1)	paper and paper products	586.20	184
Tarnobrzeg / Radom	Garwolin, Pilawa (3)	chemicals and chemical products, metals	115.94	89
Tarnobrzeg / Mińsk Mazowiecki	Mińsk Mazowiecki, Mińsk Mazowiecki (2)	paper and paper products	0.31	
Łódź/ Grodzisk Mazowiecki	Grodzisk Mazowiecki, Grodzisk Mazowiecki (3)	machinery and equipment n.e.c.	64.52	57
Łódź / Żabia Wola	Grodzisk Mazowiecki, Żabia Wola (2)	no investors yet		
Tarnobrzeg / Nowe Miasto Nad Pilicą	Grójec, Nowe Miasto nad Pilicą (3)	no investors yet		
Łódź / Pruszków	Pruszków, Pruszków (1)	other products	3.00	17
Tarnobrzeg / Radom	Warsaw West, Ożarów Mazowiecki (3)	fabricated metal products (except machinery and equipment), computers, electronic and optical products,	118.80	380
Łódź / Żyrardów	Żyrardów, Żyrardów (1)	electrical and non-electrical household appliances	2.56	23

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

The largest investments in voivodship have been completed in Radom, Warszawa and Ostrołęka. In Radom the following companies invested: in manufacture of metal products: ALMECH s.c. Alina i Stanisław Jasik, HART MET Sp. z o.o. ALTHA POWDER METALLURGY Sp. z o.o. TOHO POLAND Sp. z o.o., and MEDICOFARMA Sp. z o.o. – in manufacture of pharmaceuticals and pharmaceutical products, ZBYSZKO COMPANY Sp. z o.o. – producer of beverages and juices. In Warszawa the following companies invested: Procter and Gamble Operations Poland Sp. z o.o. (the Netherlands, hygiene products), ATM S.A. (Poland, BPO), and in Ostrołęka: GIPSEL Sp. z o.o. (Poland, other non-metallic mineral products), Produkcja Elementów Betonowych NATRIX Sp. z o.o. (Poland, other non-metallic mineral products), Stora Enso Poland S.A. (Sweden, paper and paper products), MELVIT S.A. (Poland, food products).

The voivodship development plan aims to attract investors:

- from modern services sector including R&D services that would make use of the existing R&D facilities and create centres of advanced technologies, industrial parks as well as stimulate cooperation between businesses in Łódź SEZ,
- from food-processing, machinery, construction materials, electro-technic and automotive industries that would create jobs in post-industrial areas affected by high unemployment – in Starachowice SEZ,
- that would create a considerable number of new jobs and utilise the industrial traditions of eastern Mazovia and available workforce – in Suwałki SSE,
- From food-processing, machinery, construction materials, electro-technic, automotive, metal, precise mechanics and synthetic materials industries that would enable activation of Warsaw agglomeration surroundings – in SEZ Tarnobrzeg,
- From electronic, electro-technic, machinery, chemical industries – Warmia-Mazury 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 8 are situated in Mazovian voivodship (see Table 5).

Table 5. Communes in Mazovian 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
6	Płock (1)	10.5	7.0	11.0	28.5
12	Sochaczew (1)	12.5	9.0	6.0	27.5
16	Mława (1)	12.5	9.0	5.0	26.5
28	Radom (1)	11.0	9.0	5.0	25.0
49	Nowy Dwór Mazowiecki (1)	8.0	7.0	7.0	22.0
62	Płońsk (1)	7.0	9.0	5.0	21.0
67	Milanówek (1)	9.5	11.0	0.0	20.5
87	Ciechanów (1)	10.5	9.0	0.0	19.5

Source: Authors' own calculations.

The above mentioned communes' websites stand out in their presence in social media networks. In addition, Płońsk and Radom have websites versions for visually impaired. Płońsk also presents investment offers including maps and map extracts. In their replies for Polish e-mails Ciechanów, Radom, Sochaczew and Mława distinguished themselves by good answers. When it comes to English e-mails, Płock sent an answer that can be considered a model one.

5. Region's strengths and weaknesses

Mazovian 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 Mazovian 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 A Microclimate Technical Infrastructure Class B Microclimate Social Infrastructure Class C Social Microclimate Class A Market Microclimate Class A Microclimate Administration/Government Class A Microclimate Innovativeness Class A Productivity of entreprises Class A Returns on tangible assets Class B Samofinansowanie jst Class A Investment outlays Class A	Profitability of entreprises Class E
Capital-intensive industry	
Microclimate Human Resources Class A Microclimate Technical InfrastructureClass C Social Microclimate Class B Market MicroclimateClass A Microclimate Administration/Government Class B Microclimate Innovativeness Class B Returns on tangible assets Class A Productivity of entreprises Class A Self-financing of self-government units Class A Investment outlays Class A	Microclimate Social Infrastructure Class D
Labour-intensive industry	
Microclimate Human Resources Class B Microclimate Technical Infrastructure Class B Social Microclimate Class A Market MicroclimateClass A Microclimate Administration/GovernmentClass A Returns on tangible assets Class A	Microclimate Social Infrastructure Class D

Productivity of entreprises Class A Self-financing of self-government units Class A Investment outlays Class A	
Trade	
Microclimate Human Resources Class B Microclimate Technical Infrastructure Class C Microclimate Social Infrastructure Class C Social Microclimate Class A Market Microclimate Class A Microclimate Administration/Government Class A Returns on tangible assets Class B Productivity of entreprises Class A Self-financing of self-government units Class A Investment outlays Class A	
Tourism	
Microclimate Human Resources Class A Microclimate Technical Infrastructure Class C Social Microclimate Class B Market MicroclimateClass A Microclimate Administration/GovernmentClass B Returns on tangible assets Class A Productivity of entreprises Class A Self-financing of self-government units Class A Investment outlays Class A	Microclimate Social Infrastructure Class D
Professional, scientific and technical activities	
Microclimate Human Resources Class A Microclimate Technical Infrastructure Class B Microclimate Social Infrastructure Class C Social Microclimate Class A Market Microclimate Class A Microclimate Administration/Government Class B Microclimate Innovativeness Class B Productivity of entreprises Class A Self-financing of self-government units Class A Investment outlays Class A	Returns on tangible assets 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 Mazovian voivodship are the city counties Warszawa, Ostrołęka, Siedlce, Płock, Radom and counties: Pruszków, Piaseczno, Warsaw West, Grodzisk Mazowiecki, Legionów, Wołomin, Kozienice, Nowy Dwór Mazowiecki and Otwock as well as the special economic zones in the region.

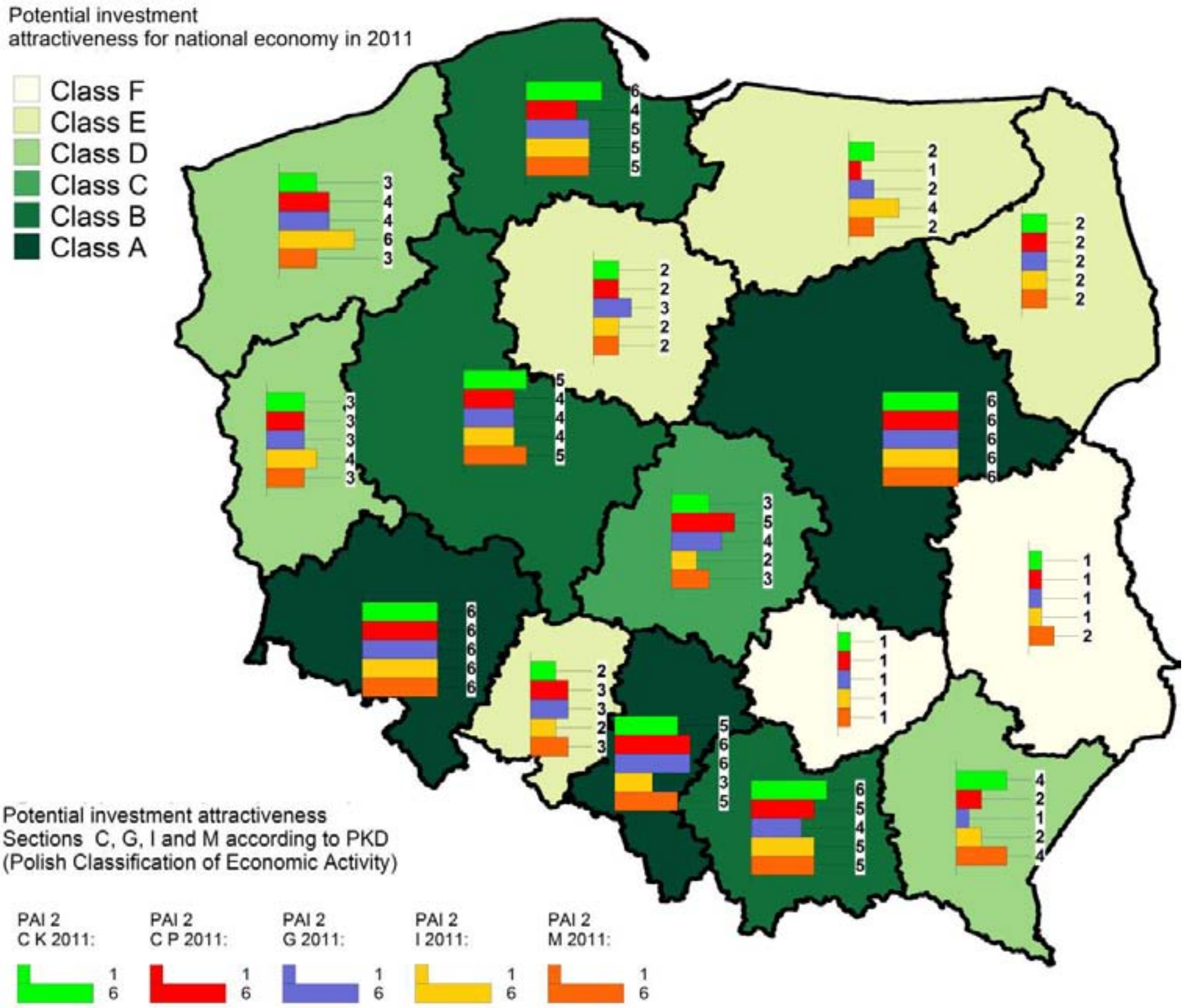
Mazovian voivodship has predispositions to **create interregional clusters**, especially in sectors such as: manufacture of clothes, printing and reproduction of recorded media, publishing activities, manufacture of bakery and farinaceous products, manufacture of plastic products, manufacture of glass and glass products, manufacture of other fabricated metal products, manufacture of other manufacture of machinery and equipment. It can also develop **intelligent specializations** basing on the competitive big and medium-sized companies, such as: in the **medium-low-tech-sectors**: manufacture of other non-metallic mineral products, in the **low-tech sector**: manufacture of clothes, and the **knowledge- based financial services** (financial and insurance activities).

It is profitable is developing of **offshoring services (BPO)** in the region, basing on the competitive enterprises from the sectors: wireless telecommunications, financial services supporting activities excluding insurances and retirement funds, buying and selling of own real estate, technical research and analyses, activities of employment placement.

Mazovian voivodship is also characterized by competitiveness of medium and big enterprises from high-tech services sector: R&D and other knowledge-based services such as education, healthcare and social care. It is worth mentioning that Mazovia is a significant player when it comes to most of innovative industries and services. The voivodship is a monopolist on the Polish market which is accompanied by returns of sales higher than the national average. Thus, the high-tech sectors should be developed in Mazovia, such as R&D, programming and broadcasting activities, telecommunications, advertising, market research, publishing activities.

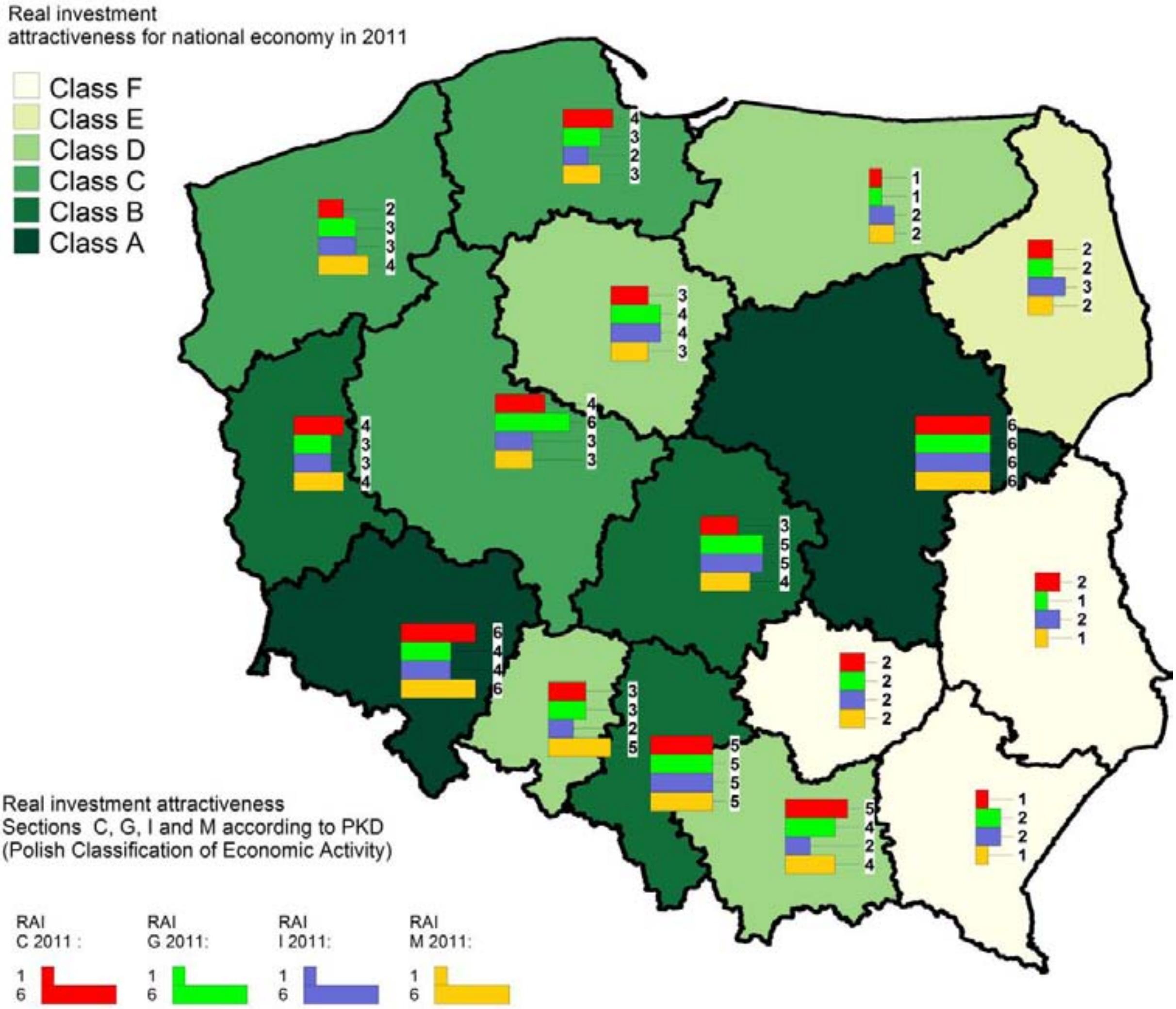
APPENDIX

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 Mazovian 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
Warszawa	0.417	A	A	A	A	A
Ostrołęka	0.346	A	A	A	A	A
Siedlce	0.342	A	A	A	B	A
Pruszków	0.329	A	A	A	A	A
Płock	0.328	A	A	A	A	A
Piaseczno	0.314	A	A	A	A	A
Warsaw West	0.300	A	A	A	A	A
Grodzisk Mazowiecki	0.299	A	A	A	A	A
Radom	0.290	B	B	B	D	A
Legionów	0.283	B	B	B	A	B
Wołomin	0.257	C	C	C	C	C
Kozienice	0.249	C	C	C	D	C
Nowy Dwór Mazowiecki	0.248	C	C	C	C	D
Otwock	0.243	C	C	C	C	C

Source: As in Table 1.

Table 4. Potential investment attractiveness of communes of Mazovian 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
Warszawa(1)	0,313	A	A	A	A	A
Legionowo (1)	0,295	A	A	A	B	A
Lesznowola (2)	0,294	A	A	A	A	A
Ząbki (1)	0,293	A	A	A	A	A
Mińsk Mazowiecki (1)	0,288	A	A	A	A	A
Płońsk (1)	0,283	A	A	A	B	A
Piastów (1)	0,281	A	A	A	D	A
Pruszków (1)	0,280	A	A	A	A	A
Podkowa Leśna (1)	0,276	A	A	A	A	A
Michałowice (2)	0,272	A	A	A	A	A
Ostrołęka (1)	0,269	A	A	A	B	A
Piaseczno (3)	0,265	A	A	A	A	A
Siedlce (1)	0,264	A	A	A	B	A
Pionki (1)	0,262	A	A	A	B	A
Nadarzyn (2)	0,261	A	A	A	A	A
Raszyn (2)	0,261	A	A	A	A	A
Płock (1)	0,258	A	A	A	A	A
Żyrardów (1)	0,258	A	A	A	A	A

Ożarów Mazowiecki (3)	0,257	A	A	A	A	A
Stare Babice (2)	0,256	A	A	A	A	A
Konstancin-Jeziorna (3)	0,255	A	A	A	A	A
Milanówek (1)	0,253	A	A	A	A	A
Garwolin (1)	0,253	A	A	A	B	A
Marki (1)	0,251	A	A	A	A	A
Kobyłka (1)	0,249	A	A	A	B	A
Słupno (2)	0,248	A	A	A	A	A
Nowy Dwór Mazowiecki (1)	0,248	A	A	A	B	A
Ciechanów (1)	0,245	A	A	A	C	A
Grodzisk Mazowiecki (3)	0,243	A	A	A	B	A
Radom (1)	0,243	A	A	A	C	A
Sulejówek (1)	0,241	A	A	A	B	A
Brwinów (3)	0,239	A	A	A	B	A
Nieporęt (2)	0,238	A	A	A	A	A
Ostrów Mazowiecka (1)	0,236	A	A	A	B	A
Kozienice (3)	0,236	A	A	A	B	A
Łomianki (3)	0,232	A	A	A	A	A
Józefów (1)	0,232	A	A	A	A	A
Serock (3)	0,232	A	A	A	A	A
Wyszków (3)	0,231	A	A	A	A	A
Izabelin (2)	0,231	A	A	A	A	A
Mława (1)	0,229	A	A	A	C	A
Maków Mazowiecki (1)	0,228	A	A	A	C	A
Otwock (1)	0,228	A	A	A	C	A
Sokołów Podlaski (1)	0,227	A	A	B	C	A
Radzymin (3)	0,227	A	A	A	A	B
Tarczyn (3)	0,226	A	A	A	A	B
Błonie (3)	0,225	A	A	B	D	A
Sierpc (1)	0,221	A	A	A	C	A
Wołomin (3)	0,221	A	A	B	D	A
Jaktorów (2)	0,220	A	B	B	D	B
Zielonka (1)	0,220	A	B	B	A	A
Białobrzegi (3)	0,219	A	A	B	B	B
Halinów (3)	0,219	A	A	A	B	B
Sochaczew (1)	0,218	A	A	A	C	A
Grójec (3)	0,218	A	A	A	B	A
Czosnów (2)	0,217	B	A	B	A	B
Wieliszew (2)	0,213	B	B	B	B	B
Garwolin (2)	0,207	B	B	D	D	B
Siedlce (2)	0,207	B	B	B	B	C
Rzekuń (2)	0,206	B	B	B	B	C
Różan (3)	0,205	B	B	B	B	C
Kołbiel (2)	0,204	B	B	B	C	C
Przasnysz (1)	0,202	B	B	B	C	B
Radziejowice (2)	0,202	B	B	B	A	C
Węgrów (1)	0,202	B	B	C	C	B

Gostynin (1)	0,201	B	B	C	C	B
Góra Kalwaria (3)	0,201	B	B	C	C	B
Łosice (3)	0,198	B	B	B	C	C
Mszczonów (3)	0,198	B	C	C	C	C
Jabłonna (2)	0,197	C	B	B	A	B
Wiązowna (2)	0,196	C	B	C	A	B
Sarnaki (2)	0,196	C	B	B	B	C
Mińsk Mazowiecki (2)	0,195	C	C	C	A	D
Stara Biała (2)	0,195	C	C	C	D	C
Leszno (2)	0,195	C	C	C	B	B
Osieck (2)	0,193	C	C	B	A	C
Olszewo-Borki (2)	0,192	C	C	C	C	C
Pułtusk (3)	0,191	C	C	C	C	B
Żelechów (3)	0,190	C	C	C	D	C
Nowe Miasto nad Pilicą (3)	0,190	C	C	C	B	D
Karczew (3)	0,189	C	C	C	D	C
Żabia Wola (2)	0,189	C	C	A	A	C
Celestynów (2)	0,189	C	C	C	C	C
Brańszczyk (2)	0,188	C	C	C	A	D
Pomiechówek (2)	0,188	C	C	C	C	C
Pilawa (3)	0,187	C	C	C	B	C
Teresin (2)	0,186	C	C	D	D	C
Lipsko (3)	0,186	C	C	E	E	C
Siennica (2)	0,185	C	C	C	B	D
Gąbin (3)	0,184	C	C	C	C	D
Mrozy (2)	0,184	C	C	C	C	D
Zwoleń (3)	0,184	C	C	C	C	D
Górzno (2)	0,183	C	C	C	C	D
Rząśnik (2)	0,182	C	D	C	D	D
Łaskarzew (1)	0,182	C	C	C	E	C
Raciąż (1)	0,182	C	C	D	D	C
Szydłowiec (3)	0,181	C	C	D	D	C
Warka (3)	0,181	C	C	D	C	D
Kampinos (2)	0,181	C	C	D	D	C
Garbatka-Letnisko (2)	0,181	C	C	D	E	C
Łąck (2)	0,181	C	C	C	B	C
Sochocin (2)	0,180	C	C	D	D	D
Lelis (2)	0,180	C	C	D	C	E
Żuromin (3)	0,179	C	C	D	E	C
Jadów (2)	0,179	C	C	D	C	E
Glinojeck (3)	0,179	C	C	D	D	D
Sochaczew (2)	0,178	C	C	D	B	D

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.