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Report on investment attractiveness of Masovia voivodship and assessment of its investment potential

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INNOVATIVE ECONOMY
NATIONAL COHESION STRATEGY

EUROPEAN UNION

Contents

Introduction

The investment attractiveness of Masovia voivodship should be looked on from various points of view in line with investors' aims and objectives as well as the specificity of a particular investment. Consequently, investment attractiveness evaluation requires a complex overview and reference to its various aspects.

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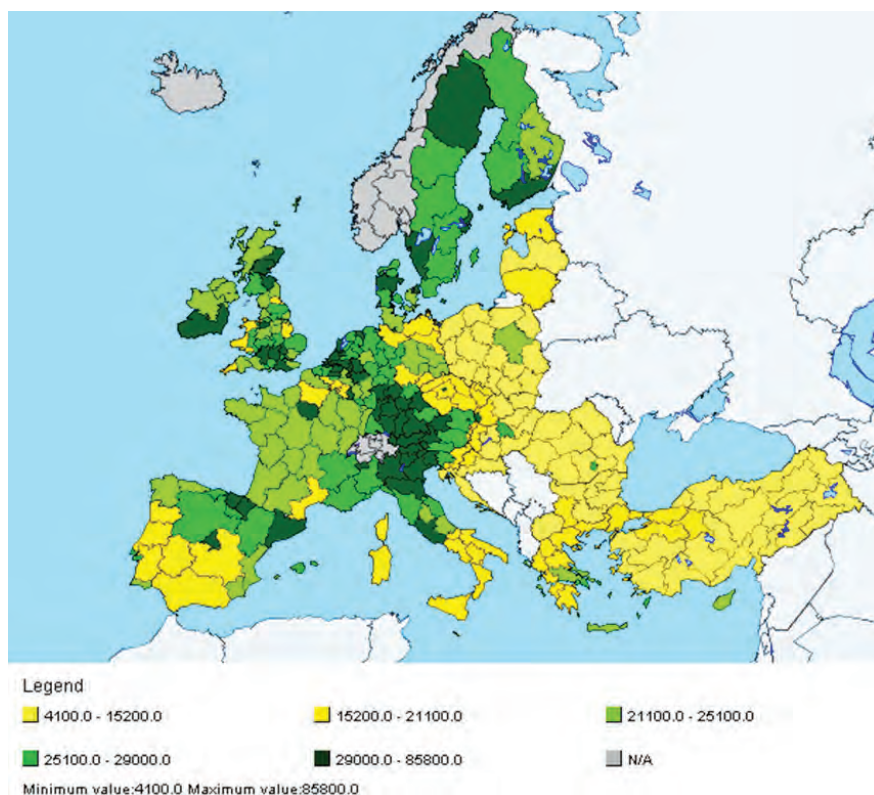
Figure 1: Gross domestic product per capita by NUTS 2 regions in 2008

On the assumption that we consider investment attractiveness potentially and through real investors' decisions as well as their implications for the management of various kinds of capital (human capital, fixed assets and financial capital), we will divide our considerations about investment attractiveness into three sections, i.e. determinants of investment attractiveness, attractiveness evaluation and practical recommendations for the territorial self-government entities and investor assistance institutions.

Determinants of investment attractiveness of Masovia voivodship

Central location

The investment attractiveness of Masovia voivodship is influenced to the greatest extent by **Warsaw and its suburban area**. The functions of the capital, huge demographic and economic potential as well as favourable geographic location make Masovia the heart of Poland where the most important processes for the Polish economy take place. Therefore, the perception of Poland abroad exerts significant influence on the image of Masovia on the international scene. The dynamics of economic growth, huge internal market in comparison with Central and Central-Eastern Europe, significant well-qualified and efficient human resources as well as economic stability set foundations for a good image of Masovia as a region representing our country in international capital flows.

Masovia is a region characterised by an **exceptionally high foreign capital absorption** which contributed to a relatively quick adaptation of global standards of organisational culture conceived in multinational companies in Masovia, in particular in its business centre.

Poland's accession to the EU as well as the coming into force of Treaty of Schengen made Masovia, a region with the greatest airport in Poland and one of the greatest **transport junction point** in Poland, a well-known, frequently visited and acclaimed destination among foreign tourists, including business tourists.

Figure 2: Transport connections

Investment attractiveness is also influenced by the high dynamics of development in comparison with other EU regions as well as related to its investment outlays absorption. On the basis of the data of gross fixed capital formation we can state that Masovia voivodship holds a lead in terms of creating a competitive economy over the entire European Union with exception to only Bucharest, which ranks better.

Chart 1. Shares of the market of investments into fixed assets broken down by selected European regions in 2004-2007

Regions	2004	2005	2006	2007	Change of competitive rank, years 2004-2007
Bucharest-Ilfov	0,30%	0,51%	0,61%	0,93%	0,64%
Mazowieckie [Masovian]	**0,70%**	**0,80%**	**0,85%**	**0,99%**	**0,29%**
Southern Sweden	1,65%	1,73%	1,78%	1,85%	0,20%
Crete	0,38%	0,55%	0,47%	0,57%	0,19%
Prague	0,54%	0,55%	0,59%	0,73%	0,19%
Śląskie [Silesian]	0,36%	0,40%	0,47%	0,55%	0,19%
Southern Denmark	0,59%	0,69%	0,81%	0,78%	0,19%
Southern and Eastern Ireland	2,35%	2,62%	2,66%	2,54%	0,18%
Sachsen-Anhalt [Saxony-Anhalt]	0,84%	0,74%	0,66%	0,66%	-0,18%
Oberbayern [Upper Bavaria]	3,14%	2,92%	3,57%	2,94%	-0,20%
Emilia-Romagna	2,12%	2,09%	2,08%	1,90%	-0,21%
Veneto	2,43%	2,43%	2,33%	2,19%	-0,24%
Niedersachsen [Lower Saxony]	2,90%	2,63%	2,60%	2,59%	-0,31%
Nordrhein-Westfallen [North Rhine-Westphalia]	6,28%	6,47%	5,95%	5,93%	-0,34%
Baden-Württemberg	4,92%	4,53%	4,69%	4,56%	-0,36%
Piemonte [Piedmont]	2,13%	2,07%	1,95%	1,76%	-0,36%

Note: The market share has been calculated on the basis of the data on gross fixed capital formation for the period 2004 – 2007, no more up-to-date data available.
For the lack of data the United Kingdom, France, Spain and Cyprus were skipped when calculating the competitive rank.
Sources: Authors' own calculations based on the Eurostat data.

Potentials

An important factor of investment attractiveness of Masovia voivodship is its huge investment potential. It is comprised of human and social capital, natural resources, technical and social infrastructure and market potential.

Masovian voivodship as the largest one in terms of population and total area distinguishes itself through particularly high potential. Some of the human, natural and capital resources exceed the expected values. Particularly huge and valuable are the following resources:

– **human resources** made up of a society of more than 3 million people who create an attractive market, which allows Masovia to generate economies of scale and demonstrate high immunity to a fluctuating performance of international markets,

- the largest concentration of higher **education** institutions and vocational secondary schools in Poland with diverse educational offer, which in turn is reflected in particularly huge and diversified in terms of professional qualifications human resources,
- the greatest concentration of **investor assistance** and **public institutions** which is important for knowledge-intensive sectors which are vital for a contemporary stage of development of post-industrial economy,
- access to **infrastructural systems**, both domestic and international; particularly important is the location of an airport in Warsaw and the presence of a transport junction point of domestic and international meaning,
- the presence of numerous **companies** which not only create the market of consumer and investment goods but are also potential business partners (not only competitors), numerous companies also contribute to the creation of fixed assets which are particularly important for microenterprises which do not have their own real estate and other fixed assets in the initial stage of development.

Despite the lack of economically feasible mineral resources Masovian voivodship distinguishes itself through the **base of renewable resources**. It refers to particularly favourable conditions of the development of food industry (the manufacture of meat, milk and dairy products, fruit and vegetables as well as poultry). The development of agricultural production gives also opportunities of the development of renewable energy production through biogas plants.

An important factor influencing the attractiveness of Masovia is a **meticulously prepared investment offer and professional investor assistance**. In this field a significant role of the market-oriented management of gminas and subjecting investment areas to certification or other quality-support procedures, e.g. including a particular area in the database run by the Polish Information and Foreign Investment Agency. State aid has a relatively low meaning for investment attractiveness. Its beneficiaries are quite often entrepreneurs in the region endowed with significant location-specific advantages resulting from the achieved level of economic development. Special economic zones and EU-subsidised projects are a source of additional benefits for investors but they fail to give significant help to the less developed areas.

Evaluation of investment attractiveness of Masovia and its regions

Leaders position

Masovia voivodship is an unquestionable leader in terms of location-specific advantages among other Polish voivodships, which is reflected not only in its rank of potential investment attractiveness for the regional economy as a whole but also in the highest ranks for industrial manufacturing both capital- and labour-intensive as well as trade and repairs, tourism and gastronomy and modern business services (including BPO). As the only voivodship in Poland it ranked highest

both in terms of potential and real investment attractiveness, the latter measured through the economic effect of investments – see Figure 3, Figure 4 and Figure 5.

What should be stressed is the fact that Masovia voivodship as the only voivodship in Poland ranks best in terms of investment attractiveness in every aspect considered.

Masovia voivodship is also unparalleled in terms of competitiveness and market potential. It applies particularly strongly to Warsaw, which holds the lead over other Poland's and Masovia's subregions – see Figure 8.

Figure 3. Potential attractiveness of Masovian voivodship in comparison to Polish voivodships broken down by the main sections of national economy in 2009
Note: The number 6 represents the highest rank 'A', 5 – a high rank 'B', 4 – a relatively high rank C, 3 – a relatively low rank D, 2 – a low rank E and 1 – a very low rank F. The colours represents the sections 'green' – capital intensive industry, 'red' – work intensive industry, 'blue' – trade and services, 'violet' – tourism, 'rose' – professional, research and technical activities
Sources: Authors' own materials.

According to the figure above Masovia voivodship has definitely the highest share of domestic economy which manifests itself in the voivoship's highest share in Poland's GDP (ca. 21%). Masovia's high share in is reflected in accumulation and consumption, and consequently in the consumption demand of the population and in the investment demand of enterprises. Masovia is an unquestionable leader as far as investment attractiveness goes.
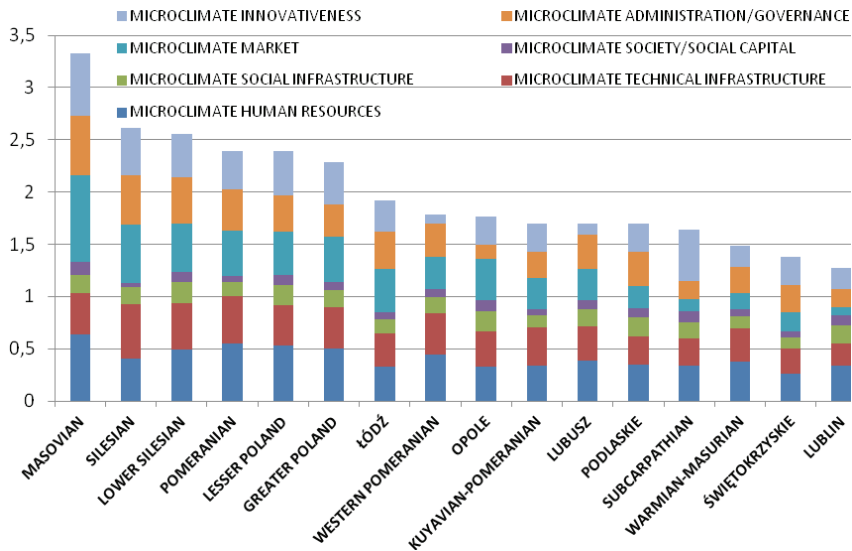
Figure 4. Potential investment attractiveness of Masovian voivodship in comparison with Polish voivodships in 2009 – structural presentation
Source: Authors' own materials.

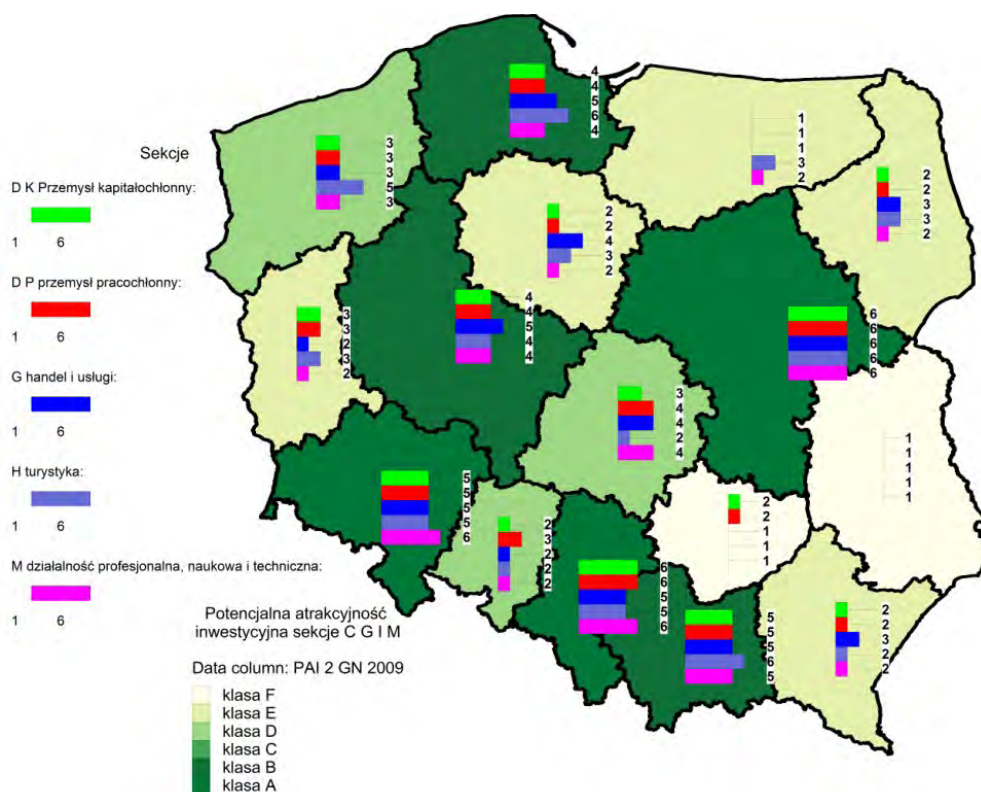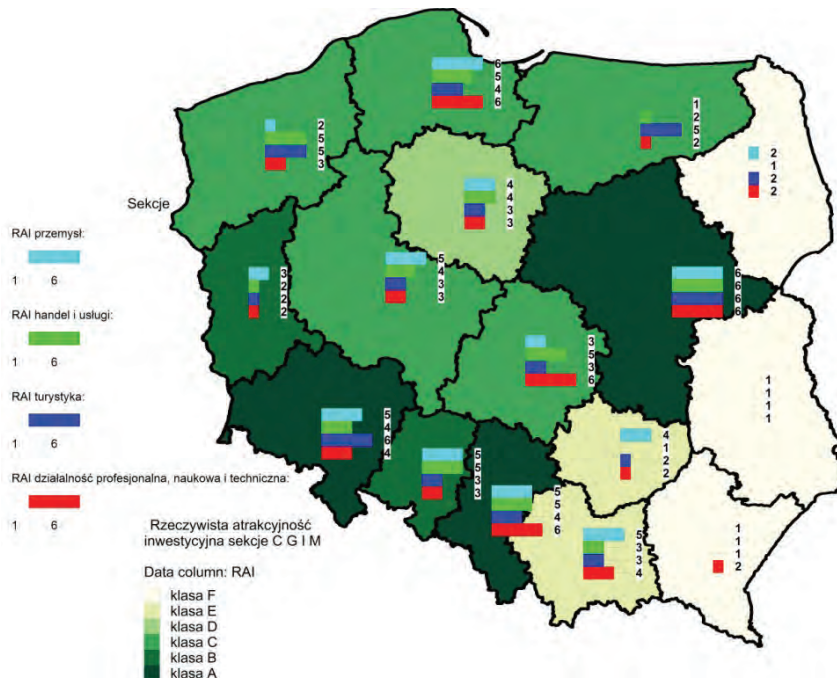*Figure 5. Real investment attractiveness of Masovia voivodship in comparison with Polish voivodships broken down by the main sections of national economy in 2009*
Note: The number 6 represents the highest rank 'A', 5 – a high rank 'B', 4 – a relatively high rank C, 3 – a relatively low rank D, 2 – a low rank E and 1 – a very low rank F. The colours represents 'blue' – industry, 'green' – trade and services, 'dark blue' – tourism, 'red' – professional, research and technical activities.
Sources: Authors' own materials.
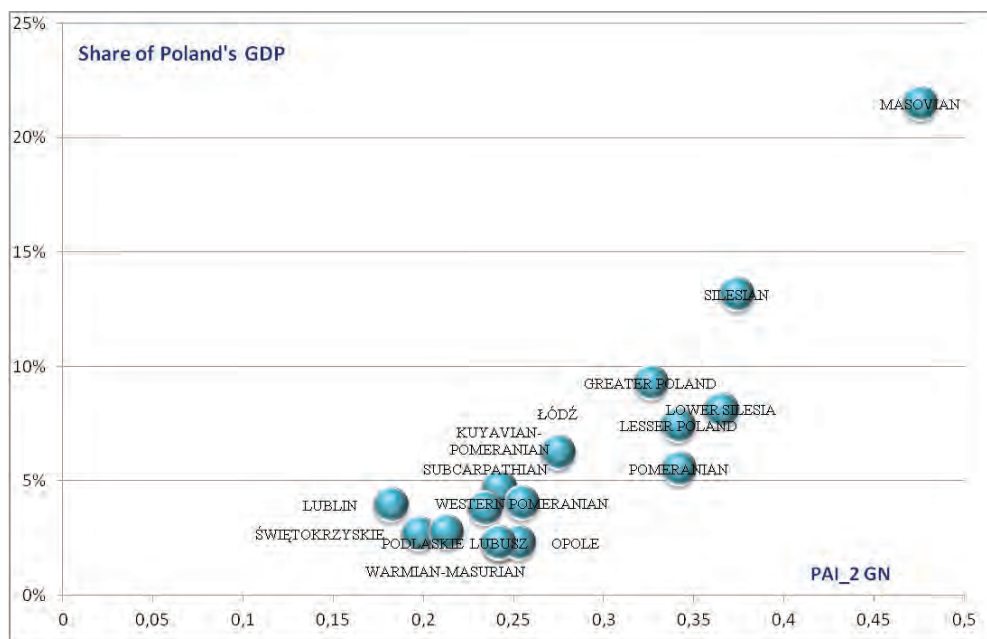
Figure 6. Market potential of Poland's voivodships and their investment attractiveness in 2009
Sources: Authors' own materials based on the Bank of Regional Data and authors' own calculations.

Voivodship's attractiveness and market potential are strongly diversified. Warsaw has a particularly big potential. Warsaw subregion holds the lead both in terms of market potential demonstrated by the share in Poland's economy (13% of GDP of the whole country) and in terms of location-specific advantages (see Figure 7).

Warsaw holds the unquestionable lead over other large cities of Poland both in terms of their economic meaning and their location-specific advantages. At the same time Masovia seems to be an internally diversified region in terms of market potential. Market potential and investment attractiveness decrease with the distance from Warsaw. Subregions Warsaw West and Warsaw East have the greatest market potential whereas subregions Ciechanów-Płock and Radom demonstrate some smaller potential. Despite these disparities all the regions of Masovia have relatively big potential, bigger that their location-specific advantages would suggest as economies of scale can be generated because of a relatively high domestic demand.

Masovian voivodship is an unquestionable leader on the investment market. This rank is reflected in a substantial advantage of Masovia on the domestic investment market. Masovian voivodship makes up 21% of country's investment outlays, and in reference to the R&D sector as much as one third.

This conclusion is confirmed by the amount of foreign capital in the companies with foreign capital participation. Masovian voivodship concentrates more than 50% of the equity of companies with foreign capital participation, which is unparalleled among Polish voivodships. It applies to both domestic and foreign equity in the companies of this kind. This confirms the primary position of Masovia voivodship on investors' map of Poland.
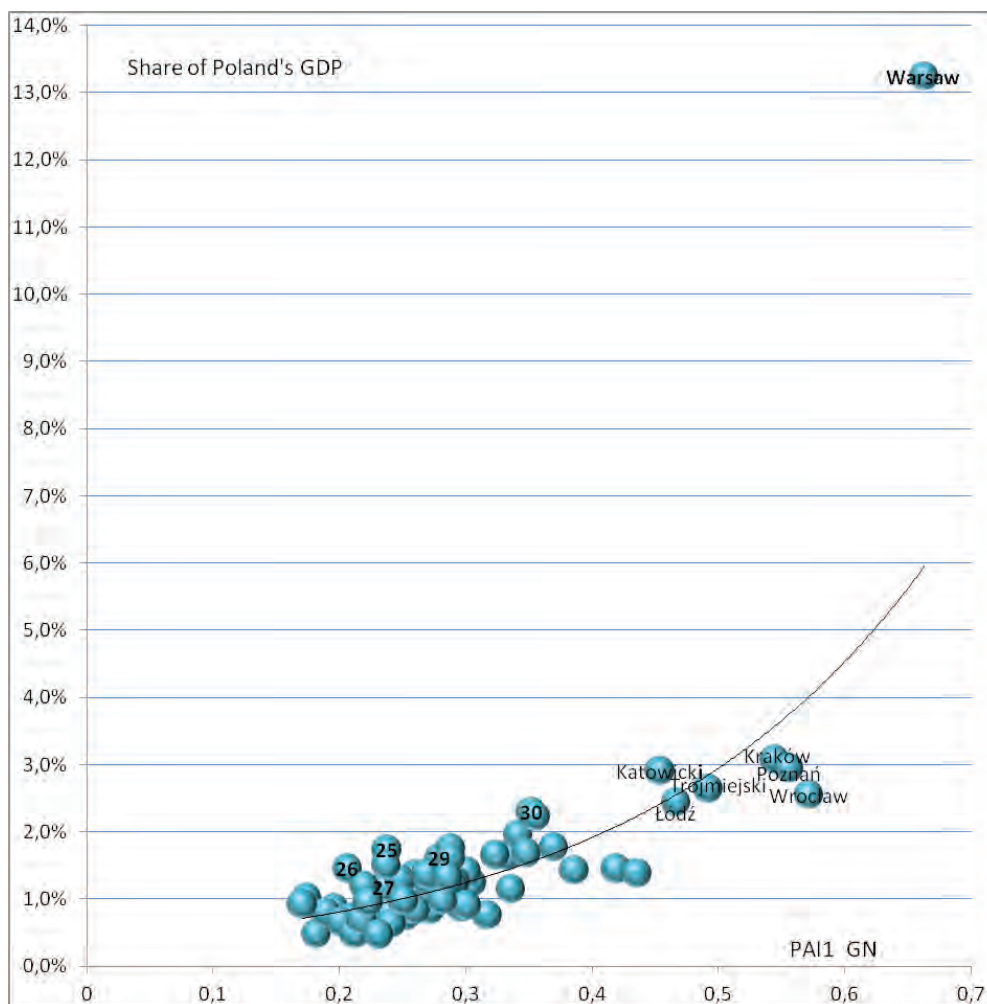
Figure 7. Market potential of Poland's subregions and their investment attractiveness in 2009
Note: 25 – Ciechanów-Płock subregion, 26 – Ostrołeka-Siedlce subregion, 27 – Radom subregion, 29 – Warsaw East subregion (warszawski wschodni), 30 – Warsaw West subregion (warszawski zachodni).
Source: Authors' own materials.

Among poviats of Mazovia the following poviats stand out mostly: Warsaw (capital city), Warszawa, Ostrołęka (city), Siedlce (city), Płock (city), Piaseczno, Radom (city), Pruszków and Warsaw West (class A), Grodzisk and Legionowo (class B) as well as Otwock and Wołomin (class C). They are highly urbanised areas belonging to the agglomeration of Warsaw and former seats of regional (voivodship) authorities in the period 1975-1989 – see Figure 6.

Consequently, the **gminas (communes) belonging to Masovia's urban agglomerations definitely distinguish themselves on the map of investment attractiveness** of our region. Warsaw is the most attractive one both in Masovia in the whole of Poland, which is confirmed by the measurements of potential investment attractiveness on subregional, poviat and gmina (com-
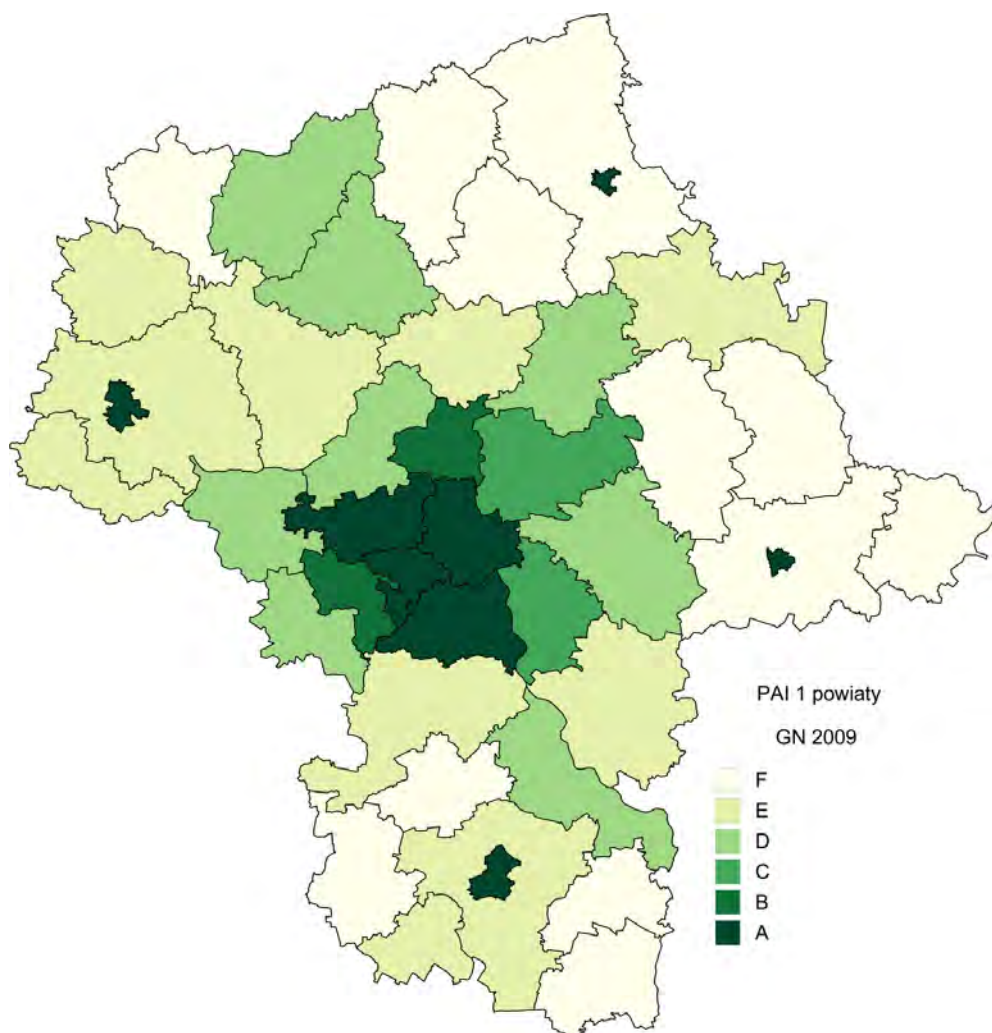
Figure 8. Potential investment attractiveness of poviats of Masovian voivodship in 2009
Source: Authors' own materials.

munal) scales. The investment attractiveness of Masovia shows a diminishing trend related to the growing distance from Warsaw.

To the most attractive gminas (class A) except for Warsaw belong the gminas constituting the Warsaw's suburban zone. Futhermore, former seats of regional (voivodship) authorities distinguish themselves: Siedlce, Ostrołęka, Radom, Płock i Ciechanów – see Figure 7.

Moreover, thanks to previously made industrial investments the following industrial centres are characterised by valuable universal location-specific advantages: Pionki, Sokołów Podlaski i Kozienice, Góra Kalwaria.

Attractiveness of particular regions is strongly influenced by location in view of communications, especially location close to state and regional roads. Location is a particularly important
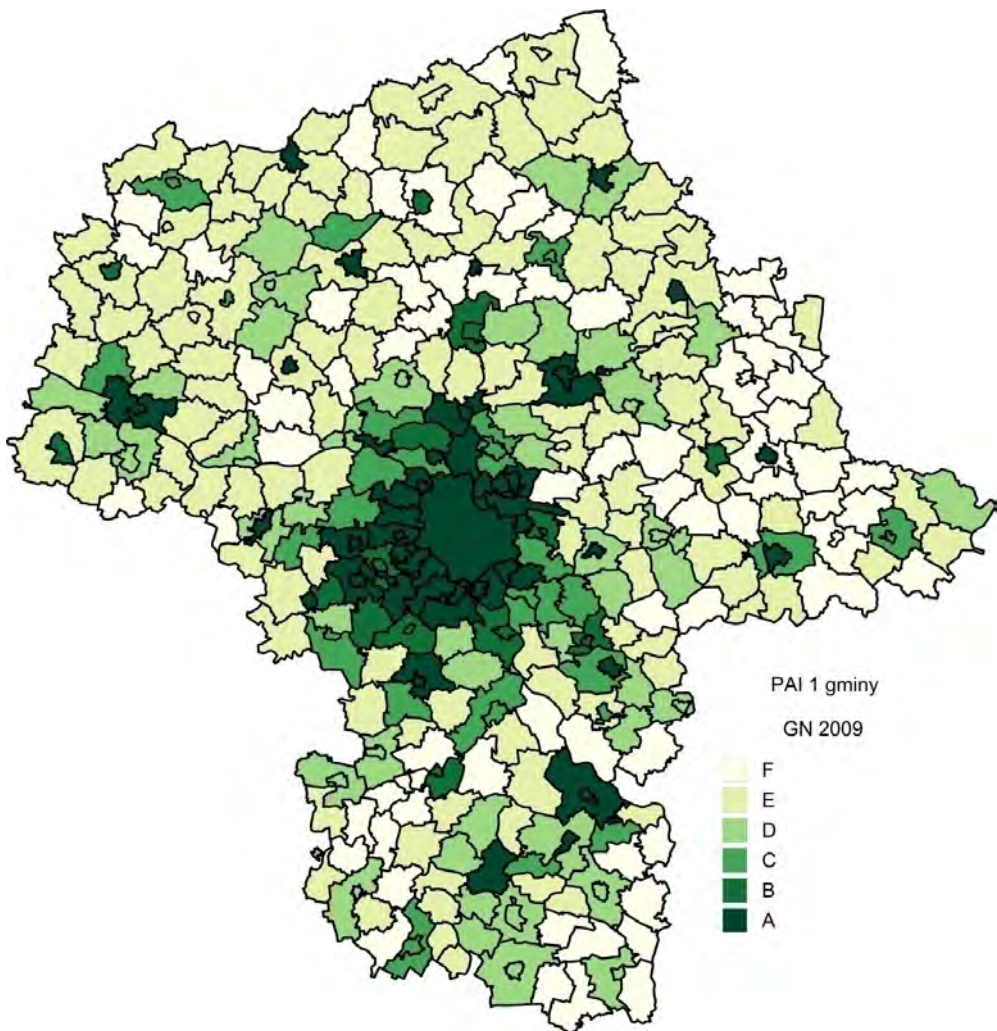
Figure 9. Potential attractiveness of gminas (communes) of Masovian voivodship in 2009
Source: Auhors' own materials.

factor influencing investment attractiveness. This factor influences not only time and cost of trans-
fer of goods, people and information. This factor influenced quite significantly the improvement
of investment attractiveness of **cities and towns situated in the transport junction point
of regional or local importance**. Apart from Warsaw, which is the most important transport
junction point, the benefits of location favourable in terms of transport led to the high investment
attractiveness of such gminas (communes) as: Sokołów Podlaski, Ostrów Mazowiecka, Płońsk i
Wyszków.

The regions which were successful thanks to creating an attractive investment offer and the
market-oriented management of the gmina also found themselves in the highest class of invest-
ment attractiveness. A shining example particularly worth repeating is Lesznowola gmina, which

has received the title 'Gmina Fairplay' many a time and in terms of foreign capital absorption is in the second place in the voivodship (first position – Warsaw).

Diversification

Masovia is a region characterised by **substantial internal contrast**s. Apart from highly attractive areas there are also gminas and poviats which belong to the least attractive ones in the whole country. These are chiefly rural areas in the former voivodships of Radom, Ostrołęka and Siedlce. These areas are usually burdened with genetically complex long-lasting developmental inhibitions. Among them there are both underdeveloped rural areas which preserve their agricultural character up till now (e.g. Kurpie and Southern Podlasie) and mid-developed previously industrialised areas which lost their impetus and are now plagued by structural unemployment (the former Belf of Radom).

Investment attractiveness of such areas can be improved through state aid in the form of subsidies for territorial self-government entities, entrepreneurs and citizens, e.g. educational grants. **Investments made within the framework of structural aid of the European Union**
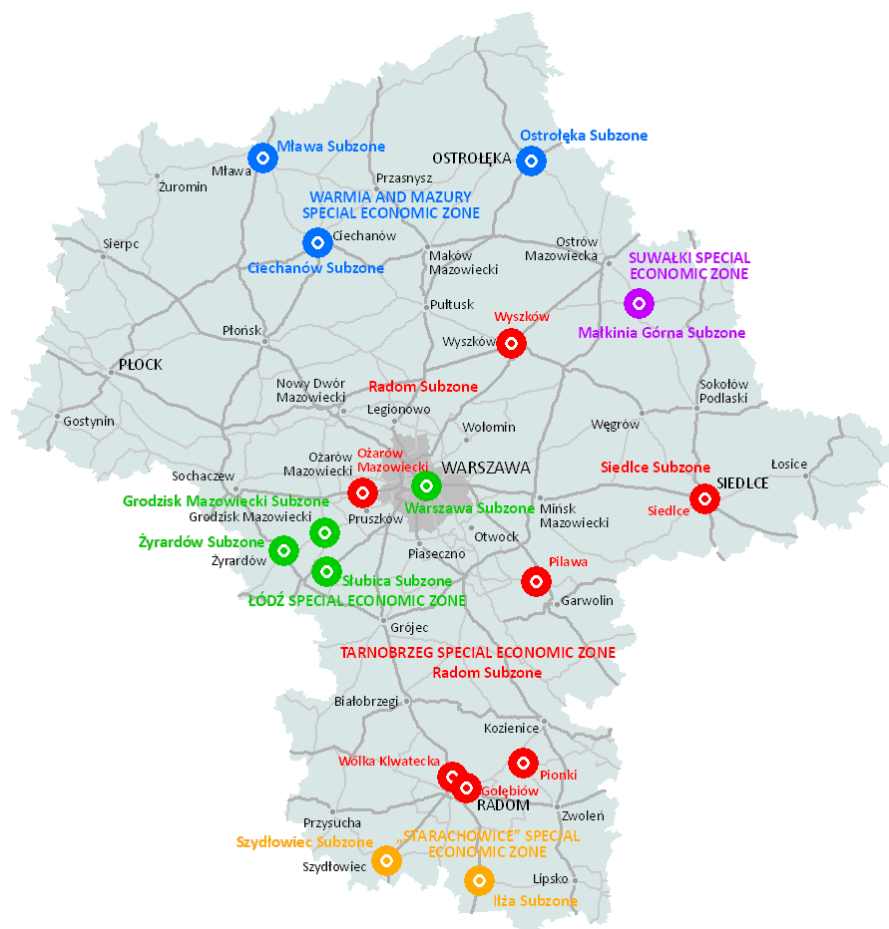
Figure 10: Special Economic Zones in Mazovia voivodship

failed to influence the improvement of investment attractiveness of the least developed regions of Masovia in a significant way. This is due to difficulties in earmarking the self-government own financial resources for the required joint financing of EU-subsidised projects and difficulties in predicting the self-government future income.

Special economic zones
State aid in the form of special economic zones has not influenced the investment attractiveness of Masovia in a significant way either. Locations chosen by investors operating in special economic zones are usually characterized by well-prepared investment areas and convenient general location, i.e. location considered for a particular gmina, poviat or region as a whole – see Figures 11 and 12.

Special economic zones have contributed to the strengthening of the advantages of regions with industrial traditions and/or characterised by a convenient location in
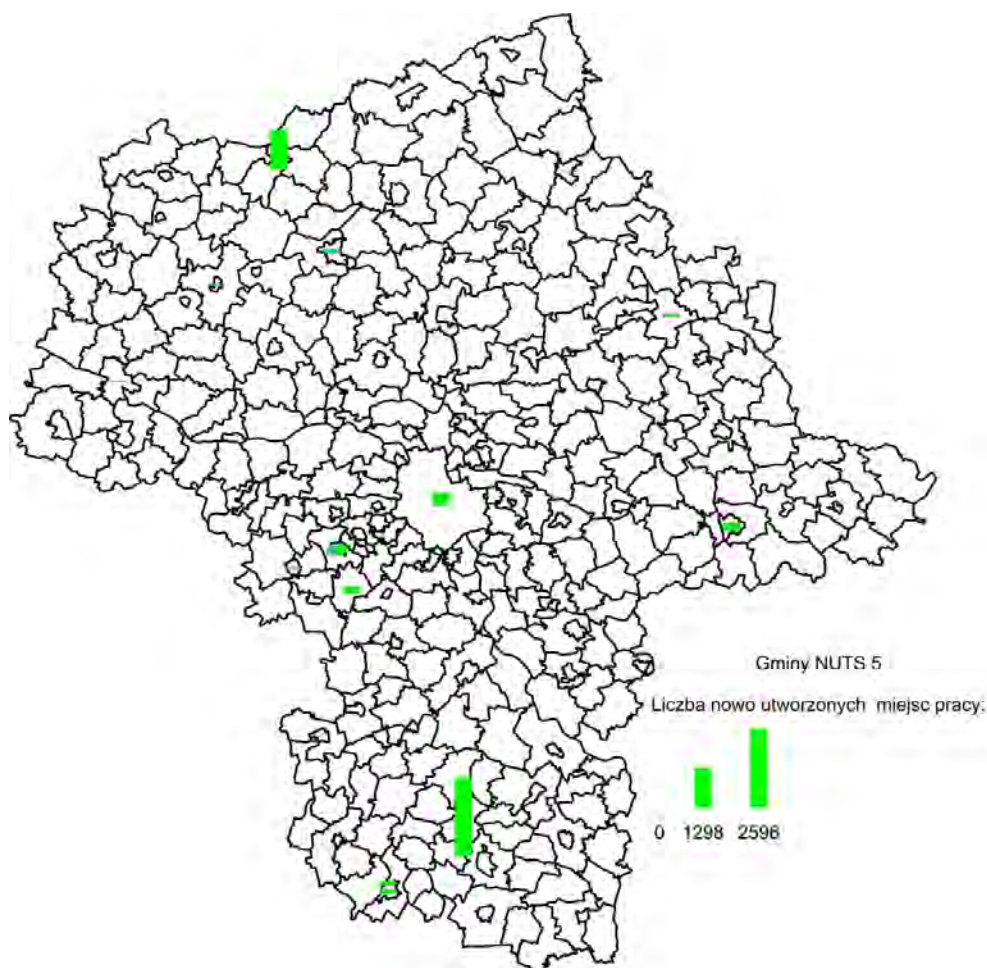
Figure 11. The effects of Special Economic Zones in Masovia – newly created workplaces as of the end of 2010
Source: Authors' own materials.

terms of transport. This aspect of attractiveness is reflected in high investment attractiveness ranks of Radom, Mława and Ostrołęka as well as in the inflow of investment into special economic zones.

Recommended sectors and trends

The high investment attractiveness of Masovia and its individual territorial self-government entities can be maintained through preparing investment offers in line with the site requirements of the sectors considered progressive on the basis of an analysis of economic performance and market prospects. Given the existent specialities in the manufacturing and services, companies' competitiveness and their production capacities **investments in the progressive sectors of**
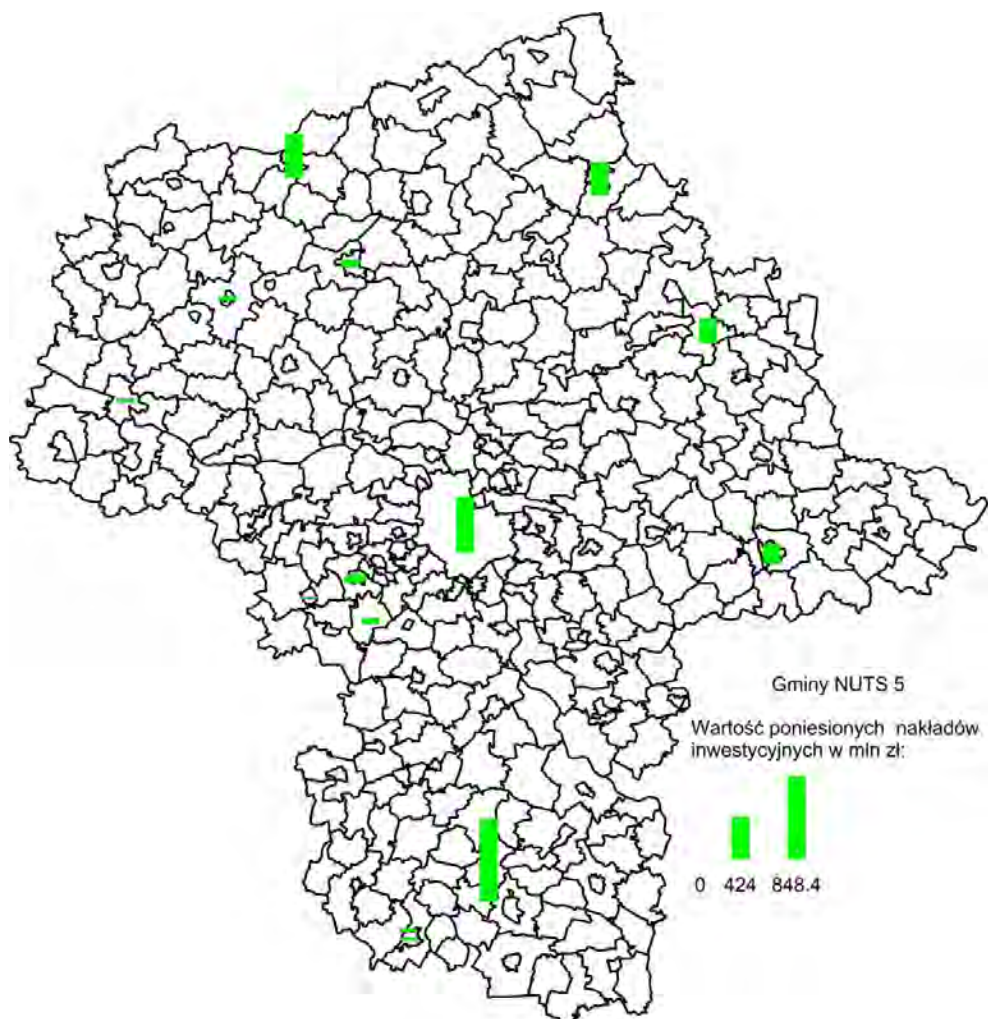
Figure 12. The effects of Special Economic Zones in Masovia – accumulated investment outlays in PLN mln as of the end of 2010
Source: Authors' own materials.

the future should be recommended**. The following sectors can be regarded as such: bio-tech industry**, **automobile industry**, **aviation**, **the manufacture of food and beverages as well as BPO.**

Investment which will change the image of Masovia in the nearest future should also be mentioned. From this point of view one should draw attention to investments in the form of **new highways and expressways as well as modernisation of railways** allowing to expedite the transport on main routes linking Masovia with seaports and Germany and Russia. Construction plans of **two new airports** in Modlin and Radom-Sadków are also important.

Practical recommendations for territorial self-government entities

The investment attractiveness of Masovia voivodship and its poviats and gminas depends not only on its current investment potential but also on the investments made by the self-government as well as private investors either now or planned in the future. To a large extent it can be improved by the wider than before **application of public-private partnership**.

Investors' decisions are not only influenced by objective characteristics of a particular area and local and regional surroundings but only their subjective evaluation of an area and/or a particular investment offer. Therefore, **professional investor assistance** in the territorial self-government entitities is vitally important ans so is satisfaction with the local administration's services to investors and entrepreneurs already operating in a particular territorial self-government entity or going to run a direct investment. What is more, the importance of personal factor should not be underestimated. Investor's place of origin or residence positively influences the evaluation of a particular investment offer.

Investment decisions are constantly more influenced by the possibility of respecting standards and cultural norms of investor's home country/region. Therefore in the course of site selection the standard of living of the population, in particular **access to modern social infrastructure** (e.g. access to broadband Internet, golf courses, water parks, cycling paths, entertainment and cultural centres), and the openness of the local society to multiculturalism are becoming increasingly important.

By virtue of the importance of the costs of basic infrastructure (water, power and gas supply networks, drainage) for the investment process cooperation with other gminas (poviats) is a very important factor of investment attractiveness. It is worth recommending taking up **joint initiatives of communal unions in infrastructural investments**, in particular when it is necessary to achieve the coherence of infrastructural systems (e.g. gminas located along the same state road, the same river or basin) or conducive to creating a joint marketable product (e.g. a tourist product).

Supporting entrepreneurship is highly desirable in territorial self-government entities. The base of resources represented by renewable sources of energy (in particular for biogas plants) and raw materials for the manufacture of food and beverages (the manufacture of milk and dairy products, meat as well as fruit and vegetables) is conducive to it. Masovia's numerous higher edu-

cation institutions train well-prepared human resources. Particularly significant human resources are educated in the professions related to business services, which creates favourable conditions for the development of BPO and individual entrepreneurship with an aid of distance job.

These directions of the development of entrepreneurship can be a means of achieving a success not only in the economically most developed regions of Masovia but also in peripheric areas which are predominantly agricultural or dominated by traditional services. Tourist advantages and the proximity of a large market of Warsaw agglomeration also give great opportunities of the development of tourist entrepreneurship.

In many gminas and poviats of Masovia **stronger support for small business** in the form of business incubators, business counselling and consulting as well as state aid is necessary, in particular support targetting secondary school and college/university graduates. It is particularly important in the areas with **negative population growth** where the ageing of population is becoming an increasingly stronger developmental inhibition hampering the inflow of investments.

The role of the self-government is to determine **preferred paths of investment development** in accordance with the strategy of local and regional development, competititve advantages and competitive potential. In recent times investors have demonstrated interest in BPO, biogas plants and investments in the manufacture of food and beverages, machines and electronics. Thus it is worth creating specialist marketable products when the features of investment areas offered converge with the site requirements of a given inwestor.

The inflow of direct investments shows that after a period of a very strong concentration of foreign investments in Warsaw and its suburban area investors' interest in other areas is on the increase. This is a chance not only to maintain the inflow of investments to Warsaw and its suburban area but also to areas which used to be less popular with investors. Efforts to improve investment attractiveness of selected investment areas need to be made in order to allow gminas characterized by lower investment attractiveness to attract investors. An excellent example of such a measure is 'Białe kruki' (White Ravens) economic zone created in Olszewo-Borki gmina.

The presence of investors from such countries as France, the Netherlands, Germany, the United States is particularly noticeable in Masovia voivodship. Investors from China and India have recently taken interest in investing in Masovia. Therefore it is necessary to intensify marketing measures targeting the investors from the aforesaid countries. **The presence of entrepreneurs already operating in a given territorial self-government entity and their satisfaction with the effects of business activity is highly opinion-making.**

An opportunity of the inflow of investments is **creating clusters and cluster initiatives**. The territorial self-government may act as an organiser of the clusters and influence the stimulation of local development through making use of local human, social, natural and real capital in the form of e.g. gmina-owned real estate. As clusters are commonly regarded as an efficient instrument of local and regional development in the developed countries, their creation in Masovia is an attractive way to the success of gminas characterised by a different level of investment attractiveness. Six clusters operate now in Masovia two of which are connected with aviation and two with IT. Only two of them are connected to traditional branches (construction, printing and advertising).

Given investment potential the creation of a food cluster based on the manufacture of eco-friendly food and traditional recipes of meat, dairy and bakery products from Kurpie region can be recommended. The space cluster in Masovia also deserves support (http://www.kosmos.gov.pl/).

Attracting foreign small and medium enterprises or setting up small joint ventures can be a way to success. Small enterprises are more and more often emerging as players on the market of international investments. It results from the fact that smaller companies are in a position of reacting more quickly to fluctuating performance of international market and the payback period is shorter than in case of larger investments. Small companies are more flexible than large ones and are easier to restructure.

Partner for your business in Mazovia

Mazovia Development Agency Plc is local authority owned company, which carries out projects of an innovative character that support regional development. An Investor and Export Service Centre within the structure of the Agency is the place of first contact for foreign entrepreneurs who are interested in investing in the region as well as in finding a trade partner amid Mazovian entrepreneurs to act a joint project.

Main tasks in the field of Investors assistance:
– Servicing of national and foreign investors, interested in undertaking economic activities in the Mazovia Region
– Providing information on economic and legal investing conditions in the Mazovia Region
– Assistance in selection of investment locations
– Creation and promotion of the Mazovian investment offers during fairs, conferences, seminars, workshops as well as other national and international affairs of an economic character

Since Mazovia Development Agency Plc is a non-profit organisation all our services are free of charge.

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Appendices

Chart 1. Potential investment attractiveness of gminas (communes) of Masovian voivodship for the national economy in 2009

No.	Gminas (communes)[1]	Investment attractiveness for the national economy	Investment attractiveness for the national economy	Microclimate Human Resources	Microclimate Technical Infrastructure	Microclimate Social Infrastructure	Microclimate Market	Microclimate Administration/Governance
1.	Warsaw, capital city (1)	0,353	A	C	A	A	A	A
2.	Piastów (1)	0,331	A	E	A	E	A	D
3.	Legionowo (1)	0,330	A	C	A	C	A	A
4.	Mińsk Mazowiecki (1)	0,323	A	B	A	C	A	B
5.	Pruszków (1)	0,320	A	B	A	E	A	C
6.	Płońsk (1)	0,319	A	B	A	A	A	B
7.	Ząbki (1)	0,317	A	A	A	A	A	A
8.	Siedlce (1)	0,316	A	B	A	C	A	B
9.	Ostrołęka (1)	0,311	A	B	A	A	A	A
10.	Lesznowola (2)	0,310	A	A	A	A	A	A
11.	Piaseczno (3)	0,300	A	A	A	A	A	B
12.	Żyrardów (1)	0,300	A	C	A	E	A	D
13.	Radom (1)	0,298	A	C	A	E	A	A
14.	Michałowice (2)	0,296	A	A	A	A	A	B
15.	Pionki (1)	0,295	A	C	A	D	A	A
16.	Milanówek (1)	0,294	A	B	A	A	A	B
17.	Ciechanów (1)	0,290	A	B	A	C	A	E
18.	Garwolin (1)	0,290	A	A	A	A	A	D
19.	Podkowa Leśna (1)	0,290	A	E	A	A	A	A
20.	Płock (1)	0,287	A	B	A	D	A	A
21.	Raszyn (2)	0,279	A	A	A	A	A	A
22.	Nadarzyn (2)	0,278	A	A	A	A	A	A
23.	Konstancin-Jeziorna (3)	0,273	A	B	B	A	A	A
24.	Stare Babice (2)	0,271	A	A	A	A	A	A
25.	Sulejówek (1)	0,271	A	C	A	B	A	B
26.	Mława (1)	0,268	A	B	A	C	A	E
27.	Ożarów Mazowiecki (3)	0,263	A	A	A	C	A	B
28.	Błonie (3)	0,258	A	B	A	C	A	C

29.	Grodzisk Mazowiecki (3)	0,257	A	A	A	A	A	B
30.	Marki (1)	0,257	A	A	B	A	A	B
31.	Nowy Dwór Mazowiecki (1)	0,255	A	B	A	C	A	A
32.	Wołomin (3)	0,251	A	B	A	D	A	F
33.	Józefów (1)	0,250	A	A	B	A	A	D
34.	Słupno (2)	0,249	A	A	B	A	A	A
35.	Izabelin (2)	0,247	A	A	B	A	A	C
36.	Kobyłka (1)	0,247	A	A	B	A	A	A
37.	Łomianki (3)	0,246	A	A	C	A	A	D
38.	Sokołów Podlaski (1)	0,246	A	A	B	B	A	D
39.	Wyszków (3)	0,246	A	B	A	C	B	B
40.	Zielonka (1)	0,246	A	D	A	C	A	D
41.	Serock (3)	0,245	A	A	B	A	B	A
42.	Grójec (3)	0,245	A	B	A	D	B	E
43.	Nieporęt (2)	0,243	A	A	C	A	A	A
44.	Otwock (1)	0,242	A	C	B	B	A	B
45.	Kozienice (3)	0,242	A	B	A	C	B	D
46.	Ostrów Mazowiecka (1)	0,242	A	B	B	D	A	B
47.	Maków Mazowiecki (1)	0,237	A	C	B	C	A	A
48.	Sochaczew (1)	0,237	A	C	B	D	A	E
49.	Jaktorów (2)	0,234	B	A	B	C	B	C
50.	Brwinów (3)	0,233	B	A	C	A	A	D
51.	Sierpc (1)	0,232	B	C	B	B	A	D
52.	Przasnysz (1)	0,231	B	B	B	B	A	D
53.	Tarczyn (3)	0,230	B	C	B	D	C	A
54.	Białobrzegi (3)	0,229	B	C	B	C	B	B
55.	Wieliszew (2)	0,223	B	A	C	A	B	B
56.	Węgrów (1)	0,223	B	A	B	C	A	E
57.	Gostynin (1)	0,222	B	C	B	C	A	D
58.	Pilawa (3)	0,220	B	C	C	C	A	E
59.	Halinów (3)	0,217	B	A	C	B	B	C
60.	Pułtusk (3)	0,214	B	B	C	C	B	D
61.	Góra Kalwaria (3)	0,214	B	B	C	D	B	D
62.	Żabia Wola (2)	0,213	B	A	D	A	A	A
63.	Czosnów (2)	0,210	C	A	D	B	A	A
64.	Szydłowiec (3)	0,210	C	D	B	D	C	E
65.	Łaskarzew (1)	0,209	C	C	C	B	C	D
66.	Radzymin (3)	0,209	C	A	D	A	B	A
67.	Karczew (3)	0,207	C	C	C	F	B	E

68.	Siedlce (2)	0,206	C	A	C	E	B	B
69.	Leszno (2)	0,204	C	B	D	A	B	C
70.	Mszczonów (3)	0,203	C	B	C	E	B	D
71.	Raciąż (1)	0,203	C	C	D	A	B	C
72.	Wiązowna (2)	0,203	C	A	D	A	B	D
73.	Celestynów (2)	0,200	C	B	C	E	B	F
74.	Jabłonna (2)	0,200	C	A	E	A	A	D
75.	Garwolin (2)	0,197	C	C	C	C	C	D
76.	Stara Biała (2)	0,196	C	A	D	C	C	E
77.	Jedlnia-Letnisko (2)	0,196	C	B	D	C	B	E
78.	Łosice (3)	0,195	C	D	C	A	C	B
79.	Regimin (2)	0,195	C	D	E	D	A	D
80.	Różan (3)	0,194	C	C	D	B	C	A
81.	Kołbiel (2)	0,193	C	C	C	D	C	B
82.	Belsk Duży (2)	0,192	C	D	D	D	B	F
83.	Teresin (2)	0,191	C	A	D	C	B	D
84.	Warka (3)	0,190	C	C	D	E	B	F
85.	Żuromin (3)	0,190	C	C	D	C	C	E
86.	Garbatka-Letnisko (2)	0,190	C	E	C	D	C	F
87.	Pomiechówek (2)	0,189	C	C	D	E	B	D

Source: Authors' own materials.

Chart 2. Potential investment attractiveness of gminas (communes) of Masovian voivodship for industry in 2009

No.	Gminas (communes)[2]	Investment attractiveness for industry	Investment attractiveness for industry	Microclimate Human Resources	Microclimate Technical Infrastructure	Microclimate Social Infrastructure	Microclimate Market	Microclimate Administration/Governance
1.	Warsaw, capital city (1)	0,329	A	A	A	A	A	A
2.	Legionowo (1)	0,324	A	B	A	B	A	A
3.	Ostrołęka (1)	0,317	A	A	A	A	A	A
4.	Płońsk (1)	0,317	A	A	A	A	A	A
5.	Mińsk Mazowiecki (1)	0,314	A	B	A	C	A	A
6.	Pionki (1)	0,309	A	B	A	B	A	A
7.	Pruszków (1)	0,309	A	B	A	E	A	B
8.	Lesznowola (2)	0,307	A	A	A	D	A	A

9.	Radom (1)	0,304	A	C	A	B	A	C
10.	Garwolin (1)	0,303	A	B	A	A	B	C
11.	Siedlce (1)	0,303	A	A	A	C	A	C
12.	Żyrardów (1)	0,301	A	C	A	D	A	C
13.	Ciechanów (1)	0,297	A	A	A	B	A	D
14.	Raszyn (2)	0,294	A	A	B	A	A	A
15.	Płock (1)	0,294	A	A	A	B	A	B
16.	Piaseczno (3)	0,293	A	A	A	D	A	B
17.	Ożarów Mazowiecki (3)	0,291	A	A	A	D	A	A
18.	Piastów (1)	0,290	A	C	A	D	A	C
19.	Ząbki (1)	0,287	A	A	A	D	A	A
20.	Mława (1)	0,285	A	A	A	B	A	E
21.	Nowy Dwór Mazowiecki (1)	0,281	A	A	A	B	A	A
22.	Grodzisk Mazowiecki (3)	0,278	A	A	A	B	B	B
23.	Wyszków (3)	0,277	A	B	A	B	B	A
24.	Marki (1)	0,277	A	A	A	D	A	A
25.	Konstancin-Jeziorna (3)	0,273	A	B	A	C	A	A
26.	Ostrów Mazowiecka (1)	0,272	A	B	A	C	A	A
27.	Wołomin (3)	0,270	A	B	A	D	A	E
28.	Sokołów Podlaski (1)	0,270	A	A	A	A	A	E
29.	Kozienice (3)	0,269	A	B	A	B	B	D
30.	Józefów (1)	0,269	A	B	A	D	A	C
31.	Grójec (3)	0,266	A	B	A	D	C	E
32.	Milanówek (1)	0,266	A	B	B	D	A	C
33.	Sierpc (1)	0,266	A	B	A	A	A	D
34.	Tarczyn (3)	0,265	A	C	A	E	C	A
35.	Białobrzegi (3)	0,265	A	C	A	D	B	A
36.	Serock (3)	0,265	A	A	A	E	C	A
37.	Sochaczew (1)	0,264	A	B	A	B	A	D
38.	Michałowice (2)	0,263	A	A	B	D	A	B
39.	Wieliszew (2)	0,263	A	A	A	B	B	D
40.	Przasnysz (1)	0,262	A	B	A	A	B	E
41.	Brwinów (3)	0,262	A	A	A	D	A	C
42.	Nadarzyn (2)	0,261	A	A	B	D	A	A
43.	Podkowa Leśna (1)	0,259	A	D	B	A	A	A
44.	Pilawa (3)	0,258	A	C	A	C	A	D
45.	Sulejówek (1)	0,257	A	B	B	D	A	A
46.	Węgrów (1)	0,255	A	A	A	B	B	E
47.	Stare Babice (2)	0,255	A	A	B	E	A	A

48.	Szydłowiec (3)	0,254	A	C	A	B	B	E
49.	Raciąż (1)	0,252	B	C	B	A	A	E
50.	Radzymin (3)	0,252	B	A	B	F	A	A
51.	Gostynin (1)	0,252	B	B	B	C	B	E
52.	Czosnów (2)	0,251	B	A	B	F	A	A
53.	Błonie (3)	0,249	B	B	B	C	B	D
54.	Góra Kalwaria (3)	0,246	B	A	B	E	B	D
55.	Kobyłka (1)	0,246	B	A	C	E	A	A
56.	Karczew (3)	0,245	B	B	B	F	A	E
57.	Maków Mazowiecki (1)	0,245	B	C	C	A	A	A
58.	Mszczonów (3)	0,244	B	B	B	E	B	E
59.	Słupno (2)	0,243	B	A	C	E	B	A
60.	Otwock (1)	0,241	B	C	C	C	A	B
61.	Garwolin (2)	0,239	B	C	B	E	C	C
62.	Stara Biała (2)	0,239	B	B	B	D	C	D
63.	Nieporęt (2)	0,238	B	A	C	F	B	A
64.	Teresin (2)	0,238	B	A	B	D	B	D
65.	Belsk Duży (2)	0,237	B	D	B	E	A	E
66.	Łaskarzew (1)	0,237	B	C	D	A	A	E
67.	Jaktorów (2)	0,237	B	B	C	D	B	C
68.	Łomianki (3)	0,236	B	A	D	E	A	D
69.	Przysucha (3)	0,236	B	D	B	B	C	E
70.	Lipsko (3)	0,235	B	B	C	A	C	E
71.	Izabelin (2)	0,235	B	A	C	C	A	D
72.	Zielonka (1)	0,234	B	D	C	E	A	D
73.	Warka (3)	0,234	B	C	B	E	B	E
74.	Garbatka-Letnisko (2)	0,234	C	E	B	D	C	E
75.	Mińsk Mazowiecki (2)	0,233	C	B	C	F	B	A
76.	Pomiechówek (2)	0,232	C	C	B	F	C	D
77.	Glinojeck (3)	0,230	C	D	C	D	B	D
78.	Halinów (3)	0,230	C	A	D	E	B	A
79.	Sochaczew (2)	0,230	C	A	C	F	A	E
80.	Małkinia Górna (2)	0,228	C	C	C	D	B	C
81.	Żabia Wola (2)	0,224	C	A	E	D	B	A
82.	Pułtusk (3)	0,223	C	B	C	C	B	E
83.	Mogielnica (3)	0,222	C	E	B	E	D	E
84.	Siedlce (2)	0,220	C	A	D	F	C	A
85.	Kołbiel (2)	0,219	C	C	D	F	B	A
86.	Leszno (2)	0,219	C	A	D	B	C	C

No.	Gminas (communes)		Microclimate Human Resources	Microclimate Technical Infrastructure	Microclimate Social Infrastructure	Microclimate Market	Microclimate Administration/Governance
87.	Różan (3)	0,218	C	C	D	C	B	A
88.	Troszyn (2)	0,218	C	E	C	B	D	A
89.	Łosice (3)	0,218	C	C	D	A	D	A
90.	Brudzeń Duży (2)	0,217	C	D	C	E	D	D
91.	Celestynów (2)	0,217	C	B	D	E	A	E
92.	Krasne (2)	0,217	C	E	C	D	F	A
93.	Winnica (2)	0,217	C	D	C	C	E	E
94.	Stanisławów (2)	0,216	C	C	C	E	C	E

Source: Authors' own materials.

Chart 3. Potential investment attractiveness of gminas (communes) of Masovian voivodship for the modern business services in 2009

No.	Gminas (communes)[3]	Investment attractiveness for the modern business services	Investment attractiveness for the modern business services	Microclimate Human Resources	Microclimate Technical Infrastructure	Microclimate Social Infrastructure	Microclimate Market	Microclimate Administration/Governance
1.	Warsaw, capital city (1)	0,361	A	C	A	A	A	A
2.	Legionowo (1)	0,321	A	C	A	C	A	A
3.	Pruszków (1)	0,316	A	C	A	E	A	A
4.	Mińsk Mazowiecki (1)	0,311	A	B	A	D	A	A
5.	Piaseczno (3)	0,305	A	A	A	B	A	A
6.	Lesznowola (2)	0,303	A	A	A	A	A	A
7.	Siedlce (1)	0,300	A	B	A	C	A	A
8.	Płońsk (1)	0,298	A	B	A	C	A	A
9.	Piastów (1)	0,298	A	E	A	E	A	C
10.	Ostrołęka (1)	0,295	A	B	A	A	A	A
11.	Żyrardów (1)	0,290	A	C	A	E	A	D
12.	Radom (1)	0,286	A	C	A	D	A	B
13.	Konstancin-Jeziorna (3)	0,285	A	C	A	A	A	A
14.	Ząbki (1)	0,285	A	A	A	B	A	A
15.	Płock (1)	0,284	A	B	A	D	A	A
16.	Podkowa Leśna (1)	0,281	A	E	B	A	A	A
17.	Garwolin (1)	0,281	A	A	A	A	A	B
18.	Ciechanów (1)	0,279	A	B	A	B	A	E
19.	Michałowice (2)	0,276	A	B	B	A	A	A

20.	Pionki (1)	0,275	A	D	A	D	A	B
21.	Marki (1)	0,267	A	A	A	C	A	A
22.	Milanówek (1)	0,267	A	C	B	B	A	B
23.	Ożarów Mazowiecki (3)	0,266	A	A	A	C	A	A
24.	Józefów (1)	0,265	A	A	A	B	A	A
25.	Mława (1)	0,260	A	B	A	B	A	E
26.	Grodzisk Mazowiecki (3)	0,258	A	A	A	C	A	C
27.	Nowy Dwór Mazowiecki (1)	0,256	A	B	A	D	A	A
28.	Brwinów (3)	0,256	A	A	A	B	A	B
29.	Sokołów Podlaski (1)	0,255	A	A	A	C	A	C
30.	Nadarzyn (2)	0,255	A	A	B	A	A	A
31.	Stare Babice (2)	0,252	A	A	B	A	A	A
32.	Ostrów Mazowiecka (1)	0,250	A	B	A	D	A	B
33.	Raszyn (2)	0,249	A	A	B	A	A	A
34.	Wołomin (3)	0,248	A	B	A	D	A	F
35.	Wyszków (3)	0,248	A	B	A	D	A	B
36.	Sulejówek (1)	0,246	A	C	B	C	A	B
37.	Łomianki (3)	0,246	A	A	D	A	A	B
38.	Kozienice (3)	0,245	A	B	A	C	A	C
39.	Serock (3)	0,245	A	A	A	A	A	A
40.	Sochaczew (1)	0,242	A	C	A	D	A	D
41.	Grójec (3)	0,241	A	B	A	D	B	E
42.	Izabelin (2)	0,240	A	A	C	A	A	A
43.	Przasnysz (1)	0,238	A	B	A	B	A	E
44.	Wieliszew (2)	0,237	A	A	A	B	B	A
45.	Nieporęt (2)	0,237	A	A	C	B	A	A
46.	Węgrów (1)	0,237	A	A	A	C	A	D
47.	Sierpc (1)	0,235	A	C	A	B	A	E
48.	Tarczyn (3)	0,235	A	C	A	E	B	A
49.	Słupno (2)	0,234	A	A	C	A	A	A
50.	Czosnów (2)	0,232	A	A	B	D	A	A
51.	Białobrzegi (3)	0,231	A	C	A	D	C	B
52.	Gostynin (1)	0,229	A	C	B	D	A	E
53.	Błonie (3)	0,229	A	B	B	D	A	A
54.	Zielonka (1)	0,227	A	D	C	B	A	A
55.	Kobyłka (1)	0,227	A	A	C	C	A	A
56.	Otwock (1)	0,225	B	C	C	C	A	B
57.	Radzymin (3)	0,224	B	A	B	D	B	A
58.	Góra Kalwaria (3)	0,222	B	B	B	E	B	D

59.	Karczew (3)	0,220	B	C	B	F	B	C
60.	Szydłowiec (3)	0,214	B	D	A	C	C	E
61.	Pilawa (3)	0,214	B	C	A	D	C	D
62.	Raciąż (1)	0,213	B	C	B	A	C	D
63.	Maków Mazowiecki (1)	0,213	B	C	C	C	A	A
64.	Garwolin (2)	0,212	B	B	B	D	C	D
65.	Mszczonów (3)	0,211	B	B	B	F	C	D
66.	Jabłonna (2)	0,209	B	A	E	B	A	B
67.	Jaktorów (2)	0,207	B	B	C	D	B	C
68.	Pomiechówek (2)	0,206	B	C	B	E	B	D
69.	Teresin (2)	0,206	B	A	B	C	C	C
70.	Stara Biała (2)	0,205	B	A	B	D	C	E
71.	Halinów (3)	0,205	B	A	D	E	A	B
72.	Warka (3)	0,204	C	C	B	E	C	F
73.	Belsk Duży (2)	0,204	C	D	B	E	C	D
74.	Przysucha (3)	0,202	C	D	B	C	C	F
75.	Żabia Wola (2)	0,201	C	A	E	C	A	A
76.	Lipsko (3)	0,199	C	C	C	A	C	D
77.	Leszno (2)	0,198	C	B	D	A	A	A
78.	Pułtusk (3)	0,198	C	B	C	C	B	D
79.	Garbatka-Letnisko (2)	0,196	C	E	B	D	D	F
80.	Prażmów (2)	0,196	C	A	E	D	A	A
81.	Sochaczew (2)	0,194	C	A	C	E	D	C
82.	Wiązowna (2)	0,193	C	A	E	C	B	C
83.	Mińsk Mazowiecki (2)	0,193	C	A	C	F	C	B
84.	Mogielnica (3)	0,192	C	E	B	E	D	D
85.	Celestynów (2)	0,191	C	B	D	E	B	E
86.	Glinojeck (3)	0,190	C	D	C	E	D	D
87.	Łosice (3)	0,190	C	D	D	A	C	B
88.	Winnica (2)	0,189	C	D	C	C	D	D
89.	Małkinia Górna (2)	0,188	C	C	C	C	D	C
90.	Siedlce (2)	0,187	C	A	D	E	C	B
91.	Stanisławów (2)	0,185	C	B	C	F	C	E
92.	Radziejowice (2)	0,185	C	A	E	C	A	A
93.	Jedlnia-Letnisko (2)	0,185	C	B	D	D	B	E
94.	Regimin (2)	0,184	C	D	E	D	A	D

Source: Authors' own materials.