

# INSTYTUT BADAŃ NAD GOSPODARKĄ RYNKOWĄ

# INVESTMENT ATTRACTIVENESS OF VOIVODSHIPS AND SUB-REGIONS OF POLAND

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# **Summary of the Report**

#### Introduction

The Gdansk Institute for Market Economics (GIME) undertakes a fourth study on the territorial diversification of foreign investment attractiveness of Poland. The three earlier studies resulted in the publication of three respective reports on the Investment Attractiveness of Voivodships and Sub-Regions of Poland.

In this 4<sup>th</sup> edition of the report we seek to continue our effort as well as to improve our research methodology. As before our overriding objective is to portray, with a maximum of precision, a time-graded territorial diversification of investment attractiveness (IA) in Poland. To this end we need to modify some of our research methods, and in particular the choice of indices and weights, due to the evolution of investor preferences and socioeconomic changes in the voivodships. In order to maintain the comparability of results in the successive reports we assumed to restrict the modification of research methods to the degree that would make it possible to analyse changes in the synthetic IA indices between the years. As in the earlier reports of 2005-2007, we performed a synthetic assessment of IA of voivodships and an assessment of IA of sub-regions against three criteria:

- industrial activities
- services
- advanced technology activities.

Based on the aforementioned assumptions and our research methodology it is possible to trace changes in the territorial diversification of foreign investment attractiveness of the Polish voivodships. These are further reflected in the IA rating lists compiled for the years 2005-2008. Regrettably, it is not possible to obtain a direct comparability of current results with those of previous reports due to a significant change in the number of sub-regions and their territorial delimitation which took place in the early 2008. On the other hand the picture of investment attractiveness obtained for the new layout of sub-regions seems to better reflect the real functional and territorial structure of Poland.

This research has been carried out by a team of GIME contributors upon the commission by the Ministry of Regional Development. The conference and the publication of this report, as well as of its summary, were made possible thanks to the co-operation between GIME and The Konrad Adenauer Foundation . The authors wish to express their heartfelt gratitude to the following persons and institutions for their co-operation and financial support in this project:

- Management of the Ministry of Regional Development and of the Department for Structural Policy Co-ordination;
- Director Stephan Raabe and Mr Falk Altenberger of The Konrad Adenauer Foundation.

# The aim of the report and the scope of research

This report aims to

- identify territorial differences in the level of investment attractiveness and to grade voivodships and sub-regions in this respect;
- indicate strong and weak points of individual territorial units in terms of IA factors;
- analyse changes in the investment attractiveness of voivodships.

The substantive scope of the report follows from the notion of investment attractiveness. IA is understood as a capability to attract investment through a combination of business benefits linked to location. These benefits stem from the specific features of the area, in which business activity is developed, and are referred to as locational factors. Therefore a set of locational factors determines the investment attractiveness of a given area. Those areas that offer an optimum combination of locational factors attract investment. They make it possible to reduce investment expenditures and the current costs of business while enabling the maximisation of profits and reducing the risk of business failure.

Business activities come in all forms and shapes which leads to diverse locational preferences. Consequently, there is no investment attraction of an area in the absolute sense. Our assessment of investment attractiveness is, therefore, a two-track process:

- with respect to sub-regions we discuss locational factors for the three most important types of economic activity –the industry, services and advanced technologies;
- with respect to voivodships universal locational factors are discussed.

In this context we analysed several dozen variables which form the basis for the assessment of territorial diversification of specific location benefits (factors), including availability of transport, cost of labour, quantity and quality of labour resources, absorption capacity of the output market, the level of economic and social infrastructure, the level of economic development and of general safety. Various weights were attributed to these factors depending on the type of business activity.

Table 1. Factors and their significance for investment attractiveness of sub-regions and voivodships.

	Industry	Services	Advanced technologies	Voivodships
Factors		We	ights ( in %)	
Availability of transport	20	10	20	20
Cost of labour	15	15		25
Quantity & quality of labour resources	40	25	30	23
Absorption capacity of market		20	10	15
Level of economic infrastructure	15	10	10	10
Level of social infrastructure			10	5
Level of economic development	2	5	5	
Level of protection and the condition of natural environment	5	7	7	
Level of general safety	3	8	8	5
Activities of regions towards investors				20
Totally	100	100	100	100

Source: GIME research

The territorial scope of the report covers the entire area of Poland and subdivides into

- 16 voivodships;
- 54 sub-regions (formally, there are 66 sub-regions but, for the sake of the report, large cities that constitute sub-regions, including Katowice, Cracow, Łódź, Poznań, Szczecin, Tri-City (Gdańsk, Gdynia, Sopot) and Wrocław were grouped together with their respective surrounding areas with which they are functionally linked).

The report relied on the data obtained mainly from the public statistical sources, and was complemented by other data. The key sources of information were:

- Regional Data Bank of the Main Statistical Office;
- State Agency for Information and Foreign Investment;
- Managers of special economic zones;
- Departments of Trade and Investment Promotion at the Polish Embassies in the countries with the highest share of foreign investment in Poland;
- Winners of the Gmina Fair Play 2008 competition which was organized by the Institute for Private Enterprise and Democracy.

The set of indices was modified in line with the changes in investor preferences and socio-economic transformations.

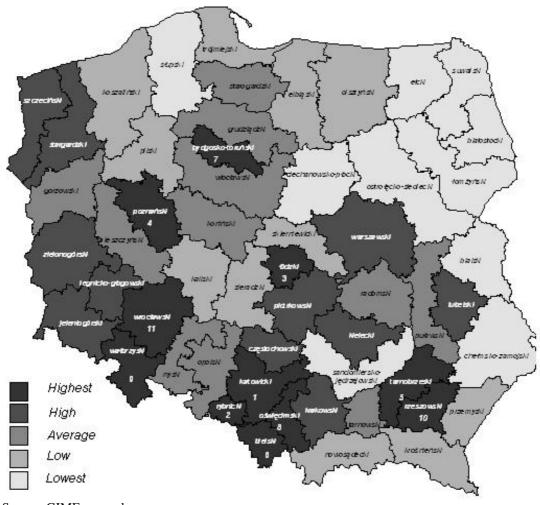
- Availability of transport was defined in terms of time needed to cover a distance between given areas. This approach enabled us to better reflect qualitative changes in infrastructure (e.g. the expansion of motorways, modernization of existing roads).
- Indices reflecting access to major sea-ports were factored in. This factor seems to be gaining importance, especially relative to the location of production.
- The level of development of the transport and logistics sector was factored in . The location of a logistics centre attracts other investments that benefit from the facilitation of transport.
- The assessment of voivodships' investor-oriented activities was extended to cover the index of participation of the winning communities in the Gmina Fair Play competition. As a result the assessment gained in precision.

# **Investment attractiveness of sub-regions**

# **Industrial Activities The significance of locational factors**

The investment attractiveness of sub-regions is shaped by seven groups of component indicators. Four of these directly influence the cost of production which is a key parameter determining the location of business. This category of indicators includes

- quantity of labour resources
- availability of transport
- cost of labour
- level of economic infrastructure.



Map 1. Sub-regional investment attractiveness for industrial activities in 2008.

The sub-regions marked as highest scorers on the IA map include areas located primarily in the south of Poland. They are characterized by long-standing industrial traditions and a well-developed production sector, a specialized labour market and a relatively good availability of transport due to A-4 motorway. There are only three highest-scoring sub-regions outside of this southern area: the sub-regions of Łódź, Poznań, and Bydgoszcz-Toruń. These areas are relatively highly industrialized and offer good availability of transport.

Table 2. Sub-regional investment attractiveness for industrial activities in 2008.

Sub-region	Ranking
katowicki	1
rybnicki	2
łódzki	3
poznański	4
tarnobrzeski	5
bielski	6
bydgosko-toruński	7

oświęcimski	8
wałbrzyski	9
rzeszowski	10
wrocławski	11

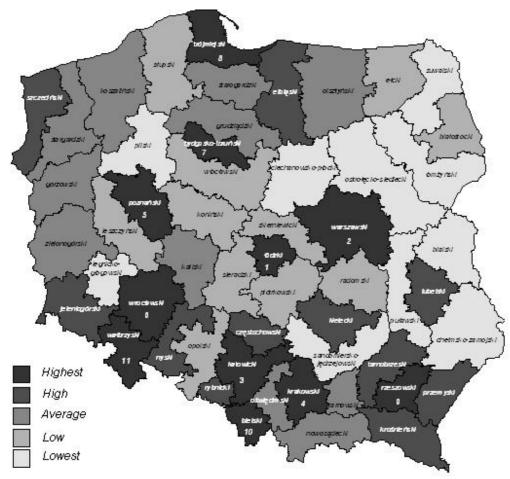
# **The Services**

# The significance of locational factors

A sub-regional investment attractiveness for services is shaped by eight groups of component factors. Among those, the groups of factors that affect the cost of services to the highest degree are

- quantity and quality of labour resources
- absorption capacity of the institutional market
- cost of labour
- level of economic infrastructure.

Map 2. Sub-regional investment attractiveness for services in 2008.



Source: GIME research

Table 3. Sub-regional investment attractiveness for services in 2008.

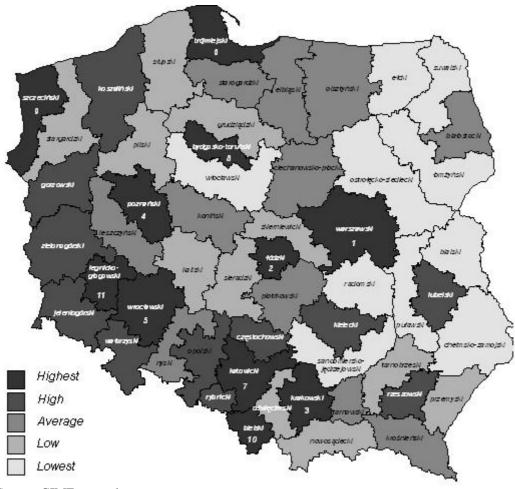
Sub-region	Ranking
łódzki	1
warszawski	2
katowicki	3
krakowski	4
poznański	5
wrocławski	6
bydgosko-toruński	7
trójmiejski	8
rzeszowski	9
bielski	10
wałbrzyski	11

Metropolitan areas emerge as the most attractive for investment. These are centred around the largest cities of Poland. They feature highly absorptive output markets, a very good availability of transport, plentiful resources of highly-trained workers and a well-developed economic infrastructure.

# The Advanced Technologies Sector The significance of locational factors

The level of investment attractiveness for advanced technologies is conditioned by eight groups of factors. Four of them have a direct impact on the cost of business. These include

- availability of transport
- market absorption
- quality of labour resources
- economic infrastructure.



Map 3. Sub-regional investment attractiveness for the advanced technologies sector in 2008.

The sub-regions of a metropolitan nature evince the highest investment attractiveness. It is in the largest cities that the major part of infrastructure and R&D personnel are found. At the same time these urban centres educate specialised workforce which enters the local labour market. Large cities offer a well-developed leisure-time infrastructure, good quality of life and, very importantly, provide a creativity-inducing climate.

Table 4. Sub-regional investment attractiveness for advanced technologies in 2008.

Sub-region	Ranking
warszawski	1
łódzki	2
krakowski	3
poznański	4
wrocławski	5
trójmiejski	6
katowicki	7
bydgosko-toruński	8
szczeciński	9

bielski	10
legnicko-głogowski	11

# **Investment Attractiveness of Voivodships. The significance of locational factors**

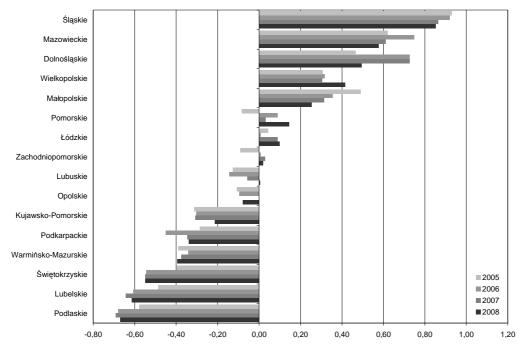
The assessment of investment attractiveness of voivodships is performed against six groups of component indices. Their regional diversification is discussed in the order of significance for investment attractiveness (from top to bottom):

- resources and cost of labour
- voivodships's investor-oriented activities
- availability of transport
- size of the market
- level of economic infrastructure
- level of social infrastructure
- level of general safety.

# Investment attractiveness – a synthetic approach. Territorial diversification of attractiveness.

There are four regions that show a high level of investment attraction, with a Silesian (Śląskie) voivodship as a clear leader followed by the Voivodships of Mazovia (mazowieckie), Lower Silesia (dolnośląskie), and Wielkopolskie. These regions typically show a higher-than-average ranking in various respects. They are characterised by a very well-developed economic infrastructure, a relatively large, highly absorptive markets and a higher-than-average availability of transport. Three of the aforementioned regions (except Wielkopolskie) area characterised by a relatively low level of general safety.

The lowest level of investment attractiveness is found in three voivodships: Świętokrzyskie, Lubelskie and Podlaskie. They rank very low in the majority of our attraction factors, except for the level of general safety which is high in these regions.



Graph 1. The assessment of voivodships with respect to investment attractiveness.

# Voivodships characterised by the highest level of investment attractiveness.

The four voivodships characterised by the highest IA, despite having a number of features in common, show quite significant differences in their attraction profile. They all have their respective strong and weak points in this respect.

Table 5. The characteristics of the Silesian Voivodship (śląskie) with respect to investment attractiveness.

Aspects	Characteristics
Strong points	Labour costs and resources; availability of transport, output market; economic infrastructure; social infrastructure
Weak points	Level of general safety
Changes	A slight relative decrease over 4 years – labour costs and resources, investor- oriented activities, market absorption

Source: GIME research

Table 6. The characteristics of the Mazovian Voivodship (mazowieckie) with respect to investment attractiveness.

Aspects	Characteristics
Strong points	Output market; economic infrastructure; social infrastructure
Weak points	Cost of labour; level of general safety
Changes	A slight relative decrease over 4 years – investor-oriented activities, market absorption, social infrastructure

Source: GIME research

Table 7. The characteristics of the Lower Silesian Voivodship (dolnośląskie) with respect to investment attractiveness.

Aspects	Characteristics
Strong points	Availability of transport, economic infrastructure; social infrastructure
Weak points	Level of general safety
Changes	A slight increase over 4 years — investor-oriented activities,, economic infrastructure; a distinct decrease relative to 2007 r. — investor-oriented activities, level of general safety (a relative decrease), to a lesser degree — a relative deterioration of economic and social infrastructure.

Table 8. The characteristics of the Wielkopolskie Voivodship with respect to investment attractiveness.

Aspects	Characteristics
Strong points	Labour costs and resources; availability of transport; economic infrastructure
Weak points	
Changes	Increase over 4 years —labour costs and resources, investor-oriented activities, output market, economic infrastructure, general safety.

Source: GIME research

Table 9. The assessment of investment attractiveness of voivodships in  $2008\,$ 

		Availa o trans	f	Labo costs resou	and	Mar siz	rket ze	Econo infrastr		Soc. infrastr		Gen safe		Investorient action	ted	Invest attracti o voivod	iveness f
		value	rank	value	rank	value	rank	value	rank	value	rank	value	rank	value	rank	value	rank
	Weights	20	0	25	5	1.	5	10	0	5		5		20	0		
1	Śląskie	0,46	4	1,45	1	1,31	2	1,41	1	2,18	1	1,04	16	0,02	8	0,85	1
2	Mazowieckie	0,39	6	0,26	12	1,73	1	0,72	3	0,33	4	0,48	12	1,20	3	0,58	2
3	Dolnośląskie	0,49	3	0,03	7	0,44	5	0,91	2	0,79	3	0,95	15	1,29	2	0,50	3
4	Wielkopolskie	0,51	2	0,12	4	0,02	6	0,24	4	-0,51	10	0,45	5	1,30	1	0,41	4
5	Małopolskie	0,26	8	0,47	2	0,50	4	0,16	5	1,81	2	0,15	9	0,44	11	0,25	5
6	Pomorskie	0,21	11	0,17	11	1,05	3	0,07	6	0,22	5	0,64	14	0,42	4	0,14	6
7	Łódzkie	0,24	9	0,21	3	0,04	7	-0,35	10	-0,19	7	0,39	11	0,33	5	0,10	7
8	Zachodniopomorskie	0,45	5	0,14	10	0,12	8	-0,36	11	-0,05	6	0,50	13	0,24	6	0,02	8
9	Lubuskie	0,53	1	0,12	9	0,15	10	-0,32	9	-0,70	15	0,35	10	0,18	7	0,01	9
10	Opolskie	0,30	7	0,31	14	0,13	9	-0,01	7	-0,59	13	0,25	7	0,11	9	-0,08	10
11	Kujawsko- Pomorskie	0,04	10	0,02	5	0,19	11	-0,51	14	-0,19	8	0,02	8	0,69	13	-0,21	11
12	Podkarpackie	0,68	14	0,01	6	1,04	15	-0,08	8	-0,56	12	1,61	1	0,45	12	-0,34	12
13	Warmińsko- Mazurskie	0,59	13	0,35	15	0,78	13	-0,38	12	-0,45	9	0,40	6	0,17	10	-0,40	13
14	Świętokrzyskie	0,34	12	0,11	8	1,26	16	-0,54	15	-0,53	11	0,52	3	1,06	15	-0,55	14
15	Lubelskie	0,72	15	0,31	13	0,97	14	-0,41	13	-0,93	16	0,83	2	1,00	14	-0,61	15
16	Podlaskie	1,11	16	0,45	16	0,36	12	-0,54	16	-0,63	14	0,46	4	1,08	16	-0,67	16

Table 10. Attractiveness of voivodships 2005-2008

	Value of synthetic index 2005	Ranking 2005	Value of synthetic index 2006	Ranking 2006	Value of synthetic index 2007	Ranking 2007	Value of synthetic index 2008	Ranking 2008	Ranking change 2008/2007
Śląskie	0,93	1	0,92	1	0,86	1	0,85	1	0
Mazowieckie	0,62	2	0,75	2	0,61	3	0,58	2	+1
Dolnośląskie	0,47	4	0,73	3	0,73	2	0,50	3	-1
Wielkopolskie	0,31	5	0,32	5	0,30	5	0,41	4	+1
Małopolskie	0,49	3	0,35	4	0,31	4	0,25	5	-1
Pomorskie	-0,08	7	0,09	6	0,03	7	0,14	6	+1
Łódzkie	0,04	6	0,01	7	0,09	6	0,10	7	-1
Zachodniopomorskie	-0,09	8	0,01	8	0,03	8	0,02	8	0
Lubuskie	-0,13	10	-0,14	10	-0,06	10	0,01	9	+1
Opolskie	-0,11	9	-0,09	9	0,00	9	-0,08	10	-1
Kujawsko-Pomorskie	-0,31	12	-0,30	11	-0,31	11	-0,21	11	0
Podkarpackie	-0,29	11	-0,45	13	-0,35	12	-0,34	12	0
Warmińsko-Mazurskie	-0,39	13	-0,34	12	-0,38	13	-0,40	13	0
Świętokrzyskie	-0,40	14	-0,54	14	-0,55	14	-0,55	14	0
Lubelskie	-0,49	15	-0,61	15	-0,64	15	-0,61	15	0
Podlaskie	-0,58	16	-0,68	16	-0,69	16	-0,67	16	0