CENTRE FOR REGIONAL AND LOCAL ANALYSES

REGIONAL INVESTMENT ATTRACTIVENESS 2012

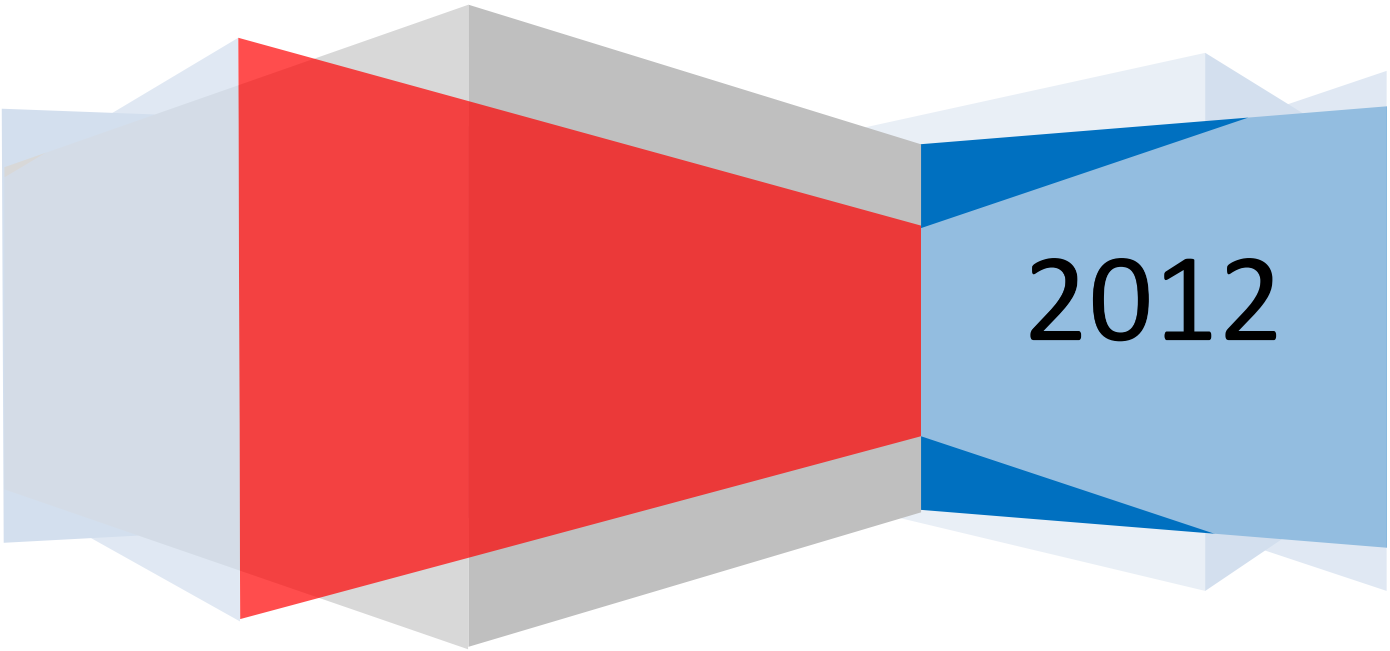
Masovian voivodship

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 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 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 : www.sgh.waw.pl/instytuty/ip, on the Web site 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 Masovian voivodship

Masovian voivodship is situated in central-eastern Poland in the Masovian Lowlands. It is the largest and most populous region of Poland. It is the most economically developed and attractive voivodship and distances all other regions of Poland in terms of GDP per capita. A characteristic feature of the region is its servitisation, 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 every branch of industry has developed in Masovia, including in particular the manufacture of means of transport and petrochemical industry. The administrative centre is Warsaw, the capital city of Poland, which is jointly with its suburban area one of the most attractive 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 with 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,
- the 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 expectation and specialists trained in various fields,
- very high labour productivity compensating a relatively high level of remunerations,
- the presence of Warsaw Stock Exchange, the capital centre of Central and Eastern Europe,
- investment incentives for investors offered in special economic zones.

[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).

Additional information

Chart. 1. General characteristics of the economy of Masovian voivodship

Feature	Masovian voivodship	Poland	Share [%]
Market Potential			
GDP per capita (PLN/person) in 2009	56,383	35,210	-
Population (persons) on 31 December 2011	5,285,604	38,538,447	13.7
Human Resources Potential			
Higher education institutions graduates (persons) in 2011	83,178	492,646	16.9
Secondary schools graduates (persons) in 2011	53,275	421,724	12.6
Number of employed persons on 31 December 2011	2.262.092	13.911.203	16.3%
Structure of employed persons in 2011	agriculture 11.6% industry 22.7% services 65.7%	agriculture 12.7% industry 30.6% services 56.7%	
Investment outlays and capital of companies with foreign capital participation in the voivodship			
Investment outlays (PLN mln) in 2010	28,603.9	61,600.3	46.4
Capital of companies (PLN mln) in 2010	92,921.4	188,812.4	49.2
Special economic zones (SEZs) in the voivodship			
- The Warmian-Masurian SEZ, subzones: Ciechanów, Ciechanów (city), Mława (city), Ostrołęka (city), - The Tarnobrzeg SEZ, subzones: Nowe Miasto nad Pilicą, Ożarów Mazowiecki, Pilawa, Przasnysz, Węgrów, Wyszków, Pionki (city), Radom (city), Siedlce (city), Siedlce - The Łódź SEZ, subzones: Grodzisk Mazowiecki, Żabia Wola, Płock (city), Raciąż (city), Warszawa (city), Żyrardów (city), Pruszków (city), - The Suwałki SEZ, subzone Małkinia Górna, - The Starachowice SEZ, subzones: Iłża, Szydłowiec			
Investment attractiveness			
Potential investment attractiveness (location-specific advantages evaluation)	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 (economic effects evaluation)	National economy class A Industry class C Trade class A Tourism class A Professional science and technical education class A		

Poviats and gminas distinguished according to the Potential Attractiveness Index for the national economy		
Poviats	Class A	Warszawa (City), Płock (City), Ostrołęka (City), Siedlce (City), Piaseczyński, Pruszkowski, Radom (City), Grodziski, Warszawski Zachodni, Legionowski
	Class B	
Gminas**	Class A	M.st. Warszawa (1), Legionowo (1), Lesznowola (2), Ząbki (1), Piaseczno (3), Płońsk (1), Piastów (1), Mińsk Mazowiecki (1), Pruszków (1), Michałowice (2), Podkowa Leśna (1), Ostrołęka (1), Płock (1), Pionki (1), Stare Babice (2), Siedlce (1), Raszyn (2), Żyrardów (1), Ciechanów (1), Nadarzyn (2), Ożarów Mazowiecki (3), Milanówek (1), Konstancin-Jeziorna (3), Radom (1), Słupno (2), Grodzisk Mazowiecki (3), Nowy Dwór Mazowiecki (1), Sulejówek (1), Marki (1), Garwolin (1), Nieporęt (2), Kobyłka (1), Radzymin (3), Ostrów Mazowiecka (1), Serock (3), Łomianki (3), Kozienice (3), Tarczyn (3), Izabelin (2), Józefów (1), Wyszków (3), Maków Mazowiecki (1), Otwock (1), Wołomin (3), Błonie (3), Mława (1), Sokołów Podlaski (1), Grójec (3), Czosnów (2), Zielonka (1), Brwinów (3)
	Class B	Sochaczew (1), Wieliszew (2), Halinów (3), Białobrzegi (3), Jaktorów (2), Sierpc (1), Siedlce (2), Węgrów (1), Gostynin (1), Garwolin (2), Przasnysz (1), Góra Kalwaria (3), Rzekuń (2), Kołbiel (2), Stara Biała (2), Różan (3), Radziejowice (2)

In 2009 Masovian voivodship made a contribution of 21.9% to the GDP of Poland. Calculated per capita, it amounted to PLN 56,383 with the average for Poland PLN 35,210. With this result the voivodship occupies the first place in the country. The GDP growth rate in the period 2003-2009 amounted to 167% 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 high share of the service sector (65.7%) whereas a share of the agricultural and industrial sectors is respectively 11.6% and 22.7% (CSO, RDB 2012).

The number of inhabitants of the voivodship in 2011 amounts to 5,285,604, which is 13.7% of the population of Poland. The age structure of Masovian voivodship in 2010 was as follows: 15.2% of the population at pre-reproductive age, 67% at reproductive age and 17.80% 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 10.1%, compared to 12.4% in Poland[2]. The average gross monthly remuneration in enterprises sector in the first six months of 2012 amounted to PLN 4.496,7, which is 122% of average remuneration in Poland.

The main potential for human capital creation in the voivodship lies in 106 higher education institutions in which 307.1 thousand students study, which makes up 17.7% of students Poland-wide. In this voivodship 9.3% of pupils of secondary schools attend basic vocational schools and 11.1% attend technical secondary schools.

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

[2] The unemployment rate in voivodships, subregions and poviats in August 2012 is based on the data of Central Statistical Office.

Preferential conditions of conducting business activities are offered in this voivodship i.a. by the following 5 special economic zones (in Polish: Specjalne Strefy Ekonomiczne, hence abbreviation SSE):

- Warmińsko-Mazurska SSE (Warmia-Mazury special economic zone), subzones: Ciechanów, the city of Ciechanów, the city of Mława, the city of Ostrołęka,

- Tarnobrzeska SSE (Tarnobrzeg special economic zone), subzones: Nowe Miasto nad Pilicą, Ożarów Mazowiecki, Pilawa, Przasnysz, Węgrów, Wyszków, the city of Pionki, the city of Radom, the city of Siedlce, Siedlce,

- Łódzka SSE (Łódź special economic zone), subzones: Grodzisk Mazowiecki, Żabia Wola, the city of Płock, the city of Raciąż, the city of Warszawa, the city of Żyrardów, the city of Pruszków,

- Starachowicka SSE (Starachowice special economic zone), subzones: Iłża, Szydłowiec,

- Suwalska SSE (Suwałki special economic zone), subzone Małkinia Górna.

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

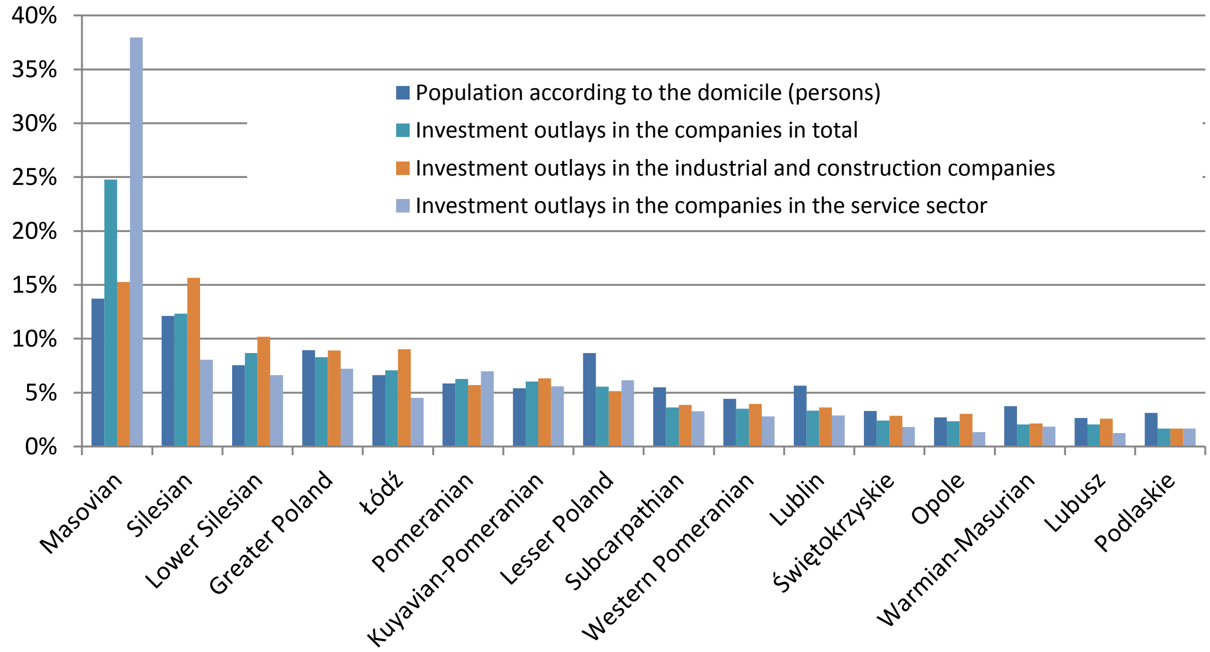
Masovian voivodship is characterised by a very high level of universal investment attractiveness, which manifests itself in its rank (Class A) according to the main potential investment attractiveness index for the whole national economy PAI 2_GN (see Exhibit 1 in the Appendix). The region also ranked very high in terms of potential investment attractiveness calculated for the 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). [3] Like in the previous ranking, Masovian voivodship is the only region in Poland with the highest scores in each section of investment attractiveness – both in the terms of national economy as well as in terms of each particular section.

Investment attractiveness can also be determined on the basis of indices of real investment attractiveness (RAI), based on such microclimates as: returns 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), industry (Class A), trade (Class A), tourism (Class A) and professional, scientific and technical activities (Class A) - see Exhibit 2 in the Appendix.

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

[3] 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.

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)

According to this exhibit Masovian 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 14%, whereas the value of the capital in companies with foreign capital in all analyzed sections represent 25% of the national level. In particular, those 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.

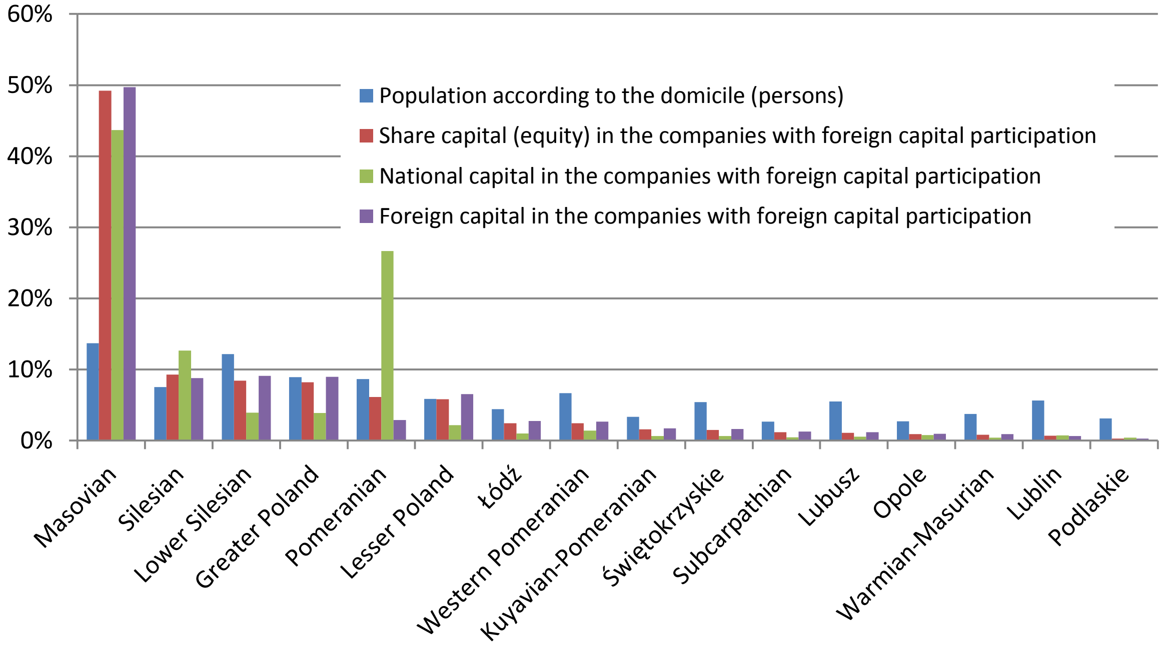
At the same time, Masovia is the country's leader in the terms of attracting foreign direct investments. The same conclusion can be drawn from the analysis of the share of foreign capital accumulated in the companies – see Exhibit 2.

The share of Masovian voivodship in the value of share capital in the companies with foreign capital participation amounts almost to 50%. What is worth noticing, in the years 2003-2010 the voivodship's share in foreign direct investment market felt from 54% to 49% (see Exhibit 3) – however the regions still holds a leading position.

Also the competitive position in terms of share of vacancies in companies with foreign capital deteriorated falling from 35,8% to 35%. It indicates at a poor use of voivodship's competitive advantages (despite the high labour costs).

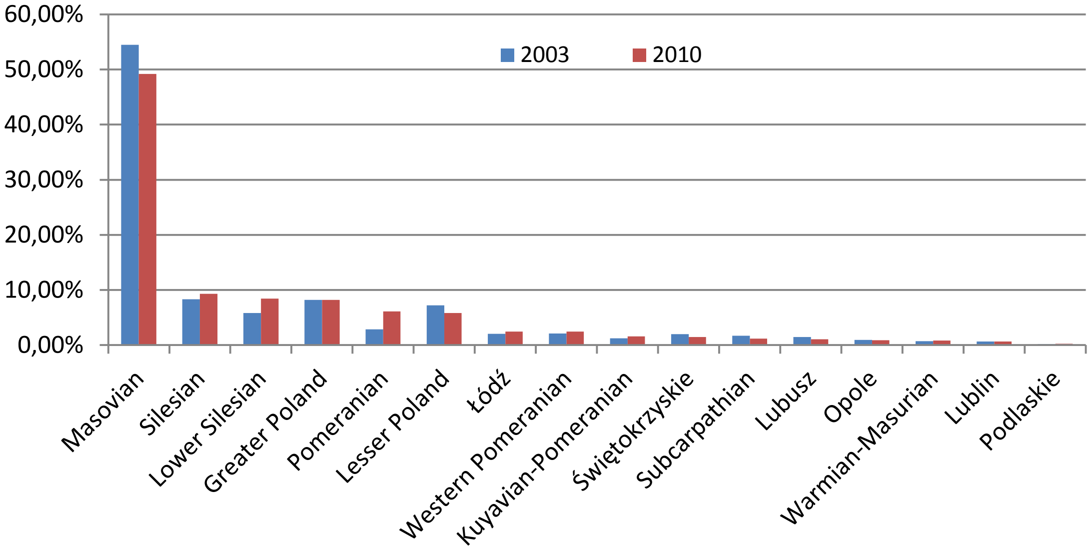
In the years 2003-2010 the number of vacancies in the companies with foreign capital increased by 33% from 398.679 to 532.109. The growth rate was slightly lower than the average growth rate in the country (37%). At the same time, 428 new companies with foreign capital were registered in 2010 in the voivodship. This result was significantly higher even in comparison to other outstanding regions: Silesian (115), Lower Silesian (100) and Greater Poland (81). It means that investors are still interested in this region.

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)

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)

Thus, it is of great importance to make use out of investment potential of Masovian voivodship, in particular in the attractive self-government units located outside the Warsaw agglomeration.

3. Internal diversification of regional investment attractiveness

Poviats (counties)

The following poviats are considered most attractive in Masovian voivodship: the city of Warszawa (City), Płock (City), Ostrołęka (City), Siedlce (City), Radom (City), Piaseczyński, Pruszkowski, Grodziski, Warszawski Zachodni, Legionowski. - see Chart 2.

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

	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
The city of Warszawa	0,479	A	A	A	A	A
The city of Płock	0,379	A	A	A	A	A
The city of Ostrołęka	0,361	A	A	A	A	A
The city of Siedlce	0,356	A	A	A	B	A
piaseczyński	0,346	A	A	A	A	A
pruszkowski	0,338	A	A	A	A	A
The city of Radom	0,336	A	A	B	C	A
grodziski	0,322	A	A	A	A	A
warszawski zachodni	0,320	A	A	A	A	A
legionowski	0,312	A	A	A	A	B
wołomiński	0,285	C	C	C	C	C
otwocki	0,279	C	C	C	B	C
nowodworski	0,268	C	C	C	C	D
kozienicki	0,265	C	C	C	E	D
żyrardowski	0,264	C	C	C	C	D

Source: Authors' own materials.

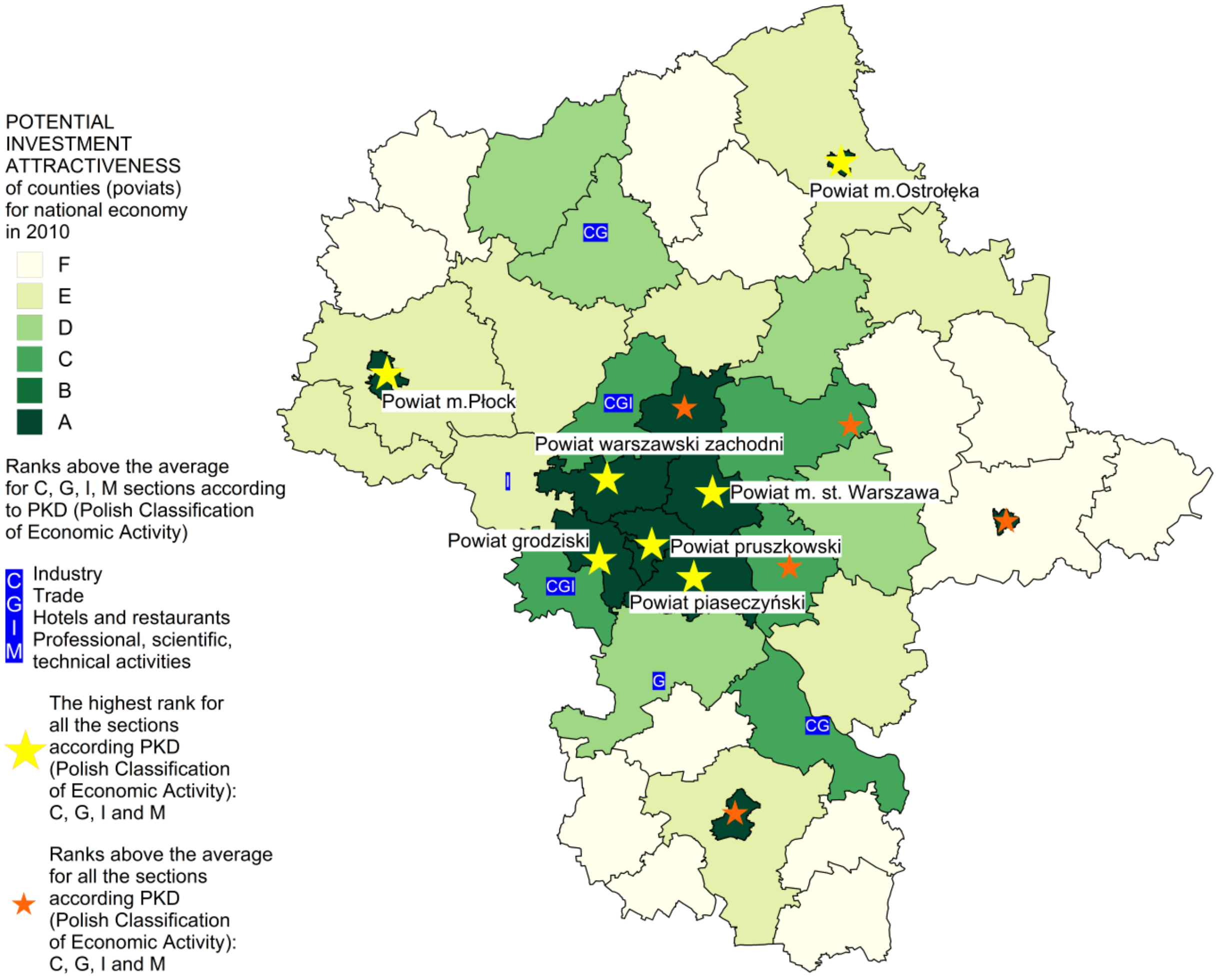
Enumerated poviats, apart from: otwocki and wołomiński poviats characterize high investment atractiveness. The following poviats should be distinguished: the city of Warszawa, the city of Ostrołęka, the city of Płock as these units attained Class A in their potential investment attractiveness for all sections of the national economy under scrutiny in this research.

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

- Ciechanowski, kozienicki, nowodworski, otwocki, wołomiński, żyrardowski (Class C) for section C,
- ciechanowski, kozienicki, nowodworski, otwocki, wołomiński, grójecki, żyrardowski (Class C) for section G,
- City of Radom, nowodworski, wołomiński, sochaczewski, żyrardowski (Class C) for section I,
- Otwocki, wołomiński (Class C) for section M.

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

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



Source: Authors' own materials.

Gminas (communes)

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

Gmina	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
M.st. Warszawa (1)	0,330	A	A	A	A	A
Legionowo (1)	0,305	A	A	A	B	A
Lesznowola (2)	0,299	A	A	A	A	A
Ząbki (1)	0,295	A	A	A	A	A
Piaseczno (3)	0,293	A	A	A	A	A
Płońsk (1)	0,291	A	A	A	A	A
Piastów (1)	0,291	A	A	A	C	A
Mińsk Mazowiecki (1)	0,290	A	A	A	A	A
Pruszków (1)	0,287	A	A	A	A	A
Michałowice (2)	0,279	A	A	A	A	A
Podkowa Leśna (1)	0,278	A	A	A	A	A
Ostrołęka (1)	0,277	A	A	A	A	A
Płock (1)	0,272	A	A	A	A	A
Pionki (1)	0,271	A	A	A	B	A
Stare Babice (2)	0,270	A	A	A	A	A
Siedlce (1)	0,268	A	A	A	B	A
Raszyn (2)	0,265	A	A	A	A	A
Żyrardów (1)	0,264	A	A	A	B	A
Ciechanów (1)	0,261	A	A	A	B	A
Nadarzyn (2)	0,261	A	A	A	A	A
Ożarów Mazowiecki (3)	0,259	A	A	A	A	A
Milanówek (1)	0,258	A	A	A	A	A
Konstancin-Jeziorna (3)	0,258	A	A	A	A	A
Radom (1)	0,257	A	A	A	C	A
Słupno (2)	0,257	A	A	A	A	A
Grodzisk Mazowiecki (3)	0,254	A	A	A	A	A
Nowy Dwór Mazowiecki (1)	0,254	A	A	A	A	A
Sulejówek (1)	0,254	A	A	A	B	A
Marki (1)	0,253	A	A	A	A	A
Garwolin (1)	0,252	A	A	A	B	A
Nieporęt (2)	0,246	A	A	A	A	A
Kobyłka (1)	0,246	A	A	A	B	A
Radzymin (3)	0,245	A	A	A	A	A
Ostrów Mazowiecka (1)	0,244	A	A	A	A	A
Serock (3)	0,242	A	A	A	A	A
Łomianki (3)	0,242	A	A	A	A	A
Kozienice (3)	0,242	A	A	A	B	A
Tarczyn (3)	0,241	A	A	A	A	B
Izabelin (2)	0,241	A	A	A	A	A
Józefów (1)	0,237	A	A	A	A	A

Wyszków (3)	0,237	A	A	A	A	A
Maków Mazowiecki (1)	0,237	A	A	A	C	B
Otwock (1)	0,236	A	A	A	A	A
Wołomin (3)	0,234	A	A	B	D	A
Błonie (3)	0,232	A	A	A	C	A
Mława (1)	0,231	A	A	A	C	A
Sokołów Podlaski (1)	0,228	A	A	B	C	A
Grójec (3)	0,228	A	A	A	A	A
Czosnów (2)	0,227	A	A	B	A	B
Zielonka (1)	0,226	A	B	B	A	A
Brwinów (3)	0,225	A	A	A	B	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: Sochaczew (1), Wieliszew (2), Halinów (3), Białobrzegi (3), Jaktorów (2), Sierpc (1), Siedlce (2), Węgrów (1), Gostynin (1), Garwolin (2), Przasnysz (1), Góra Kalwaria (3), Rzekuń (2), Kołbiel (2), Stara Biała (2), Różan (3), Radziejowice (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:

- Gąbin (3), Łąck (2), Raciąż (1), Sarnaki (2), Łyse (2), Olszewo-Borki (2), Troszyn (2), Krasne (2), Pułtusk (3), Brańszczyk (2), Rząśnik (2), Lipsko (3), Szydłowiec (3), Zwoleń (3), Łaskarzew (1), Pilawa (3), Żelechów (3), Mińsk Mazowiecki (2), Mrozy (2), Siennica (2), Pomiechówek (2), Zakroczym (3), Celestynów (2), Karczew (3), Osieck (2), Jadów (2), Klembów (2), Nowe Miasto nad Pilicą (3), Warka (3), Sochaczew (2), Teresin (2), Kampinos (2), Mszczonów (3) – for section C,

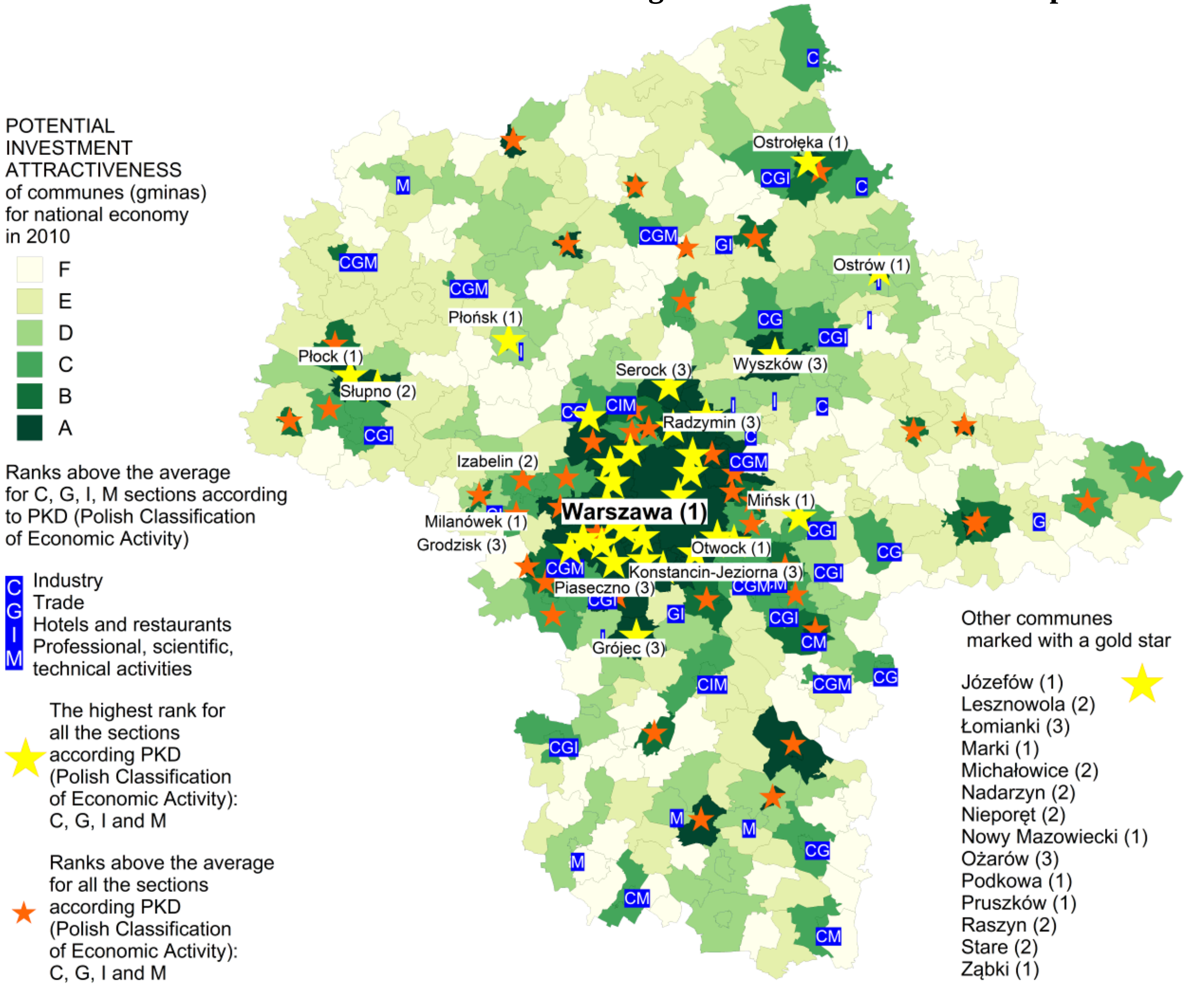
- Gąbin (3), Łąck (2), Stara Biała (2), Raciąż (1), Czerwonka (2), Olszewo-Borki (2), Przasnysz (1), Krasne (2), Pułtusk (3), Mordy (3), Węgrów (1), Brańszczyk (2), Rząśnik (2), Zwoleń (3), Łaskarzew (1), Pilawa (3), Żelechów (3), Jabłonna (2), Mińsk Mazowiecki (2), Mrozy (2), Siennica (2), Zakroczym (3), Karczew (3), Osieck (2), Wiązowna (2), Nowe Miasto nad Pilicą (3), Góra Kalwaria (3), Prażmów (2), Teresin (2), Kampinos (2), Leszno (2), Mszczonów (3) - for section G,

- Gostynin (1), Mława (1), Łąck (2), Stara Biała (2), Płońsk (2), Łosice (3), Maków Mazowiecki (1), Czerwonka (2), Olszewo-Borki (2), Brok (3), Sokołów Podlaski (1), Węgrów (1), Zabrodzie (2), Białobrzegi (3), Radom (1), Siennica (2), Pomiechówek (2), Zakroczym (3), Kołbiel (2), Dąbrówka (2), Nowe Miasto nad Pilicą (3), Pniewy (2), Warka (3), Prażmów (2), Piastów (1), Sochaczew (2), Błonie (3), Kampinos (2), Mszczonów (3) - dla sekcji I,

- Łąck (2), Stara Biała (2), Raciąż (1), Żuromin (3), Łosice (3), Sarnaki (2), Różan (3), Rzekuń (2), Krasne (2), Siedlce (2), Lipsko (3), Przysucha (3), Jedlnia-Letnisko (2), Zakrzew (2), Szydłowiec (3), Łaskarzew (1), Pilawa (3), Pomiechówek (2), Celestynów (2), Kołbiel (2), Warka (3), Teresin (2), Kampinos (2), Mszczonów (3), Radziejowice (2) – for section M.

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

Exhibit 5. Potential investment attractiveness of gminas of Masovian voivodship



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: Płocki Park Przemysłowo Technologiczny, Związek Pracodawców Warszawy i Mazowsza in Warsaw, Agencja Rozwoju Mazowsza S.A. in Warsaw, Mazowiecka Izba Gospodarcza w Ciechanowie, Mazowiecki Fundusz Poręczeń Kredytowych in Warsaw, Mazowiecki Serwis Gospodarczy, Mazowiecka Agencja Energetyczna Sp. z o.o. in Warsaw, Polsko – Brytyjska Izba Handlowa (chamber of commerce) in Warsaw, Polska Izba Produktu Regionalnego i Lokalnego in Warsaw, Mazowiecki Regionalny Fundusz Pożyczkowy in Warsaw, HRK S.A. in Warsaw, IT Business Centre in Warsaw, Advisory Group TEST Human Resources Branch in Warsaw, Bigram SA Personnel Consulting in Warsaw, Hays Warszawa, Randstad Warszawa, Accord Group Poland Warszawa, Adecco Poland-Centrala in Warsaw, Creyf's

Polska in Warsaw, Deloitte&Touche Biuro in Warsaw, Cushman & Wakefield Healey & Baker Warszawa, Ernest and Young Warsaw, NAJ International Sp. z .o.o. Warsaw, Izba Przemysłowo-Handlowa Inwestorów Zagranicznych in Poland, Akademicki Inkubator Przedsiębiorczości (business incubator at the Faculty of Economics, Warsaw University, BCC), Akademicki Inkubator Przedsiębiorczości (business incubator at a private higher education institution Wyższa Szkoła Informatyki Stosowanej i Zarządzania, BCC), Akademicki Inkubator Technologiczny (Warsaw University), Akademicki Inkubator Przedsiębiorczości (business incubator at the Warsaw University of Lifesciences, BCC).

Płocki Park Przemysłowo Technologiczny (Płock Techno-Industrial Park) is an investment area of over 200 ha with a spatial development plan that provides for three interconnected elements: an industrial park, a technological park and a R&D park. The PPPT offers office and conference space as well as investment areas aimed at production-services and industrial-production businesses. The Park attracts investors by means of an assistance package which includes real estate tax breaks for investing in the PPPT 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 PPPT's offer is targeted at investors of modern services operating in Business Processes Outsourcing Centres (BPO) and Shared Service Centres (SSC). By the end of 2013 the Park will have completed a set of projects based on the synergy effect such as Business Services Centre (BSC), in which the BPO/SSC investors will be able to offer their services and products. The BSC will constitute an area of 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) as well as of Data Centre objects (which is an electronic computing centre offering IT and research services). (www.pppt.pl/, 30.09.2012.).

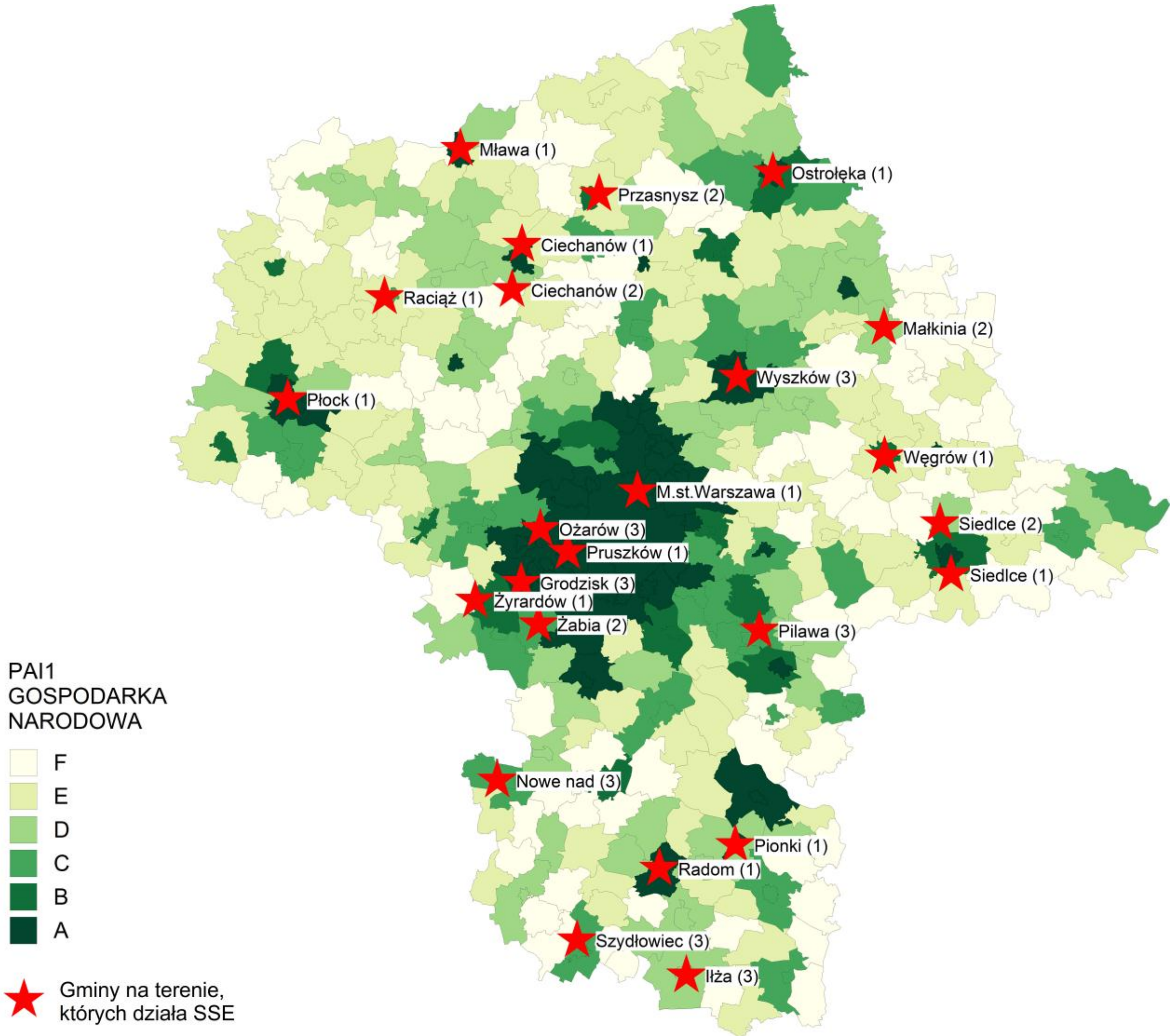
Związek Pracodawców Warszawy i Mazowsza (Union of Warsaw and Masovian Employers). The union offers training and consulting services for firms in the field of acquiring capital for realisation of economic projects, pre-project audits and preparations for introducing monitoring and project management systems, business plans and international cooperation. The union supports the innovativeness of enterprises (by means of 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 runs several projects e.g. Masovian Centre for Economic Information which will be a data processing unit in the field of economic forecasts. The main targets of the project are entrepreneurs who will be able to directly make use of solutions emerging from cooperation between businesses and research institutions. (www.zpwim.pl/, 30.09.2012.).

Agencja Rozwoju Mazowsza S.A. (Masovia Development Agency Plc.) is tasked with realisation of e-Development Strategy of Masovia, development of human capital, economic promotion of the region, servicing investors and exporters as well as with projects related to revitalisation and consulting. The Centre for Investor and Exporter Servicing offers online databases: Masovian Export Offer – Made in Mazovia and a database of available investment areas. (www.armsa.pl/, 30.09.2012.).

Special economic zones in Masovian voivodeship - effects

There are five special economic zones (SSE) in Mazowieckie voivodeship: Łódzka, Starachowicka, Suwalska, Warmińsko-Mazurska and Tarnobrzeska. At the end of 2011 the areas of SSE were part of 12 cities and 12 gminas (counties) (Exhibit 6).

Exhibit 6. The location of SSE in Masovian voivodeship



Source: Authors' own calculations.

First SSEs were established in 2001. The enterprises operating in the zones invested 3.3 billion PLN until 2011, which constitutes 4% of all economic zone capital expenditures in Poland. In the same period the enterprises have created 6.5 thousand jobs, which constitutes 4% 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
Warmińsko-Mazurska SSE, Ciechanów (1)	Poligraphy	160	87,2
Warmińsko-Mazurska SSE, Ciechanów (2)	Data unavailable		
Łódzka SSE, Grodzisk Mazowiecki (3)		250	65,0
Starachowicka SSE, Iłża (3)	Data unavailable		
Łódzka SSE, M.st. Warszawa (1)	BPO	410	572,8
Suwalska SSE, Małkinia Górna (2)	Construction materials	85	249,9
Warmińsko-Mazurska SSE, Mława (1)	Electronics	2 189	483,7
Tarnobrzeska SSE, Nowe Miasto nad Pilicą (3)	No investors		
Warmińsko-Mazurska SSE, Ostrołęka (1)	Paper	35	500,8
Tarnobrzeska SSE, Ożarów Mazowiecki (3)	Data unavailable		
Tarnobrzeska SSE, Pilawa (3)	Data unavailable		
Tarnobrzeska SSE, Pionki (1)	Data unavailable		
Łódzka SSE, Płock (1)	Synthetic materials	30	50,0
Łódzka SSE, Pruszków (1)	Writing materials	20	16,0
Tarnobrzeska SSE, Przasnysz (2)	No investors		
Łódzka SSE, Raciąż (1)	Food processing	50	55,0
Tarnobrzeska SSE, Radom (1)	Poligraphy/metal/food processing	2 613	902,8
Tarnobrzeska SSE, Siedlce (2)	Data unavailable		
Tarnobrzeska SSE, Siedlce (1)	Metal	401	228,8
Starachowicka SSE, Szydłowiec (3)	Paper and paper products	196	35,0
Tarnobrzeska SSE, Węgrów (1)	No investors		
Tarnobrzeska SSE, Wyszków (3)	Data unavailable		
Łódzka SSE, Żabia Wola (2)	Data unavailable		
Łódzka SSE, Żyrardów (1)	Household appliances	70	21,4

Source: Authors' own calculations based on PAIiIZ data.

Largest investment inflows have been observed in Radom, Warszawa and Ostrołęka. Radom has attracted investments in the field of metal products: ALMECH s.c. Alina and Stanisław Jasik, HART MET Sp. z o.o. ALTHA POWDER METALLURGY Sp. z o.o. TOHO POLAND Sp. z o.o., as well as MEDICOFARMA Sp. z o.o. – a pharmaceutical company, ZBYSZKO COMPANY Sp. z o.o. – a beverage producer. Warsaw investments include: Procter and Gamble Operations Polska Sp. z o.o. (Netherlands, hygiene products), ATM S.A. (Poland, BPO), and in Ostrołęka: GIPSEL Sp. z o.o. (Poland, non-metallic mineral resources), Produkcja Elementów Betonowych NATRIX Sp. z o.o. (Poland, non-metallic mineral resources), Stora Enso Poland S.A. (Sweden, paper and paper products), MELVIT S.A. (Poland, food products).

The voivodeship 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 Łódzka SSE,
- From food-processing, machinery, construction materials, electro-technic and automotive industries that would create jobs in post-industrial areas affected by high unemployment – in Starachowicka SSE,
- That would create a considerable number of new jobs and utilise the industrial traditions of eastern Mazowsze and available workforce – in Suwalska 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 Tarnobrzska SSE,
- From electronic, electro-technic, machinery, chemical industries – in Warmińsko-Mazurska 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 7 gminas situated in Masovian voivodship.

Chart 5. Gminas in Masovian voivodship distinguished as ‘A’ Communes

Gmina	Poviat	Audit of Web sites	Audit of e-contact in Polish	Audit of e-contact in English	Sum
Michałowice (2)	pruszkowski	7,5	3	4	**14,5**
Ostrołęka (1)	Ostrołęka	9	5	0	**14**
Mława (1)	mławski	9,5	4	0	**13,5**
Mińsk Mazowiecki (1)	miński	9	4	0	**13**
Podkowa Leśna (1)	grodziski mazowiecki	7,5	5	0	**12,5**
Legionowo (1)	legionowski	7,5	5	0	**12,5**
Izabelin (2)	warszawski zachodni	6	3	3,5	**12,5**
Radom (1)	Radom	9,5	3	0	**12,5**

Source: Authors’ own materials.

What makes the Web sites of all the communes in question stand out is their presence in social media networks. In addition, Radom has a Web site for visually impaired. In its replies to enquiries in Polish Mława distinguished itself by providing information on the possibility of setting up a company in the special economic zone, whereas a reply from Ostrołęka is particularly politely worded. As far as correspondence in foreign languages is concerned, Michałowice distinguished itself by providing information on the local zoning plan and upcoming tender for real estate property while the authorities of Izabelin invited the auditor to come and meet the Mayor.

5. Region's strengths and weaknesses

Masovian 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 Masovian voivodship

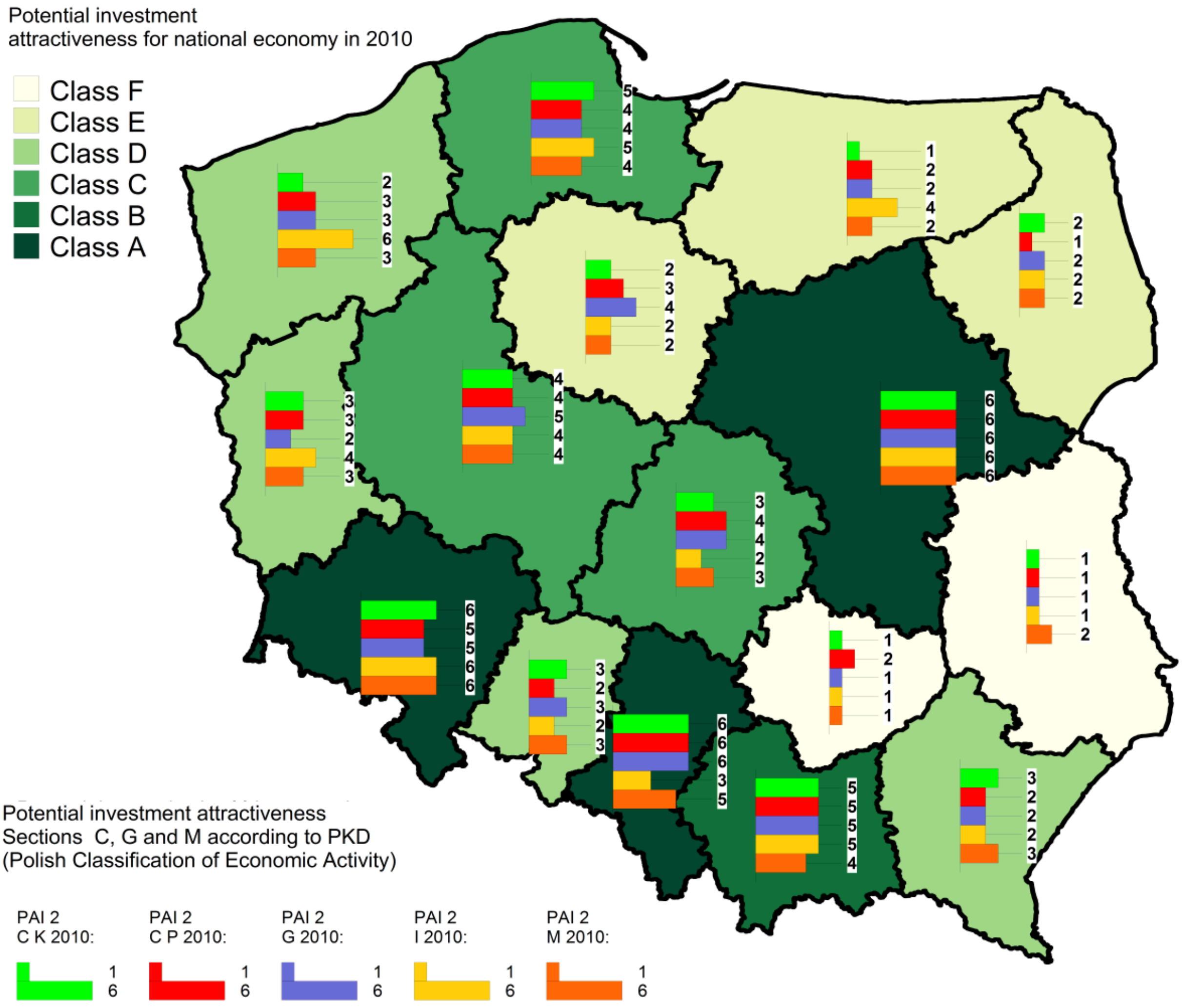
Strengths of the region according to the microclimates by IP SGH	Weaknesses of the region according to the microclimates by IP SGH
National economy	
Microclimate Human Resources Class A Microclimate Technical Infrastructure Class B Microclimate Social Infrastructure Class B Microclimate Social Capital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

Microclimate Social Capital Class A Microclimate Market Class A Microclimate Administration/Governance Class A Returns on tangible assets Class A Labour productivity in enterprises Class A Self-financing of self-government units Class A Investment outlays Class A	Microclimate Social Infrastructure Class D
Trade	
Microclimate Human Resources Class C Microclimate Technical Infrastructure Class C Microclimate Social Infrastructure Class C Microclimate Social Capital Class A Microclimate Market Class A Microclimate Administration/Governance Class A Returns on tangible assets Class C Labour productivity in enterprises 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 Microclimate Social Capital Class A Microclimate Market Class A Microclimate Administration/Governance Class A Returns on tangible assets Class A Labour productivity in enterprises Class A Self-financing of self-government units Class A Investment outlays Class A	Microclimate Social Infrastructure Class B
Professional, scientific and technical activities	
Microclimate Human Resources Class A Microclimate Technical Infrastructure Class B Microclimate Social Infrastructure Class C Microclimate Social Capital Class A Microclimate Market Class A Microclimate Administration/Governance Class A Microclimate Innovativeness Class A Returns on tangible assets Class C Labour productivity in enterprises Class A Self-financing of self-government units Class A Investment outlays Class A	

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

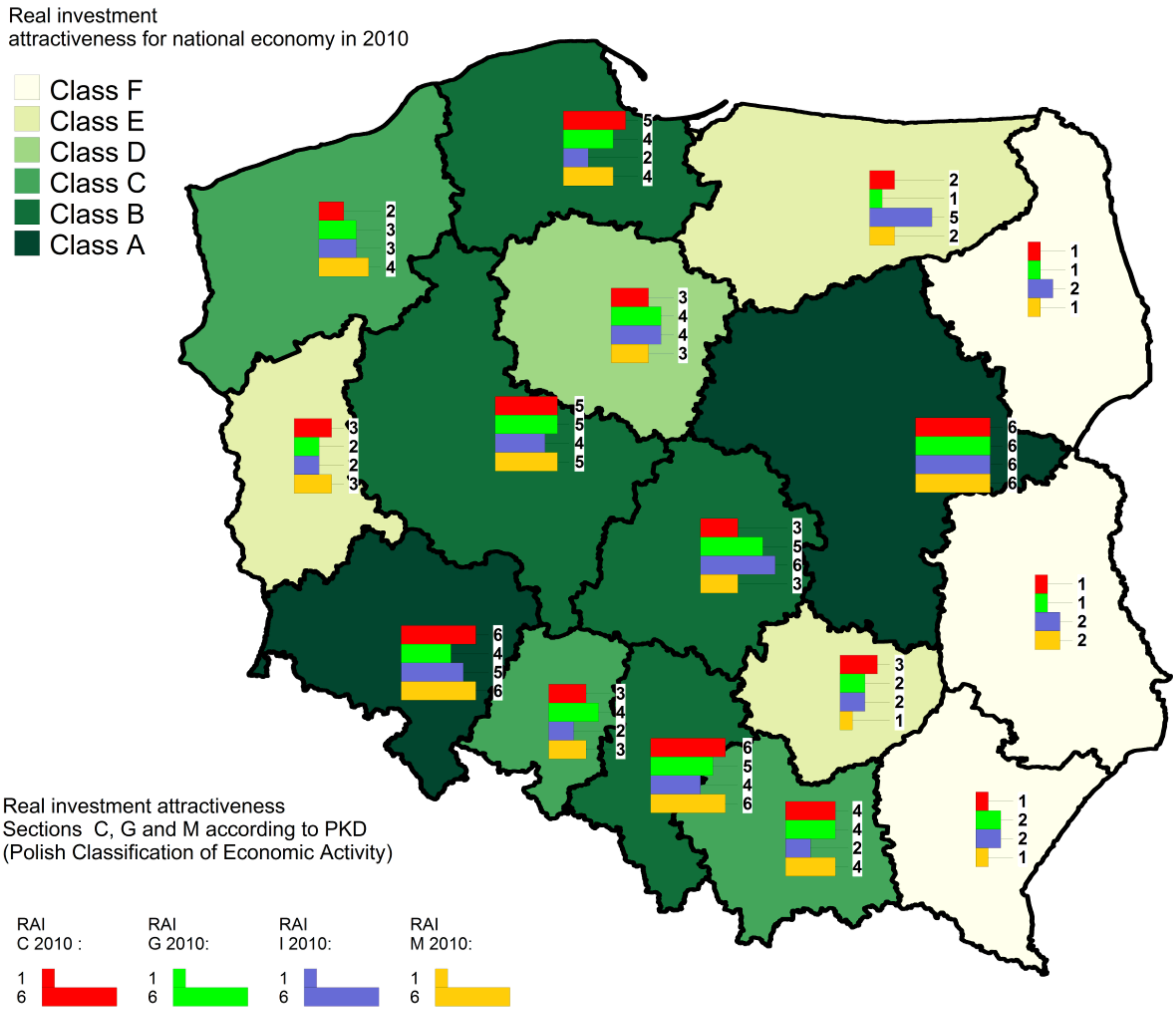
APPENDIX

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	ŁÓDŹ	LESSER POLAND	MASOVIAN	OPOLE	SUBCARPATHIAN	PODLASKIE	POMERANIAN	SILESIAN	ŚWIĘTOKRZYSKIE	WARMIAN-MASURIAN	GREATER POLAND	WESTERN POMERANIAN
PAI1 GN	A	E	F	C	D	C	A	E	D	E	B	A	F	D	B	C
PAI2 GN	A	E	F	D	C	B	A	D	D	E	C	A	F	E	C	D
RAI GN	A	D	F	E	B	C	A	C	F	F	B	B	E	E	B	C
PAI1 C	A	D	F	C	C	C	A	D	E	E	B	A	F	E	C	C
PAI2 C KAPITAŁ	A	E	F	D	D	B	A	D	D	E	B	A	F	F	C	E
PAI2 C PRACA	B	D	F	D	C	B	A	E	E	F	C	A	E	E	C	D
RAI C	A	D	F	D	D	C	A	D	F	F	B	A	D	E	B	E
PAI1 G	A	E	F	C	D	B	A	D	E	F	B	A	F	C	C	C
PAI2 G	B	C	F	E	C	B	A	D	E	E	C	A	F	E	B	D
RAI G	C	C	F	E	B	C	A	C	E	F	C	B	E	F	B	D
PAI1 I	B	E	F	B	E	B	A	E	D	E	B	D	F	B	C	A
PAI2 I	A	E	F	C	E	B	A	E	E	E	B	D	F	C	C	A
RAI I	B	C	E	E	A	E	A	E	E	E	E	C	E	B	C	D
PAI1 M	A	E	F	C	D	C	A	D	D	F	B	B	F	D	B	C
PAI2 M	A	E	E	D	D	C	A	D	D	E	C	B	F	E	C	D
RAI M	A	D	E	D	D	C	A	D	F	F	C	A	F	E	B	C

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 Masovian 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 capital city of Warsaw	0,479	A	A	A	A	A
The City of Płock	0,379	A	A	A	A	A
The City of Ostrołęka	0,361	A	A	A	A	A
The City of Siedlce	0,356	A	A	A	B	A
piaseczyński	0,346	A	A	A	A	A
pruszkowski	0,338	A	A	A	A	A
The City of Radom	0,336	A	A	B	C	A
grodziski	0,322	A	A	A	A	A
warszawski zachodni	0,320	A	A	A	A	A
legionowski	0,312	A	A	A	A	B
wołomiński	0,285	C	C	C	C	C
otwocki	0,279	C	C	C	B	C
nowodworski	0,268	C	C	C	C	D
kozienicki	0,265	C	C	C	E	D

żyrardowski	0,264	C	C	C	C	D

Source: See Chart 1.

Chart 3. Potential investment attractiveness of gminas of Masovian 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
The capital city of Warsaw (1)	0,330	A	A	A	A	A
Legionowo (1)	0,305	A	A	A	B	A
Lesznowola (2)	0,299	A	A	A	A	A
Ząbki (1)	0,295	A	A	A	A	A
Piaseczno (3)	0,293	A	A	A	A	A
Płońsk (1)	0,291	A	A	A	A	A
Piastów (1)	0,291	A	A	A	C	A
Mińsk Mazowiecki (1)	0,290	A	A	A	A	A
Pruszków (1)	0,287	A	A	A	A	A
Michałowice (2)	0,279	A	A	A	A	A
Podkowa Leśna (1)	0,278	A	A	A	A	A
Ostrołęka (1)	0,277	A	A	A	A	A
Płock (1)	0,272	A	A	A	A	A
Pionki (1)	0,271	A	A	A	B	A
Stare Babice (2)	0,270	A	A	A	A	A
Siedlce (1)	0,268	A	A	A	B	A
Raszyn (2)	0,265	A	A	A	A	A
Żyrardów (1)	0,264	A	A	A	B	A
Ciechanów (1)	0,261	A	A	A	B	A
Nadarzyn (2)	0,261	A	A	A	A	A
Ożarów Mazowiecki (3)	0,259	A	A	A	A	A
Milanówek (1)	0,258	A	A	A	A	A
Konstancin-Jeziorna (3)	0,258	A	A	A	A	A
Radom (1)	0,257	A	A	A	C	A
Słupno (2)	0,257	A	A	A	A	A
Grodzisk Mazowiecki (3)	0,254	A	A	A	A	A
Nowy Dwór Mazowiecki (1)	0,254	A	A	A	A	A
Sulejówek (1)	0,254	A	A	A	B	A
Marki (1)	0,253	A	A	A	A	A
Garwolin (1)	0,252	A	A	A	B	A
Nieporęt (2)	0,246	A	A	A	A	A
Kobyłka (1)	0,246	A	A	A	B	A
Radzymin (3)	0,245	A	A	A	A	A
Ostrów Mazowiecka (1)	0,244	A	A	A	A	A
Serock (3)	0,242	A	A	A	A	A
Łomianki (3)	0,242	A	A	A	A	A
Kozienice (3)	0,242	A	A	A	B	A
Tarczyn (3)	0,241	A	A	A	A	B

Izabelin (2)	0,241	A	A	A	A	A
Józefów (1)	0,237	A	A	A	A	A
Wyszków (3)	0,237	A	A	A	A	A
Maków Mazowiecki (1)	0,237	A	A	A	C	B
Otwock (1)	0,236	A	A	A	A	A
Wołomin (3)	0,234	A	A	B	D	A
Błonie (3)	0,232	A	A	A	C	A
Mława (1)	0,231	A	A	A	C	A
Sokołów Podlaski (1)	0,228	A	A	B	C	A
Grójec (3)	0,228	A	A	A	A	A
Czosnów (2)	0,227	A	A	B	A	B
Zielonka (1)	0,226	A	B	B	A	A
Brwinów (3)	0,225	A	A	A	B	A
Sochaczew (1)	0,222	B	A	A	B	A
Wieliszew (2)	0,221	B	A	B	B	B
Halinów (3)	0,220	B	A	A	B	B
Białobrzegi (3)	0,220	B	B	B	C	B
Jaktorów (2)	0,220	B	B	B	D	B
Sierpc (1)	0,215	B	B	B	D	B
Siedlce (2)	0,211	B	B	B	B	C
Węgrów (1)	0,211	B	B	C	C	B
Gostynin (1)	0,210	B	B	B	C	B
Garwolin (2)	0,209	B	B	D	D	B
Przasnysz (1)	0,208	B	B	C	B	B
Góra Kalwaria (3)	0,208	B	B	C	B	B
Rzekuń (2)	0,206	B	B	B	B	C
Kołbiel (2)	0,206	B	B	B	C	C
Stara Biała (2)	0,205	B	B	C	C	C
Różan (3)	0,203	B	B	B	B	C
Radziejowice (2)	0,203	B	B	B	A	C

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).