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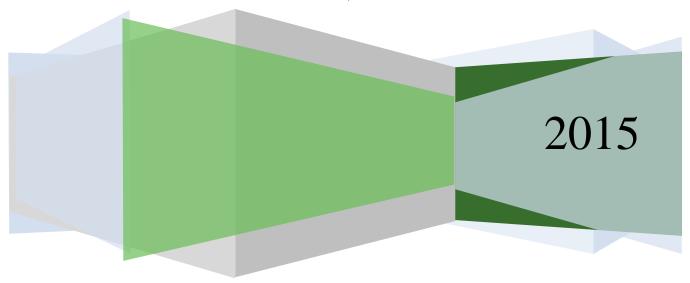


### REGIONAL INVESTMENT ATTRACTIVENESS 2015

### Warmian-Masurian Voivodship

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> Report prepared for the Polish Information and Foreign Investment Agency at the Institute of Enterprise, Warsaw School of Economics Warsaw, December 2015









Polish Information and Foreign Investment Agency (PAIiIZ) is a governmental institution and has been servicing investors since 1992. Its mission is to create a positive image of Poland in the world and increase the inflow of foreign direct investments by encouraging companies to invest in Poland. PAIiIZ is a useful partner for foreign entrepreneurs entering the Polish market. The Agency guides investors through all the essential administrative and legal procedures that involve a project. It also provides rapid

access to complex information relating to legal and business matters regarding investments. Moreover, it helps in finding the appropriate partners and suppliers together.

#### PAIIZ provides free of charge professional advisory services for investors, including:

- investment site selection:
- tailor-made investors visits to Poland;
- information on legal and economic environment;
- data on available investment incentives;
- facilitating contacts with central and local authorities;
- identification of potential suppliers and contractors;
- care of the investors operating in the country, including the reinvestment.

On the website **www.paiz.gov.pl** an investor can find all the necessary information concerning key facts about Poland, Polish economy, legal regulations in Poland and detailed information which could be useful for any company wanting to set up a business in Poland.

Since 2011 China – Poland Economic Cooperation Centre operates in PAIiIZ as a "one-stop shop" providing comprehensive information on investment opportunities in Poland and offering support for Chinese companies during the investment process. The Centre is responsible for: promotion of Poland as a location for FDI, identifying sources of foreign direct investment, supporting the missions and delegations from China, preparing analysis & information, maintaining regular contact with Chinese companies operating in Poland, Go China Project. More information you can find on: www.gochina.gov.pl.

Also since 2013 PAIiIZ is implementing the "Go Africa" program. Its aim is to encourage Polish entrepreneurs to enter the African markets and to promote Poland in Africa. Therefore PAIiIZ is organizing: fact finding missions to African countries, participation of Polish entrepreneurs in fairs, conferences, seminars and workshops both in Poland and in Africa. Furthermore the Agency is preparing publications on African markets. More information you can find on: www.goafrica.gov.pl.

#### Introduction

The report has been prepared to order of the Polish Information and Foreign Investment Agency and is the next edition of the regional investment attractiveness reports. The reports have been published since 2008. They are the result of scientific research conducted since 2002 under the supervision of prof. H. Godlewska-Majkowska, Ph.D., full professor in the Warsaw School of Economics, in the Institute of Enterprise, Collegium of Business Administration of the Warsaw School of Economics. All the authors are the core members of a team that develops methodology of calculating regional investment attractiveness.

The report consists of a few parts. The first part includes the synthetic presentation of the voivodship's economy, including social-economic potential of the voivodship and the level of economic development as well as economy structure. The most important socio-economic data, including information on investment attractiveness, is presented in a table. The first part of the report also presents the position of the voivodship compared to other Polish and European Union regions, paying special attention to the most important industries and high potential sectors.

The second part of the report presents internal diversification of voivodship's investment attractiveness at the levels of counties (Polish: *powiat*) and communes (Polish: *gmina*). The results of the investment attractiveness calculations for the Warmian – Masurian voivodship's territorial units can be compared to the other territorial units from all of the Polish regions as the calculations have been made for all of them.

In the third part of the report the main business environment institutions in the voivodship are presented, taking into consideration kinds of support which they offer to investors. This part also includes information on location of the Special Economic Zones (SEZs) in the voivodship and information on the results of their activities.

The report is completed with the Appendix including tables with comparisons of investment attractiveness indices for voivodship's counties and communes. There is also some more detailed information in the Appendix concerning effects of functioning of the Special Economic Zones in the region.

There are two approaches to the investment attractiveness presented in this work. One of them is **potential investment attractiveness**, defined as a set of regional location advantages that influence achieving investors' goals (such as costs of running a business, sales revenues, net return on investment and investment's competitiveness).

Another approach is **real investment attractiveness**, defined as region's ability to create investor's satisfaction and influence absorption of financial and physical capital in form of investments. They can be measured by effectiveness of capital spending.<sup>1</sup>

Potential investment attractiveness indices in their simplified version (PAI1) measure the location-specific advantages of regions. 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 indices refer to the whole national economy and to the selected sections: C – manufacturing industry, G – trade and repair, I – accommodation and catering, M – professional, scientific and technical services. These sections are the core of the national economy.

Besides, some indices are calculated only for the voivodships, 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.

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. Real investment attractiveness can be calculated for voivodships, based on the statistical data available on the regional level.

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 Institute of Enterprise at the Warsaw School of Economics (http://kolegia.sgh.waw.pl/pl/KNoP/struktura/IP/struktura/ZOB/), as well as in numerous scientific publications and expert opinions.

<sup>1.</sup> More information on this topic can be found in: *Atrakcyjność inwestycyjna regionów Polski jako źródło przedsiębiorczych przewag konkurencyjnych*, H. Godlewska-Majkowska (ed.), Studia i Analizy Instytutu Przedsiębiorstwa, Oficyna Wydawnicza SGH, Warszawa 2012; H. Godlewska-Majkowska, *Polish regions and their investment attractiveness in the EU*, in: POLAND Competitiveness Report 2013. National and Regional Dimensions, M. Weresa (ed.), Oficyna Wydawnicza SGH, Warsaw 2013, pp 299-316.

#### 1. THE PROFILE OF REGIONAL ECONOMY OF WARMIAN-MASURIAN VOIVODSHIP

Warmian-Masurian voivodship is situated in the north-eastern part of Poland and as the only voivodship it borders on the Kaliningrad Oblast (the Russian Federation), which gives huge opportunities of cooperation with the markets of Eastern Europe, including Russia. In the voivodship there are also huge opportunities of developing the manufacture of high-quality food, which is determined by the favourable structure of farm size and the presence of unoccupied production space in agriculture.

#### The main advantages of the voivodship are:

- favourable natural conditions (lake districts, forests) for the development of tourism,
- agro tourism as well as 'clean' (green) industry using renewable energy,
- the planned A1 and Via Baltica routes that give opportunities to develop very good
- connections in the future,
- in the voivodship there is a sea port in Elblag, which is located on the Vistula lagoon.

Currently a project of building a shipping canal through the Vistula Spit with the cooperation with the Ukraine, which additionally raises the advantages of the region in terms of transport, there are high ranked scientific establishments and courses of study connected with agriculture and food processing: the Institute of Animal Reproduction and Food Research of the Polish Academy of Sciences in Olsztyn and Warmian-Masurian University in Olsztyn: the Faculty of Animal Bioengineering, the Faculty of Environmental Protection and Fishery, the Faculty of Veterinary Medicine, the Faculty of Environmental Management and Agriculture, the Faculty of Food Sciences, The voivodship's largest cities are Olsztyn and Elbląg. Olsztyn is the main centre of food industry, the manufacture of tires, timber industry and tourism. Elbląg is an important centre of heavy industry and tourism. It is also a sea port.

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

Table 1. General characteristics of the economy of Warmian-Masurian voivodship

Feature	Warmian – Masurian voivodship	Poland	Share [%]		
Market potential					
GDP per capita 2013 (PLN/person)	31106	43175	-		
Population (persons) on 31 December 2014	1.443.967	38.478.602	3,8%		
	Human resou	rces potential			
Higher education institutions graduates (persons) in 2014	11465	424317	2,7%		
Secondary schools graduates (persons) in 2014	9625	271333	3,5%		
Number of employed persons in 2014 (in thousands)	527	15859	3,3%		
Structure of employed persons in 2013	agriculture13.0% industry 29.5% services 57.5%	11.5.0% 30.5% 58.0%			
Investment outlays and capital of companies with foreign capital participation in the voivodship					
Investment outlays (PLN m) in 2013	354,7	75105,1	0,5%		
Capital of companies (PLN n) in 2013	1580,4	209130,1	0,8%		
	Special Economic Zones (SEZs) in the voivodship*				
– Suwalki – Warmian-Masuri	an				
Distinguishing	investment attractiveness r	ratings PAI _2 and RAI (cla	ss A, B and C)		
Potential investment attractiveness PAI_2	Accommodation and catering Class C				
Counties and communes distinguished according to the Potential Attractiveness Index for the national economy (PAI1_GN)					
Counties	Class A	City of Olsztyr	ı, city of Elbląg		
Communes	Class A	Bartoszyce (u), Działdowo (u), Elbląg (u), Ełk (u), Giżycko (u), Górowo Iławeckie (u), Iława (u), Kętrzyn (u), Lidzbark Warmiński (u), Lubawa (u), Mrągowo (u), Nidzica (u-r), Nowe Miasto Lubawskie (u), Olsztyn (u), Ostróda (u), Stawiguda (r), Szczytno (u) Braniewo (u), Dywity (r), Iława (r)			
Notice: (11) – 11rhan comm	Class B	Braniewo (u), Dy r) – urban-rural commune, P.			

Notice: (u) – urban commune, (r) – rural commune, (u-r) – urban-rural commune, PAI – potential investment attractiveness, RAI – real investment attractiveness \* For more information see Table 4 in the Appendix. Source: Authors' own calculations.

The number of inhabitants of the voivodship amounts to 1443967 (as of 2014), which is 3.8% of the population of Poland. The age structure in the voivodship in 2014 was as follows: 18.8% of the population at pre-productive age, 64.2% at productive age and 17% at post productive age (for Poland it was 18%, 63% and 19% respectively).

The main potential for human capital creation in the voivodship lies in 7 higher education institutions in which there are 36000 students studying, which makes up 2.4 % of all students in Poland. According to a report prepared by the Committee for Evaluation of Research (KEJNA) for the Ministry of Science and Higher Education in the Warmian-Masurian 7 faculties of universities has received scientific category A; 11 faculties received a category - B; and 1 faculty category - C. It is also worth mentioning that six universities had not received any category awarded by KEJNA (appendix, Tab. 5).

In addition, 12.4% of the secondary school students in the voivodship attend vocational schools and 31% attend technical schools.

The registered unemployment rate in the voivodship amounted to 16.0% in August 2015, compared to 9.7% in Poland.<sup>2</sup> The average monthly gross wages and salaries in enterprises sector in the first half-year of 2015 amounted to PLN 3147.6, which is 83% of the average for Poland.

In 2013 Warmian-Masurian voivodship made a contribution of 2.7% to the GDP of Poland. Calculated per capita, it amounted to PLN 31106 with the average for Poland PLN 43175. With this result the voivodship takes the 14th place in the country. The GDP growth rate in the voivodship in the years 2003-2013 amounted to 181% while the average for Poland amounted to 197%.

In comparison with the whole country the structure of employment in the voivodship is characterized by a share of the service sector at the level of 57.5% whereas a share of the agricultural and industrial sectors are respectively 13% and 29.5% (Central Statistical Office, Local Data Bank 2015).

Warmian and Masurian voivodship is specialized in the production of food. In 2014 the food industry accounted for as much as 37% of the value of sold production of industry in whole Podlasie. Noteworthy industries are also: furniture (11%), products of wood and cork, straw and wicker (6%) and metal products (6%).

Warmian and Masurian voivodship is an important producer of furniture (10% of the national value of production sold in 2014). Moreover reaches about 5-percent share in the domestic production of food and wood products.<sup>3</sup>

<sup>&</sup>lt;sup>2</sup> Unemployed and unemployment rate by voivodships, sub-regions and counties (as of the end of August 2015). GUS.

<sup>&</sup>lt;sup>3</sup> Calculations based on Statistical Bulletin of Warmia and Mazury, first quarter 2015 and first quarter of Statistical Bulletin 2015 www.stat.gov.pl (11/10/2015).

When it comes to most of the above-mentioned sectors, the voivodship improved or maintained its competitive position within the last three years (measured by its share in the country's sold production).

The information on sectors that are found as strategic by the region's authorities can be important for the investors. The voivodship's strategic sectors mentioned in the strategy of regional development include above all:

- water economy
- high-quality food
- wood and furniture.

For the entrepreneurs willing to invest in Warmian-Masurian voivodship the list of the high potential sectors may be a good hint. The list was prepared by the Polish Information and Foreign Investment Agency in cooperation with the Warmian-Masurian voivodship self-government, based on the observations on investments inflows to the voivodship.

Investments of this kind can be located on preferential conditions in the specially prepared places in the Special Economic Zone: **Suwałki, Warmian-Masurian, in subzones:** 

- **SEZ Suwałki, subzones**: Ełk (u), Gołdap (u-r),
- SEZ Warmian-Masurian, subzones: Barczewo (u-r), Bartoszyce (u), Bartoszyce (r), Biskupiec (u-r), Dobre Miasto (u-r), Elbląg (u), Iława (u), Iłowo-Osada (r), Kętrzyn (u), Kurzętnik (r), Lidzbark Warmiński (u), Morąg (u-r), Mrągowo (u), Nidzica (u-r), Nowe Miasto Lubawskie (u), Olecko (u-r), Olsztyn (u), Olsztynek (u-r), Orzysz (u-r), Ostróda (u), Pasłęk (u-r), Piecki (r), Pisz (u-r), Szczytno (r), Wielbark (r), Nowe Miasto Lubawskie (r).

In the all above-mentioned locations investors can benefit from tax allowances amounting to 50% - 70%, depending on the enterprise size – more information can be found on http://www.paiz.gov.pl/investment\_support/investment\_incentives\_in\_SEZ.

# 2. REGION'S RANK IN TERMS OF INVESTMENT ATTRACTIVENESS IN POLAND AND IN THE EUROPEAN UNION

Warmia and Mazury is the region with high growth potential, especially for areas requiring a high quality environment. This is reflected in the high attractiveness for tourism and catering (Class C). This may be particularly attractive for eco-innovative investments.

Based on the methodology prepared by the team of the Enterprise Institute while conducting

statutory research in Collegium of Business Administration at the Warsaw School of Economics, calculations of European regions' investment attractiveness have been made for two years. They are based on measurements of attractiveness of human resources, market and innovativeness.<sup>4</sup>

Among all the EU regions Warmian-Masurian voivodship is taking 250th place.. In this year's study region it has a very low investment attractiveness (class F). The strength of the region is human capital (Class B).

Due to different methodology of research and variables taken into account for regions in Poland only and regions in the EU, the results of research are incomparable. This is because not all data are available for all the regions, e.g. data on infrastructure.

#### It is worth mentioning that the voivodship is more attractive than EU regions such as:

- in Bulgaria: Severen tsentralen, Severozapaden, Yugoiztochen, Yuzhen tsentralen;
- in Greece: Dytiki Makedonia, Peloponnisos, Sterea Ellada;
- in Spain: Extremadura;
- in Portugal: Alentejo;
- in Romania: Centru, Nord-Est, Nord-Vest, Sud Muntenia, Sud-Est, Sud-Vest Oltenia;
- in Italy: Calabria, Puglia, Sicilia.

<sup>&</sup>lt;sup>4</sup> More on this topic: Atrakcyjność inwestycyjna regionów Polski na tle Unii Europejskiej, edited by H. Godlewska-Majkowska, Oficyna Wydawnicza SGH, Warsaw 2014 and http://kolegia.sgh.waw.pl/pl/KNoP/struktura/IP/struktura/ZOB/

# 3. INTERNAL DIVERSIFICATION OF REGIONAL INVESTMENT ATTRACTIVENESS

**Investment attractiveness** of the particular administrative units in the voivodship is the result of how investors assess conditions of conducting business that are important for them. These conditions include labour market, technical infrastructure, market and natural conditions.

**Labour market assessment** gives investor the information on opportunities to recruit the right employees for their companies and labour surpluses or shortages, which indirectly influences costs of hiring workers.

**Technical infrastructure assessment** allows entrepreneurs to plan their investments that need preparing of investment plot equipped with the basic technical elements such as water, gas and electric installations and environment protection equipment such as sewage farms.

**Social infrastructure** is rated as equipment of a place where the investment is to be located with facilities influencing citizens' life quality and human resources development. These facilities provide the citizens with access to education, healthcare, sports and recreation facilities or information technologies such as Internet.

**Market conditions** informs on market absorptive power that means the number of potential customers and indirectly on their wealth that means ability to buy goods and services. Environment conditions were rated as they are a basic factor influencing tourism development and citizens' life quality.

The composite assessment of all the above-mentioned elements in particular counties or communes shows spatial differentiation of investment attractiveness in the voivodship. What is more, calculations for particular sectors of economy are presented such as industry, trade and modern services connected with professional, scientific and technical activities are presented (Chart 1 and Chart 2). The distinguished locations presented on the map are marked with stars that indicate highest marks for the above-mentioned areas of conducting business.

An orange star means that a county or a commune was rated above average in all the sections analysed (national economy, industry, trade, tourism and professional services) and the golden star is the highest distinction and means that all the rated sections in a particular commune or county were ranked at the highest level.

When it comes to counties, the highest ranked city county was city of Elblag (golden star),

#### When it comes to urban communes, the highest ranked of them were:

- **distinguished with a golden star:** Elbląg (u), Giżycko (u), Górowo Iławeckie (u), Lidzbark Warmiński (u), Lubawa (u), Mrągowo (u), Olsztyn (u), Ostróda (u),
- **distinguished with an orange star**: Bartoszyce (u), Działdowo (u), Ełk (u), Iława (u), Kętrzyn (u), Nowe Miasto Lubawskie (u), Szczytno (u).

Among rural communes the highest rank communes include:

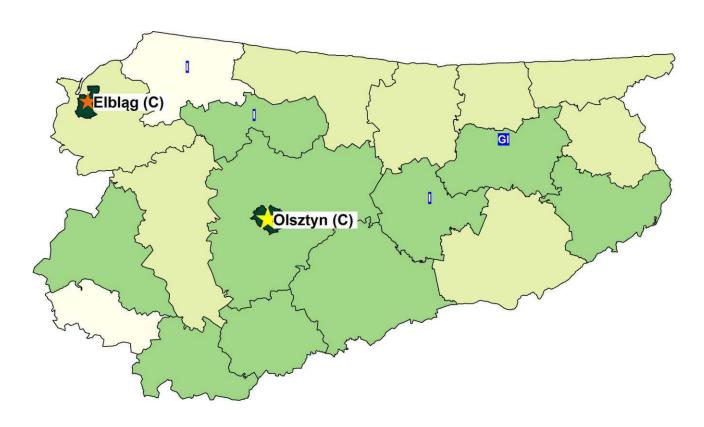
- distinguished with a golden star: Stawiguda (r),
- **distinguished with an orange star**: Dywity (r), Gietrzwałd (r), Giżycko (r), Iława (r).

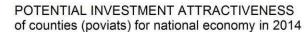
Among urban-rural communes the highest rank communes include:

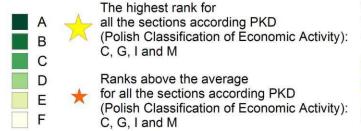
• **distinguished with an orange star**: Barczewo (u-r), Gołdap (u-r), Mikołajki (u-r), Morąg (u-r), Olsztynek (u-r), Pisz (u-r), Węgorzewo (u-r).

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## Chart 1. Potential investment attractiveness of counties of Warmian-Masurian voivodship, considering the most attractive sections







Ranks above the average for C, G, I, M sections according to PKD (Polish Classification of Economic Activity)

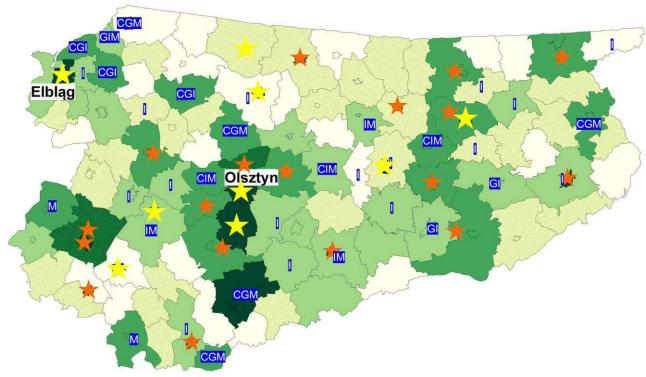
C Industry
G Trade and repairs
I Accommodation and catering
M Professional, scientific,
technical activities

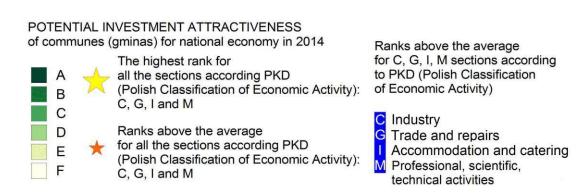
#### County distinguished with a golden star:

Elblag

Source: Author's own work.

Chart 2. Potential investment attractiveness of communes of Warmian-Masurian voivodship, considering the most attractive sections.





#### Communes distinguished with a golden star:

Elbląg (u), Ełk (u), Giżycko (u), Iława (u), Lidzbark Warmiński (u), Mrągowo (u), Olsztyn (u), Ostróda (u), Stawiguda (r)

Source: Author's own work.

# 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.

#### 3.1. Business supporting institutions

Among business environment institutions (excluding R&D institutions) that influence region's economic development are: chambers of commerce, associations, business incubators, technology parks, technology transfer centres, consulting centres, financial institutions and development agencies.

For the investors especially important is a system of regional Investor Assistance Centres set up by the Polish Information and Foreign Investment Agency in consultation with voivodships' marshals to ensure complex services for investors in each voivodship.

In Warmian-Masurian voivodship such centre is:

Investor Assistance Centre operating within the structure of **Warmian - Masurian Regional Development Agency** www.investinwarmiaandmazury.pl



Warmian-Masurian Investor Assistance Centre is a partner of the Polish Information and Foreign Investment Agency and a one stop shop: a source of regional information that are useful for investors, legal acts, investment offers and current data on region's economy. The personnel of the centre have qualifications to offer services for investors and are working according to the standards set by the Polish Information and Foreign Direct Investment Agency, which offers it substantive help and trainings.

An important tool supporting investors are the Special Economic Zones, which are described in the further part of this report.

Below some chosen business environment institutions are presented that operate for entrepreneurship development by supporting development of new technologies and cooperation of enterprises.

#### These institutions are among others:

#### Warmian-Masurian Chamber of Craft and Entrepreneurship in Olsztyn (izbarzem.olsztyn.pl)

The Chamber is an organization of economic self-crafts and small and medium enterprises. The mission of the Chamber is to prepare well-trained staff for crafts and small businesses, partnerships supporting SME development, improvement and development of professional skills of employees of SMEs, improving the competitiveness of SMEs by providing them with a comprehensive range of high quality services. The offer includes: representing the interests of crafts from the public administration, government and international institutions, to promote the craft of Warmia and Mazury, instructional support, advice and information, broadcasting apprentice and master skills in the profession, training services.

#### Scientific and Technological Park in Olsztyn (http://opnt.olsztyn.pl/)

OPNT is a place for businesses and scientific institutions, which stimulates and manages the flow of knowledge and technology between universities, R & D institutions, companies and markets, supports the creation and development of innovative companies with incubation processes. The park consists of three functional parts: the Technology Park (office buildings and office and conference for companies with an established position in the market), Business Incubator (place of business for the newly established, innovative companies and support their development), and the Centre for Technology Transfer (office and laboratory facilities for scientific research into new technologies, their use and implementation). Park offer also includes business consulting and "Virtual Office" service. Within the park operates Radio Wave Propagation Centre in the ionosphere, Geomatics Center and New Technology Satellite, as well as the Laboratory of food for children.

#### Technology Park in Elblag (http://www.ept.umelblag.pl)

The main task of Technology Park in Elblag is to guarantee good conditions for making business, investment and research. Modern technological complex gives entrepreneurs the opportunity to lease investment areas and office space, as well as the use of infrastructure and consulting services, technology transfer and assistance in obtaining funds (including EU funds). The park is located Business Centre, Development and Innovation posing favourable conditions for the development of innovative activity, which houses the Centre for Research - Development providing services for companies (Centre of Environmental Quality, Centre of Metal, Wood Technology Centre and Furniture, Information Technology Transfer Centre, Laboratory of Work Environment and Emissions Laboratory for Advanced Environmental Analysis). The Park also operates Business Incubator and Training and Conference Centre. Park is part of the area within the Warmia-Mazury SEZ.

#### Science and Technology Park in Ełk (http://www.technopark.elk.pl/)

The offer of the Park includes: rental of office space (including the possibility of renting office hours), workshops, exhibition halls - conference, as well as training, counselling, legal advice. Park also provides virtual office. The park offers a fully developed investment areas that are included in the sub-zone area of the Suwałki Special Economic Zone in Elk. The Park Business Incubator and Technology Incubator. Preferences in the selection of companies carrying out their activities in the Science and Technology Park in Elk are directed to companies operating in sectors that offer innovative and technologically advanced products or services.

#### Warmian-Masurian Regional Development Agency (www.wmarr.olsztyn.pl)

The Agency's mission is to promote the economic development of Warmia and Mazury, in particular by supporting small and medium enterprises. This is accomplished through a variety of activities related to the direct support of enterprises in the form of grants, lending for business development (Regional Loan Fund), consulting services in various forms and scope, organization and implementation of training and information activities. Agency inspires relationships between domestic and foreign entities in the area of business development. Activity of WMARR SA is associated with the handling of EU aid programs. The structure of the Agency's work Warmia and Mazury Investor Assistance Centre and the Centre for the Promotion of Innovation and Implementation in Olsztyn.

#### 3.2. SPECIAL ECONOMIC ZONES IN THE VOIVODSHIP – EFFECTS

There are two SEZ operating in the voivodship: Warmian-Masurian and Suwałki. At the end of 2014 the areas of the SEZ were parts of 10 cities and 17 communes – see Chart 3.

The first zone areas were established in 1996. Companies operating in the region at the end of 2013 invested a total amount of 3.1 billion PLN, which is 3% of the total capital expenditure in SEZ in Poland. In the same period, companies created 13.7 thousand. new jobs in the region, which accounts for 5% of all new jobs created in the zones (Table. 3 in the Appendix).

The largest investment in terms of the value has been made in Olsztyn by Michelin Poland SA, the tire manufacturer. The region also focused furniture industry: Furniture Factory SZYNAKA sp. Lubawskie in New Town, Furniture Factory Taranko Taranko in Morag Alexander, Wojcik Furniture Factory Sp. z oo Elblag, Comfort Collection sp. z o.o in Piecki, SWEDWOOD Poland sp. z o.o in Wielbark.

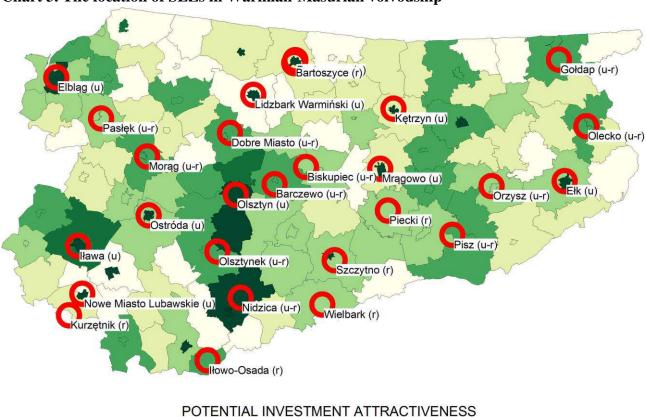


Chart 3. The location of SEZs in Warmian-Masurian voivodship

POTENTIAL INVESTMENT ATTRACTIVENESS of communes (gminas) for national economy in 2014



Source: Authors' own work.

According to the Pomeranian SEZ development plan, the voivodship intends to acquire the following kinds of investors:

- using natural resources and human resources of the region, projects that contribute to the development of the furniture cluster, as well as implementing innovative manufacturing and service projects, enhancing the competitiveness of the Suwałki SEZ,
- from the timber, machinery, electronics and biotechnology, that guarantee job creation in areas where the region has a lot of potential human resources and business-related and scientific facilities, supporting the development of beef processing cluster and window frames, and companies interested in innovative knowledge transfer to industry in Warmian-Masurian SEZ.

#### **APPENDIX**

Table 1 . Potential investment attractiveness of Polish voivodships for the national economy and its selected sections

	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Voivodship	National economy	National economy	Industry	Trade and repairs	Accommodation and catering	Professional, scientific and technical activities
		Voivod	lships			
LOWER SILESIAN	0,818	A	A	A	В	В
KUYAVIAN-POMERANIAN	0,565	С	С	Е	D	D
LUBLIN	0,173	F	Е	F	F	F
LUBUSZ	0,319	Е	Е	D	С	Е
ŁÓDŹ	0,566	С	В	Е	Е	D
LESSER POLAND	0,691	В	В	A	A	В
MAZOVIAN	0,985	A	A	A	A	A
OPOLE	0,267	Е	Е	D	Е	Е
SUB-CARPATHIAN	0,364	D	Е	D	Е	Е
PODLASKIE	0,244	Е	Е	Е	D	Е
POMERANIAN	0,667	В	С	A	A	В
SILESIAN	1,000	A	A	В	C	A
ŚWIĘTOKRZYSKIE	0,000	F	F	F	F	F
WARMIAN-MASURIAN	0,206	Е	F	D	C	Е
GREATER POLAND	0,489	D	D	С	D	С
WESTERN POMERANIAN	0,587	С	С	С	A	C

Source: Authors on the basis of the results of statutory research carried out in Collegium of Business Administration under the guidance of H. Godlewska-Majkowska (2015).

Table 2. POTENTIAL INVESTMENT ATTRACTIVENESS OF COUNTIES FOR THE NATIONAL ECONOMY AND SELECTED SECTIONS

	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
County	National	National economy	Industry	Trade and repairs	Accommodation and catering	Professional, scientific and technical activity
			Counties			
City of Olsztyn	0.352	0,327	A	A	A	A
City of Elblag	0.316	0,289	A	A	A	В

Source: Authors on the basis of the results of statutory research carried out in Collegium of Business Administration under the guidance of H. Godlewska-Majkowska (2015).

Table 3. POTENTIAL INVESTMENT ATTRACTIVENESS OF COMMUNES FOR THE NATIONAL ECONOMY AND SELECTED SECTIONS

	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Commune	National economy	National economy	Industry	Trade and repairs	Accommodation and catering	Professional, scientific and technical activity
		ī	U <b>rban commune</b>	s		
Kętrzyn (u)	0,266	A	A	A	В	A
Działdowo (u)	0,266	A	A	A	В	A
Szczytno (u)	0,263	A	A	A	С	A
Ostróda (u)	0,258	A	A	A	A	A
Olsztyn (u)	0,254	A	A	A	A	A
Iława (u)	0,249	A	A	A	В	A
Mrągowo (u)	0,249	A	A	A	A	A
Górowo Iławeckie (u)	0,246	A	A	A	A	A
Ełk (u)	0,246	A	A	A	В	A
Bartoszyce (u)	0,244	A	A	A	С	A
Giżycko (u)	0,241	A	A	A	A	A
Elbląg (u)	0,238	A	A	A	A	A
Lidzbark Warmiński (u)	0,237	A	A	A	A	A
Lubawa (u)	0,233	A	A	A	A	A
Nowe Miasto Lubawskie (u)	0,215	A	A	A	В	В
Braniewo (u)	0,199	В	В	В	D	A
		]	Rural communes	S		
Stawiguda (r)	0,219	A	A	A	A	A
Iława (r)	0,198	В	В	С	С	В
Dywity (r)	0,197	В	В	В	В	A
Gietrzwałd (r)	0,184	С	С	С	A	В
Giżycko (r)	0,180	С	С	С	С	С
Iłowo-Osada (r)	0,180	С	С	В	D	С
Jonkowo (r)	0,175	С	С	D	В	С
	Urban-rural communes					
Nidzica (u-r)	0,207	A	В	C	D	A
Olecko (u-r)	0,186	С	С	С	D	В
Olsztynek (u-r)	0,181	С	С	С	С	В
Pisz (u-r)	0,179	С	С	С	С	В
Dobre Miasto	0,178	С	С	С	D	С

(u-r)						
Morąg (u-r)	0,177	С	С	С	С	С
Węgorzewo (u-r)	0,176	С	С	С	С	В
Ryn (u-r)	0,176	С	С	D	С	С
Barczewo (u-r)	0,175	С	С	С	В	С
Orneta (u-r)	0,175	С	С	С	С	D
Mikołajki (u-r)	0,175	С	С	С	A	С
Tolkmicko (u-r)	0,173	С	С	С	В	D
Gołdap (u-r)	0,172	С	С	С	С	С
Młynary (u-r)	0,171	С	С	С	С	D
Lidzbark (u-r)	0,170	С	D	D	D	С
Susz (u-r)	0,169	С	D	D	E	С

Notice: (u) – urban commune, (r) – rural commune, (u-r) – urban-rural commune

Source: As for Table 1. Note: All the indices in the report have been calculated on the basis on the most up-to-date data from the Local Data Bank (LDB), 2015

Table 4. Effects of Special Economic Zones functioning at the end of 2014

		Cumulated		
SEZ	County, commune	capital expenditure in million PLN	New jobs number	Leading industries (at least 20% share of revenue or employment)
Warmińsko-Mazurska	Bartoszyce, Bartoszyce	-	-	no leading industry
Warmińsko-Mazurska	Bartoszyce, city of Bartoszyce	66 700 750,00	844	products of other non- metallic mineral products, furniture,
Warmian-Masurian	Działdowo, Iłowo-Osada	-	-	no leading industry
Warmian-Masurian	Elbląg, Pasłęk	-	-	no leading industry
Suwałki	Ełk, city of Ełk	257 901 129,28	1 446	fabricated metal products, except machinery and equipment
Suwałki	Gołdap, Gołdap	159 606 324,00	1 133	paper and paper products, rubber and plastic products, fabricated metal products, except machinery and equipment
Warmian-Masurian	Iława, city of Iława	4 606 789,00	105	textiles, products of other non-metallic mineral products, machinery and equipment nec
Warmian-Masurian	Kętrzyn, city of Kętrzyn	-	637	no leading industry
Warmian-Masurian	Lidzbark Warmiński, city of Lidzbark Warmiński	2 561 210,00	581	products of other non- metallic mineral products
Warmian-Masurian	City of Elbląg, city of Elbląg	124 496 006,00	670	machinery and equipment nec, furniture,
Warmian-Masurian	City of Olsztyn, city of Olsztyn	1 760 059 393,00	4 159	rubber and plastic products
Warmian-Masurian	Mrągowo, Piecki	3 251 000,00	147	furniture
Warmian-Masurian	Mrągowo, city of Mrągowo	92 570 970,00	381	fabricated metal products, except

				machinery and equipment
Warmian-Masurian	Nidzica, Nidzica	6 066 000,00	131	textile products
Warmian-Masurian	Nowe Miasto Lubawskie, Kurzętnik	207 600,00	43	fabricated metal products, except machinery and equipment
Warmian-Masurian	Nowe Miasto Lubawskie, city of Nowe Miasto Lubawskie	56 856 062,00	248	furniture
Warmian-Masurian	Olecko, Olecko	-	-	no leading industry
Warmian-Masurian	Olsztyn, Barczewo	-	-	no leading industry
Warmian-Masurian	Olsztyn, Biskupiec	-	-	no leading industry
Warmian-Masurian	Olsztyn, Dobre Miasto	99 873 238,00	716	Food, chemicals and chemical products, furniture
Warmian-Masurian	Olsztyn, Olsztynek	10 615 714,00	75	rubber and plastic products, repair services, maintenance and installation of machinery and equipment,
Warmian-Masurian	Ostróda, Morąg	19 230 627,00	113	furniture
Warmian-Masurian	Ostróda, city of Ostróda	-	-	no leading industry
Warmian-Masurian	Pisz, Orzysz	-	-	no leading industry
Warmian-Masurian	Pisz, Pisz	1 377 749,00	258	furniture
Warmian-Masurian	Szczytno, Szczytno	91 297 955,77	495	consumables
Warmian-Masurian	Szczytno, Wielbark	303 379 621,00	1 523	furniture

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

Table 5. Universities, Faculties and its categories

School name	Category of Ministry of Science and Higher Education
Elblag College of Humanities and Economics in Elblag	no data
Elbląska College of Humanities and Economics in Elblag	no data
Joseph Rusiecki Olsztyn School of Higher Education	no data
State Higher Vocational School in Elblag	no data
University of Warmia and Mazury in Olsztyn	A - Faculty of Biology and Biotechnology
	A - Faculty of of Environmental Sciences
	A - Faculty of Veterinary Medicine
	A - Faculty of Animal Bioengineering
	A - Faculty of Food Science
	A - Faculty of Theology
	B - Faculty of Social Sciences
	B – Faculty of Medical Sciences
	B – Faculty of Environment and Agriculture
	B - Faculty of Technical Sciences
	B - Faculty of Surveying and Spatial Planning
	B - Faculty of Mathematics and Computer Science
	B - Faculty of Arts
	B - Faculty of Economics
	B - Faculty of Law and Administration
	B - Faculty of Humanities
Higher School of Economics and Computer Science in Olsztyn	no data
Prof. Tadeusz Kotarbiński School of Computer Science and Management based in Olsztyn	no data
Wojciech Kętrzyński Centre for Scientific Research in Olsztyn	B - for the whole center

Pedagogical Science in Warsaw; Faculty of Humanities - Social Olsztyn	C - for the entire faculty
Higher Police School in Szczytno	A – Faculty of Internal Security

Source: Authors' own work based on the Official Journal of the Ministry of Science and Higher Education Warsaw, 9 July 2014 .; Item 38; Communication from the Minister of Science and Higher Education of July 4, 2014 year; of scientific terms granted to scientific institutions.

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