# CENTRE FOR REGIONAL AND LOCAL ANALYSES

## REGIONAL INVESTMENT ATTRACTIVENESS 2012

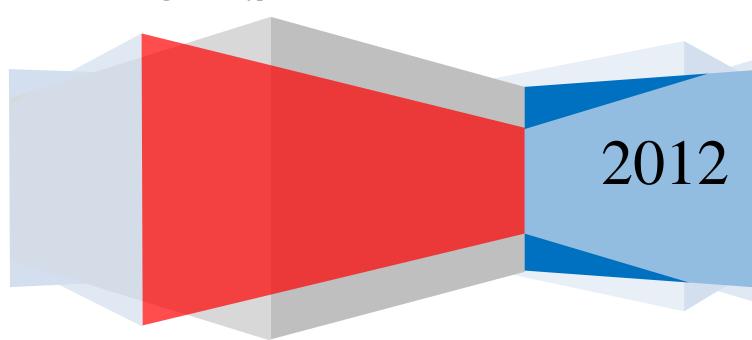
### Łódź voivodship

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#### Introduction

This report has been prepared thanks to the application of results of scientific research conducted since 2002 by the Institute of Enterprise, Collegium of Business Administration of the Warsaw School of Economics, under the supervision of Prof. H. Godlewska-Majkowska, Ph.D. All Authors are core members of the team that develops the methodology of calculating regional investment attractiveness in order that important characteristics of regions are captured as closely as possible both in general terms and from a point of view of specificity of a given kind of business activity as well as a size of investment.

Potential investment attractiveness (PAI) indices measure the location-specific advantages of regions. In their simplified version they are calculated for territorial units of various levels of statistical division of the country (gminas/communes, poviats/counties, subregions, voivodships/regions). These are PAII indices, which refer to the whole regional/national economy (PAI1\_GN) and selected sections: C – manufacturing industry, G – trade and repair, I – tourism and catering, M – professional, scientific and technical services.

Besides, some indices are only calculated for voidoships on the basis of much more characteristics available on the regional or macroregional level. This allows us to evaluate their investment attractiveness in a much broader context. These are PAI2 indices, which are calculated both from a general point of view and with reference to the above mentioned sections of the economy (PAI2\_C, PAI2\_G, PAI2\_I, PAI2\_M).

What is more, real investment attractiveness ranks are used in this report, which relates to the inflow of capital (in the form of investments) and the effects of investments considered from a point of view of productivity and returns on the outlays previously made.

The measurements in use are subject to annual review thanks to consulting them with foreign investor assistance institutions and direct contact to territorial self-government units as well as organisations of entrepreneurs. A description of methodological approach to measuring investment attractiveness of Polish regions, counties and communes can be found online on the Web site of the Institute of Enterprise: <a href="www.sgh.waw.pl/instytuty/ip">www.sgh.waw.pl/instytuty/ip</a>, on the Web site of the Centre for Regional and Local Analyses, which cooperates with the Institute of Enterprise: <a href="www.caril.edu.pl">www.caril.edu.pl</a>, as well as in numerous scientific publications and expert opinions.

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

Łódź voivodship is situated in the centre of Poland and at the same time in the centre of Europe. It is a region with industrial traditions associated with textile industry and the manufacture of clothing. Nowadays, thanks to Łódź, Poland's third largest city, other branches of industry develop in the region, in particular the manufacture of household appliances (white and brown goods) and biotech industry.

The advantages of the voivodship are:

- its excellent location in terms of communications; in the voivodship, in the vicinity of Stryków, a node of highways is planned thanks to which the voivodship will be the best site in Poland for investments targetted at domestic market,
- access to substantial human resources including not only cheap low-qualified workers but also well-qualified employees, which is possible thanks to the presence of numerous higher and vocational education institutions,
- a huge R&D potential of the higher education institutions and research establishments of the area of  $\dot{L}\dot{o}d\dot{z}^1$ ,
- substantial resources of brown coal thanks to which the surplus of cheap electricity is available in the voivodship,
- very large resources of thermal waters which can set the foundations for the development of renewable energy and health resorts in the region,
- attractive investment offers for investors in the locations of special economic zones.

3

In 2010 the Ministry of Science and Higher Education ranked among the best scientific establishments in Poland the following ones: the Faculty of Chemistry, the Faculty of Mechanics, the Faculty of Construction, Architecture and Environmental Engineering and the Faculty of Biotechnology and Food Studies of the Technical University of Łódź, The Centre of Molecular and Macromolecular Studies of The Polish Academy of Sciences in Łódź, the Faculty of Economics and Sociology of the University of Łódź, Polish Mother's Memorial Hospital Research Institute in Łódź, The Professor Jerzy Nofer Institute of Occupational Medicine in Łódź, The Institute of Medical Biology of The Polish Academy of Sciences in Łódź and The International Institute of The Polish Academy of Sciences in Łódź – European Regional Centre for Ecohydrology in Łódź.

Chart 1. General characteristics of the economy of Łódź voivodship

	Feature		Łódź vo	oivodship	Poland	Share [%]				
	Market Potential									
GDP per c	apita (PLN/person) 2009	) in	32	,162	35,210	-				
	ion (persons) on 31 ecember 2011	[	2,53	33,681	38,538,447	6.6				
Human Resources Potential										
	ducation institution s (persons) in 201		30	,456	492,646	6.2				
	ry schools graduate ersons) in 2011	es	25	,530	421,724	6.1				
	employed persons of ecember 2011	on 31	933	3,578	13,911,203	6.7%				
Structure o	of employed person 2011	s in	:	agriculture 13.1% industry 32.4% services 54.5%		agriculture 12.7% industry 30.6% services 56.7%				
Investr	nent outlays and o	capital	of companies wit	h foreign capital p	articipation in th	ne voivodship				
Investment	t outlays (PLN mln 2010	) in	2,5	513.4	61,600.3	4.1				
Capital of	companies (PLN m	nln)	4,6	527.6	188,812.4	2.5				
	S	Special	economic zones (	(SEZs) in the voivo	odship					
Konstar Ozorkó (city), S Widawa Żychlin	ntynów Łódzki (city w (city), Paradyż, I kkierniewice (city), a, Wieluń, Wola Kr	y), Ksa Piotrkó Sławno zysztop	werów, Kutno (cit w Trybunalski (cit o, Stryków, Tomas oorska, Wolbórz, V	łchatów (city), Brój zy), Łęczyca (city), zy), Radomsko (city szów Mazowiecki ( Wróblew, Zduńska V	Lowicz (city), Łóo ), Rawa Mazowie city), Tomaszów I	dź (city), Opoczno, cka (city), Sieradz Mazowiecki, Ujazd,				
			Investment a							
Potential in	vestment attractive advantages eval			National economy Labour-intensive i Trade class C						
Real inves	stment attractivene evaluation		nomic effects	National economy Trade class B Tourism class A	class b					
Poviats	and gminas distin	nguishe	d according to th	ne Potential Attrac	tiveness Index fo	r the national				
Poviats	Class A	Łó		w Trybunalski (city)	, Skierniewice (c	ity), Bełchatów				
roviais	Class B									
Gminas**	Class A	Pabia	nice (1), Łódź (1),	rniewice (1), Rawa Piotrków Trybunal 3), Zgierz (1), Łowi	ski (1), Tomaszóv	w Mazowiecki (1),				

	Andrespol (2), Konstantynów Łódzki (1), Kutno (1), Rzgów (3), Brzeziny (1), Zduńska Wola (1), Łęczyca (1)
Class B	Dłutów (2), Radomsko (1), Rząśnia (2), Sieradz (1), Tuszyn (3), Stryków (3), Rawa Mazowiecka (2), Ozorków (1), Ksawerów (2), Szczerców (2), Działoszyn (3)

In 2009 Łódź voivodship made a contribution of 6.1% to the GDP of Poland. Calculated per capita, it amounted to PLN 32,162with the average for Poland PLN 35,210. With this result the voivodship occupies the sixth place in the country. The GDP growth rate in the period 2003-2009 amounted to 154.5% while the national average reached 168.5%.

In comparison with the whole country the structure of employment in the voivodship is characterized by a relatively low share of the service sector (54.5%) whereas a share of the agricultural and industrial sectors is respectively 13.1% and 32.4% (CSO, RDB 2012).

The number of inhabitants of the voivodship amounts to 2,533,681 (as of 201), which makes up 6.6% of the population of Poland. The age structure of the voivodship in 2010 was as follows: 14% of the population at pre-reproductive age, 67.2% at reproductive age and 18.5% at post-reproductive age (for Poland, respectively, 15.1%, 68.1% and 16.8%). The registered unemployment rate in the voivodship in August 2012 was 13%, compared to 12.4% in Poland<sup>2</sup>. The average gross monthly remuneration in enterprises sector in the first six months of 2012 amounted to PLN 3,338.7, which is 90.6% of average remuneration in Poland.

The main potential for human capital creation in the voivodship is constituted by 30 higher education institutions in which 108.2 thousand students study, which makes up 6.2% of all students Poland-wide. Moreover 6.0 % of pupils of secondary schools attend technikum schools and 5.1% vocational schools.

The voivodship's strategic sectors mentioned in the strategy of regional development include above all: e-business, IT and telecommunications as well as the following braches: power industry, logistics, textile industry, the manufacture of food, construction, the manufacture of chemical products and biotechnology.

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

- Łódzka SSE (Łódź special economic zone), subzones: Aleksandrów Łódzki, the city of Bełchatów, Brójce, Kleszczów, Koluszki, the city of Konstantynów Łódzki, Ksawerów, the city of Kutno, the city of Łęczyca, the city of Łowicz, the city of Łódź, Opoczno, the city of Ozorków, Paradyż, the city of Piotrków Trybunalski, the city of Radomsko, the city of Rawa Mazowiecka, the city of Sieradz, the city of Skierniewice, Sławno, Stryków, the city of Tomaszów Mazowiecki, Tomaszów Mazowiecki, Ujazd, Widawa, Wieluń, Wola Krzysztoporska, Wolbórz, Wróblew, the city of Zduńska Wola, the city of Zgierz, Zgierz, Żychlin,
- Starachowicka SSE (Starachowice special economic zone), subzone Mniszków.

<sup>&</sup>lt;sup>2</sup> The unemployment rate in voivodships, subregions and poviats in August 2012 is based on the data of Central Statistical Office.

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

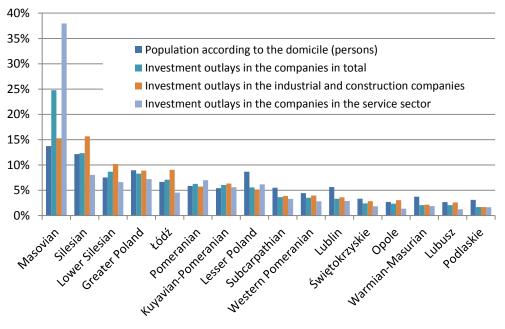
Łódź voivodship is characterised by a universal investment attractiveness level above an average level for the whole country, which demonstrates itself in its rank (Class C) according to the main potential investment attractiveness index for the whole national economy PAI 2\_GN (see Exhibit 1 in the Appendix). The region was also ranked very high in terms of potential investment attractiveness for the sections: labour-intensive industry (Class C), trade and repairs (Class C).

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's RAI indices were rather low (most sections received Class E – the only exceptions were RAI\_I and RAI\_M classified as D) – 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.

In 2010 Łódź voivodship was ranked in the 5<sup>th</sup> position in Poland when it comes to investments in companies (its market share in the national investment outlays accounts for 7%) and this position was equal to the one in terms of share in country's population. It is worth noticing that in the voivodship investment outlays were relatively more concentrated in industry (9%) than in services (5%), which seems to be accurate given its industrial character. Significant human-resources potential (at least in comparison to other regions) has not been reflected in the inflow of foreign direct investments – see Exhibit 2.

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



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

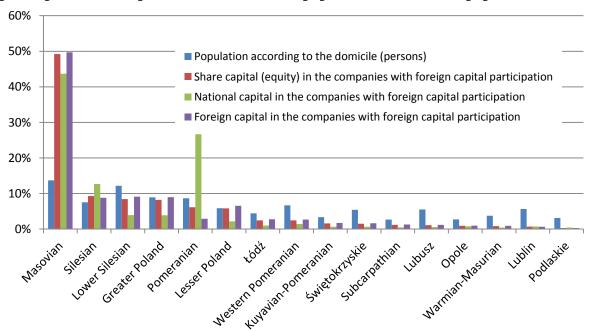
Source: Authors on the basis of the Local Data Bank (downloaded 23.10.2012).

 $<sup>^3</sup>$ Section C –manufacturing industry, section G – trade and repair, section I – hotels and restaurants, section M- professional, scientific and technical activities.

The share of Łódź voivodship in the value of share capital in the companies with foreign capital participation amounts to 2%. It is not too much if one takes into consideration the 7% share of the region in Polish population. Between 2003 and 2010 the voivodship strengthened its competitive rank on the foreign direct investment market growing from 2.1% to 2.5% - see Exhibit 3.

Over this period the number of vacancies in those companies increased by 80% from 42,162 to 75,794. The rank of voivodship calculated on the basis of its share in the number of vacancies in the companies with foreign capital rose significantly – from 3.8% to 5.0%. It indicates at the really good use of cost competitive advantages connected with labour factor.

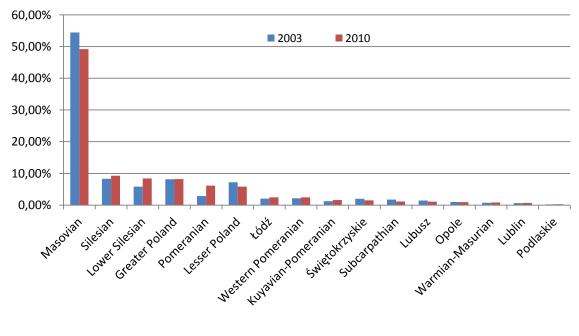
Exhibit 2. Regional structure of capital in the companies with foreign capital participation in comparison with a share in population (% national population)



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).

An opportunity for Łódź voivodship lies in neatly prepared investment offers. Self-government units of Łódź voivodship should seek opportunities in careful preparation of offers of investment areas in accordance with their location-specific advantages.

### 3. Internal diversification of regional investment attractiveness

#### Poviats (counties)

The following poviats are considered most attractive in Łódź voivodship: the city of Łódź, bełchatowski, the city of Piotrków Trybunalski, the city of Skierniewicei - see Chart 2.

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

Poviat	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
The city of Skierniewice	0,353	A	A	A	A	A
bełchatowski	0,338	A	A	A	В	A
The city of Łódź	0,334	A	A	A	В	A
The city of Piotrków Trybunalski	0,325	A	A	В	С	A
pabianicki	0,283	С	В	С	D	С
zgierski	0,281	С	В	С	С	С
łódzki wschodni	0,276	С	С	A	В	D

Source: Authors' own materials.

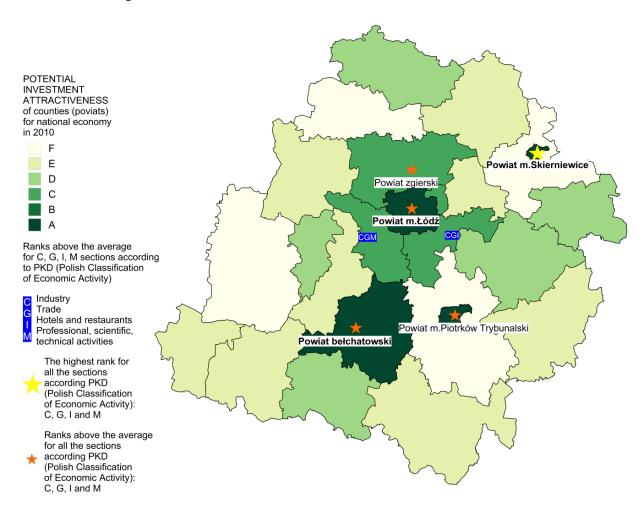
Enumerated poviats, apart from: pabianicki, łódzki wschodni and zgierski poviats, characterize high investment atractiveness. The following poviat should be distinguished: the city of Skierniewice as these unit which attained Class A in their potential investment attractiveness for all sections of the national economy under scrutiny in this research.

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

- Łódzki wschodni (Class C) for section C,
- The city of Piotrków Trybunalski, zgierski (Class C) for section I,
- Pabianicki, zgierski (Class C) for section M.

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

Exhibit 4. Spatial diversification of potential investment attractiveness of poviats of Łódź 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: Kleszczów (2), Skierniewice (1), Rawa Mazowiecka (1), Bełchatów (1), Pabianice (1), Łódź (1), Piotrków Trybunalski (1), Tomaszów Mazowiecki (1), Aleksandrów Łódzki (3), Zgierz (1), Łowicz (1), Głowno (1), Nowosolna (2), Andrespol (2), Konstantynów Łódzki (1), Kutno (1), Rzgów (3), Brzeziny (1), Zduńska Wola (1), Łęczyca (1). It is also reflected in their high ranks (Class A or B) for all analysed sections – see Chart 3.

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

Gmina	PAI1_GN	PAI1_GN	PAI1_C	PAI1_G	PAI1_I	PAI1_M
Kleszczów (2)	0,377	A	A	A	A	A
Skierniewice (1)	0,268	A	A	A	A	A
Rawa Mazowiecka (1)	0,265	A	A	A	A	A
Bełchatów (1)	0,265	A	A	A	A	A
Pabianice (1)	0,259	A	A	A	В	A
Łódź (1)	0,259	A	A	A	В	A
Piotrków Trybunalski (1)	0,255	A	A	A	С	A
Tomaszów Mazowiecki (1)	0,245	A	A	A	С	A
Aleksandrów Łódzki (3)	0,242	A	A	A	A	A
Zgierz (1)	0,241	A	A	A	D	A
Łowicz (1)	0,240	A	A	A	C	A
Głowno (1)	0,240	A	A	В	A	A
Nowosolna (2)	0,239	A	A	A	A	A
Andrespol (2)	0,236	A	A	A	A	В
Konstantynów Łódzki (1)	0,236	A	A	A	В	A
Kutno (1)	0,234	A	A	A	В	A
Rzgów (3) *	0,234	A	A	A	A	В
Brzeziny (1) *	0,229	A	A	A	С	В
Zduńska Wola (1)	0,226	A	A	В	D	A
Łęczyca (1)	0,226	A	A	A	С	A

<sup>(1) –</sup> 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: Dłutów (2), Radomsko (1), Rząśnia (2), Sieradz (1), Tuszyn (3), Stryków (3), Rawa Mazowiecka (2), Ozorków (1), Ksawerów (2), Szczerców (2), Działoszyn (3). 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:

- Dobroń (2), Mokrsko (2), Osjaków (2), Wieluń (3), Bolesławiec (2), Wieruszów (3), Krośniewice (3), Pabianice (2), Nowe Ostrowy (2), Żychlin (3), Parzęczew (2), Dmosin (2), Bełchatów (2), Szczerców (2), Zelów (3), Koluszki (3), Mniszków (2), Opoczno (3), Wolbórz (2), Kamieńsk (3), Łask (3), Pajęczno (3), Sulmierzyce (2), Poddębice (3), Uniejów (3) for section C,
- Dłutów (2), Osjaków (2), Wieluń (3), Wieruszów (3), Krośniewice (3), Nowe Ostrowy (2), Lipce Reymontowskie (2), Skierniewice (2), Jeżów (2), Szczerców (2), Koluszki (3), Kamieńsk (3), Inowłódz (2), Ujazd (2), Wodzierady (2), Działoszyn (3), Rząśnia (2) for section G,
- Dłutów (2), Sieradz (1), Sokolniki (2), Wieruszów (3), Kutno (2), Łęczyca (1), Daszyna (2), Łowicz (1), Parzęczew (2), Brzeziny (1), Bełchatów (2), Drużbice (2), Rusiec (2), Mniszków (2), Wolbórz (2), Radomsko (1), Gomunice (2), Przedbórz (3), Tomaszów Mazowiecki (1), Tomaszów Mazowiecki (2), Piotrków Trybunalski (1), Działoszyn (3), Rząśnia (2) dla sekcji I,
- Dłutów (2), Dobroń (2), Mokrsko (2), Krośniewice (3), Żychlin (3), Rawa Mazowiecka (2), Ozorków (2), Parzęczew (2), Stryków (3), Bełchatów (2), Szczerców (2), Koluszki (3), Opoczno (3), Dobryszyce (2), Gomunice (2), Kamieńsk (3), Tuszyn (3), Inowłódz (2), Ujazd (2), Łask (3), Działoszyn (3), Pajęczno (3), Rząśnia (2), Poddębice (3) for section M.
- Synthetic evaluation of potential investment attractiveness of gminas of Łódź voivodship is presented in Exhibit 5.

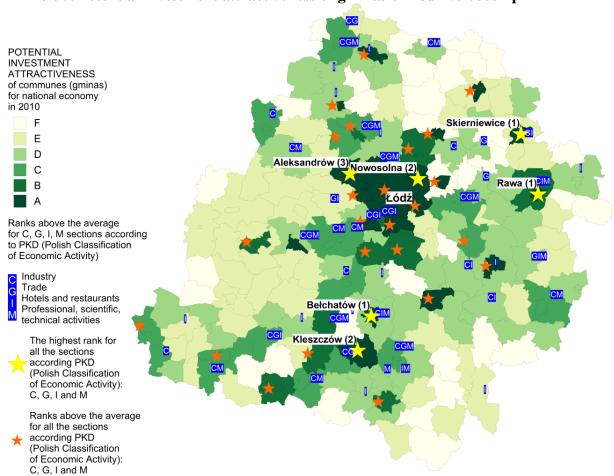


Exhibit 5. Potential investment attractiveness of gminas of Łódź voivodship

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 voivodship's business-supporting institutions one should mention: Łódzki Regionalny Naukowo-Technologiczny, Bełchatowsko-Kleszczowski Park Przemvsłowo Technologiczny, Centrum Zaawansowanych Technologii BioTechMed in Wojewódzkie Porozumienie Izb Gospodarczych in Łódź, Łódzka Izba Przemysłowo-Handlowa (chamber of commerce and industry), Regionalna Izba Budownictwa in Łódź, Izba Rolnicza Województwa Łódzkiego, Związek Pracodawców Przemysłu Odzieżowego i Tekstylnego in Łódź, Łódzka Agencja Rozwoju Regionalnego S.A., Fundacja Rozwoju Przedsiębiorczości in Łódź, Fundacja "Inkubator" in Łódź, Fundacja Rozwoju Gminy Zelów, Fundacja Rozwoju Gminy Kleszczów, Agencja Rozwoju Regionu Kutnowskiego.

Łódzki Regionalny Park Naukowo-Technologiczny (Łódź Regional Research and Technology Park) operates the Łódź Technology Incubator for hi-tech businesses. It offers a possibility of leasing investment premises covered by local spatial development plans (the area is reserved for services, low-intensity production and hotels). In October 2012 a BioNanoPark has been opened in Technopark Łódź. It is one of the largest polish research

centres for business and is made of biotechnological and biophysical laboratories that will offer research services for business and research institutions in Poland and abroad. The BioNanoPark houses the first Polish Workshop of Individual Medical Implants. It will also include office and laboratory space necessary to conduct research by small, but equipped companies looking for a location to conduct their research. (<a href="www.technopark.lodz.pl/">www.technopark.lodz.pl/</a>, 29.09.2012.).

Belchatowsko-Kleszczowski Park Przemyslowo-Technologiczny (Bełchatów-Kleszczów Technolndustrial Park) offers information, training and consulting services for enterprises, investment areas and space for lease in its Technology Incubator as well as technical infrastructure for S&M enterprises that operate in innovative technology industries. The offer primarily targets companies created by graduates, phds and young research staff of Łódź Technical University and other regional educational institutions (support for spin-off and spin-out firms) or by employees that have lost their jobs due to restructuring processes. (www.ppt.belchatow.pl/, 29.09.2012.).

Centrum Zaawansowanych Technologii BioTechMed in Łódź (Advanced technologies Center BioTechMed in Łódź) The center is an industrial-research consortium established by higher education institutions, Polish Academy of Sciences units and other entities from Łódzkie voivodeship. The aim of BioTechMed is to conduct joint research and innovation projects in the fields of healthcare and environment protection by utilising advancements in biotechnology and medical technology. In order to intensify these actions a LabNet portal was created, which includes two independent online databases - a Virtual Laboratory (VirtuaLab) and a Scientific Cooperation Offers Bank (ScientCooperation). Both databases are available in Polish and in English and they serve to gather the information on currently conducted research in the fields of biotechnology, medical technology as well as on equipment resources available at various research and business institutions. (www.biotechmed.pl/, 29.09.2012.).

#### Special economic zones in Łódź voivodship - effects

There are two special economic zones (SSE) in Łódź voivodeship: Łódzka and Starachowicka. At the end of 2011 the areas of SSE were part of 15 cities and 19 gminas (counties). (Exibit 6).

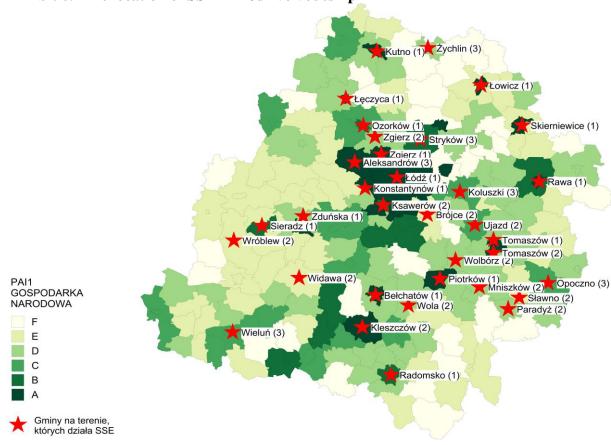


Exhibit 6. The location of SSE in Łódź voivodeship

Source: Authors' own materials.

First SSE were established in 1998. The enterprises operating in the zones have until 2011 invested 7,4 billion PLN which constitutes 10% of all economic zone capital expenditures in Poland. In the same period the enterprises have created 13,4 thousand jobs, which constitutes 8% 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
Łódzka SSE, Aleksandrów Łódzki (3)	Cosmetics	467	303,2
Łódzka SSE, Bełchatów (1)	Data unavailable		
Łódzka SSE, Brójce (2)	Data unavailable		
Łódzka SSE, Kleszczów (2)	Solar energy generators	206	201,4
Łódzka SSE, Koluszki (3)	Pharmaceutical	60	25,8
Łódzka SSE, Konstantynów Łódzki (1)	Packaging	268	131,5
Łódzka SSE, Ksawerów (2)	Pharmaceutical/Cosmetics	342	126,5
Łódzka SSE, Kutno (1)	Synthetic materials	913	869,6
Łódzka SSE, Łęczyca (1)	Metal and machinery	422	121,5
Łódzka SSE, Łowicz (1)	Chemical	16	6,3
Łódzka SSE, Łódź (1)		6.153	2.104,9
Starachowicka SSE, Mniszków (2)	Non-metallic mineral resources	46	30,5

Łódzka SSE, Opoczno (3)	Ceramic plates	30	25,0
Łódzka SSE, Ozorków (1)	Ceramic plates	476	236,1
Łódzka SSE, Paradyż (2)	Ceramic plates	25	120,0
Łódzka SSE, Piotrków Trybunalski (1)	Automotive	338	203,0
Łódzka SSE, Radomsko (1)		1.350	627,2
Łódzka SSE, Rawa Mazowiecka (1)	Construction	399	717,2
Łódzka SSE, Sieradz (1)	Pharmaceutical	184	75,0
Łódzka SSE, Skierniewice (1)	Data unavailable		
Łódzka SSE, Sławno (2)	Glass packaging	45	55,0
Łódzka SSE, Stryków (3)	Paper	150	229,2
Łódzka SSE, Tomaszów Mazowiecki (1)	Ceramics	513	294,1
Łódzka SSE, Tomaszów Mazowiecki (2)	Data unavailable		
Łódzka SSE, Ujazd (2)	Glass	275	723,2
Łódzka SSE, Widawa (2)	Cosmetics	40	15,0
Łódzka SSE, Wieluń (3)	Data unavailable		
Łódzka SSE, Wola Krzysztoporska (2)	Furniture	150	15,0
Łódzka SSE, Wolbórz (2)	Logistics	30	13,5
Łódzka SSE, Wróblew (2)	Ceramic plates	31	20,0
Łódzka SSE, Zduńska Wola (1)	Textile	225	42,5
Łódzka SSE, Zgierz (1)	Construction	254	56,8
Łódzka SSE, Zgierz (2)	Data unavailable		
Łódzka SSE, Żychlin (3)	Data unavailable		

Source: Authors' own calculations based on PAIiIZ data.

Largest capital inflow has been observed in Łódź with investments related to a variety of industries: food-processing (Dakri Sp. z o.o., Pifo Eko, Strefa Sp. z o.o.), synthetic materials (COKO, Werk Polska Sp z o.o., Wirthwein Polska Sp z o.o., Hirsch Porozell Sp. z o.o., MECALIT POLSKA Sp. z o.o.), BPO (Fujitsu Services Sp. z o.o., Business Support Solution S.A.), packaging (Albea Poland Sp. Z o.o., Schaumaplast, Organika Sp. z o.o., AMCOR FLEXIBLES REFLEX Sp. z o.o., medical (MDH Sp. z o.o.), cosmetics (Gillette Poland International Sp z o.o., Delia Cosmetics Distribution), IT (DELL Products (Poland) Sp z o.o., Ericpol Telecom Sp. z o.o., AMG.lab).

The voivodeship intends to attract investors from the hi-tech, household appliances, pharmaceutical and cosmetics and construction material industries – both in Łódzka and Starachowicka 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 2 gminas situated in Łódź voivodship.

Chart 5. Gminas in Lower Silesian voivodship distinguished as 'A' Communes

Gmina	Poviat	Audit of Web sites	Audit of e- contact in Polish	Audit of e- contact in English	Sum
Skierniewice (1)	Skierniewice	9	5	0	14
Aleksandrów Łódzki (3)	zgierski	10	3	0	13

Źródło: Opracowanie własne.

Both distinguished communes run transparent and pleasant to read Web sites. Additionally, Aleksandrów Łódzki develops a system of SMS notifications, which allows the gmina to maintain a permanent contact with its inhabitants and investors. What makes Skierniewice stand out is its offer of preferential investment conditions like real estate tax exemptions and financial support for equipment and training courses on the sponsoring basis.

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

Łódź 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 Łódź voivodship

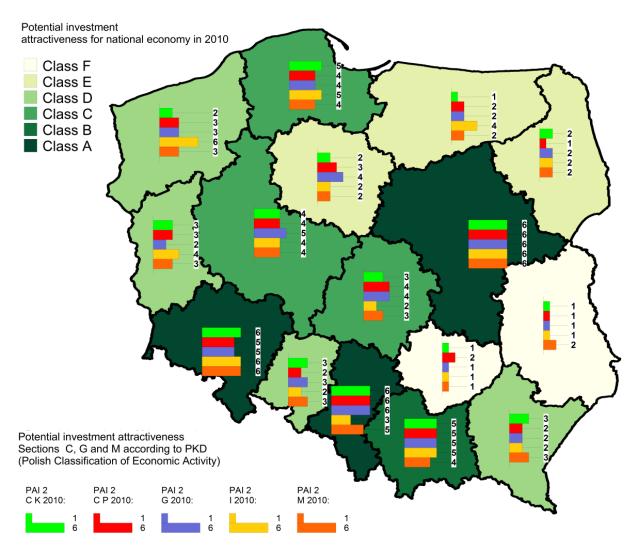
Strengths of the region according to the microclimates by IP SGH	Weaknesses of the region according to the microclimates by IP SGH							
National economy								
Microclimate Technical Infrastructure Class C	Microclimate Human Resources Class F							
Microclimate Social Capital Class C	Microclimate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

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

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

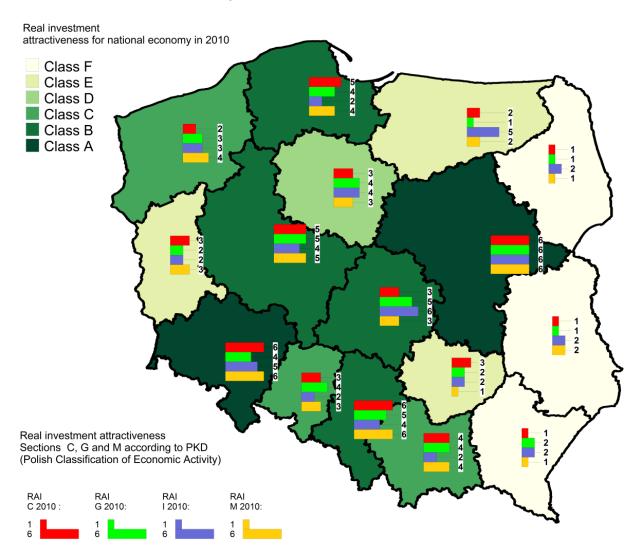
#### **APPENDIX**

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



Source: Authors' own materials.

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



Source: Authors' own materials.

Chart 1. List of investment attractiveness indices for voivodships

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

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

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

Doviete (counties)	DAI1 CN	PAI1_GN_Cl	PAI1_C_	PAI1_G_	PAI1_I_	PAI1_M_
Poviats (counties)	PAI1_GN	asses	Classes	Classes	Classes	Classes
The city of Skierniewice	0,353	A	A	A	A	A
bełchatowski	0,338	A	A	A	В	A
The city of Łódź	0,334	A	A	A	В	A
The city of Piotrków Trybunalski	0,325	A	A	В	С	A
pabianicki	0,283	С	В	С	D	C
zgierski	0,281	С	В	С	С	С
łódzki wschodni *	0,276	С	C	A	В	D
rawski	0,257	D	D	Е	D	D
tomaszowski	0,251	D	D	D	D	D
kutnowski	0,246	D	D	D	D	D
pajęczański	0,245	D	D	D	Е	Е

Source: See Chart 1.

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

Gmina (commune)	PAI1_GN	PAI1_GN_	PAI1_C_	PAI1_G_	PAI1_I_	PAI1_M_
diffina (commune)	17H1_GN	classes	classes	classes	classes	classes
Kleszczów (2)	0,377	A	A	A	A	A
Skierniewice (1)	0,268	A	A	A	A	A
Rawa Mazowiecka (1)	0,265	A	A	A	A	A
Bełchatów (1)	0,265	A	A	A	A	A
Pabianice (1)	0,259	A	A	A	В	A
Łódź (1)	0,259	A	A	A	В	A
Piotrków Trybunalski (1)	0,255	A	A	A	С	A
Tomaszów Mazowiecki (1)	0,245	A	A	A	С	A
Aleksandrów Łódzki (3)	0,242	A	A	A	A	A
Zgierz (1)	0,241	A	A	A	D	A
Łowicz (1)	0,240	A	A	A	C	A
Głowno (1)	0,240	A	A	В	A	A
Nowosolna (2)	0,239	A	A	A	A	A
Andrespol (2)	0,236	A	A	A	A	В
Konstantynów Łódzki (1)	0,236	A	A	A	В	A
Kutno (1)	0,234	A	A	A	В	A
Rzgów (3) *	0,234	A	A	A	A	В
Brzeziny (1) *	0,229	A	A	A	С	В
Zduńska Wola (1)	0,226	A	A	В	D	A
Łęczyca (1)	0,226	A	A	A	С	A
Dłutów (2)	0,221	В	В	С	C	C

Radomsko (1)	0,221	В	В	В	С	A
Rząśnia (2)	0,216	В	В	С	С	С
Sieradz (1)	0,214	В	В	В	С	A
Tuszyn (3)	0,213	В	В	A	A	С
Stryków (3)	0,211	В	В	В	A	С
Rawa Mazowiecka (2)	0,209	В	В	D	В	С
Ozorków (1)	0,207	В	В	В	D	В
Ksawerów (2) *	0,206	В	В	A	В	D
Szczerców (2)	0,204	В	С	С	D	С
Działoszyn (3)	0,202	В	В	С	С	С

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).