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The Economic Situation Regarding Voivodships Shortly Before the Poland's Accession to the European Union

Introduction

Regional development involves several factors which have to do with economy, politics, culture, biology and the environment (cf Z. Chojnicki, T. Czyż, 2004). In this paper we will be concerned with the economic aspect of regional development focusing our attention on its three categories: economic activity, financial resources and economic effectiveness. Fifteen variables have been used altogether - five for each of the groups. It should be noted that some of the variables describe certain aspects of the functioning of an economy not only with respect to the subject matter they have been assigned to. As a result the division of the variables into three groups is - to some extent - a relative one. All the data used in this paper have been derived from publications by Central Statistic Office (in Polish: Główny Urząd Statystyczny). The choice of variables used in the analysis is based on the following sources: R. Bailey, B. Lehaney (1992); M. Dutkowski (1998); J. Kropiwnicki, R. Szewczyk (1998); J. J. Parysek (1997); S. M. Zawadzki (1972).

In the period of the centrally controlled economy industrialization and urbanization were the most visible processes in the Polish spatial reality (T. Lijewski, 1993). On the other hand, the most important factor affecting regional differences was a set of sectoral preferences while industry turned out to be the most important driving force behind interregional differentiations (A. Pyszkowski, 2002). The industrial sector quickly lost its leading role as it appeared to be unable to adjust itself to the new reality (cf T. Styjakiewicz, 1999).

The purpose of this paper is to analyse the economic situation of voivodships in Poland before its accession to the European Union. The subject matter defines the period of the analysis which is 2003. The paper seems to be a kind of "balance sheet" used as a starting point for a new period.

The research procedure involves: (1) standardization of variables, (2) changing destimulators into stimulators, (3) calculating the total Perkal value (cf J. J. Parysek,

L. Wojtasiewicz, 1979). To divide voivodships into groups the method of critical distance by Z. Hellwig was used.

The summary of the research is based on the combination of two methods involving: global indicators and cluster analysis (Ward's method for Euclidean space (cf J. J. Parysek, 1982)).

The detailed analysis of the economic situation of voivodships

The detailed analysis of the economic situation of voivodships was carried out on the basis of three categories: economic activity, financial resources and economic effectiveness.

The analysis of economic activity was based on the following five variables:

1. Economic activity of the population (by LFS - Labour Force Survey) aged 15 and more: activity rate in %.
2. Long - term unemployment in % of total unemployment (by LFS - Labour Force Survey).
3. Investment outlays (current process) in zł per capita.
4. Gross domestic expenditures on research - development activity (R&D) excluding depreciation of fixed assets (current prices) ratio to gross domestic product (GDP) in % [2002].
5. Entities of the national economy (as of 31 XII; excluding persons tending private farms in agriculture) recorded in the REGON register, per 10 thous. population.

The most general approach to economic activity may be described by means of economic activity of the population. Employment rate as well as its opposite term, i. e. (registered) unemployment rate are also useful. The second of the above mentioned variables is used in this paper as a destimulant. Unemployment should be considered to be a social and economy pathology. Out of all forms of unemployment there are two which the most destructively affect both the society and economy: long term unemployment and youths unemployment (e.g. in Poland this form of unemployment includes persons not older than 24). Investment outlays per capita are a variable which is a descriptive measure somewhere between vocational activity and financial resources. In the era of the third industrial revolution research - development activity is getting more and more important. Thus the analysis is bound to use a variable depicting this sphere of economic activity. Gross domestic expenditures on research

- development activity (R&D) ratio to gross domestic product (GDP) in % was chosen as the most suitable variable out of several available variables. Another variable called entities of the national economy (excluding persons tending private farms in agriculture) recorded in the REGON register was also used to assess economic activity. Potentially, this variable is a very good one but in Polish economic reality it shows certain drawbacks. The main one is lack of legal obligation to cancel the registration in case economic activity stops. It results in the REGON system showing more economic entities than the number of the entities being actually active.

The analysis of economic activity (Figure 1) shows how much Mazowieckie Voivodship differs from other regions. Its privileged position is caused mainly by the capital city which is situated within its administrative borders. The concentration of foreign investments in the capital city is typical of countries characterized by poor development of their infrastructure. This, in turn, accounts for a higher level of economic activity and lower unemployment rate. Furthermore, the voivodship enjoys its population being more enterprising. All above mentioned factors contribute to a relatively high investment outlays. Last but not least the biggest universities and research institutes concentrate in the capital city raising the share of outlays allocated for research and development activity.

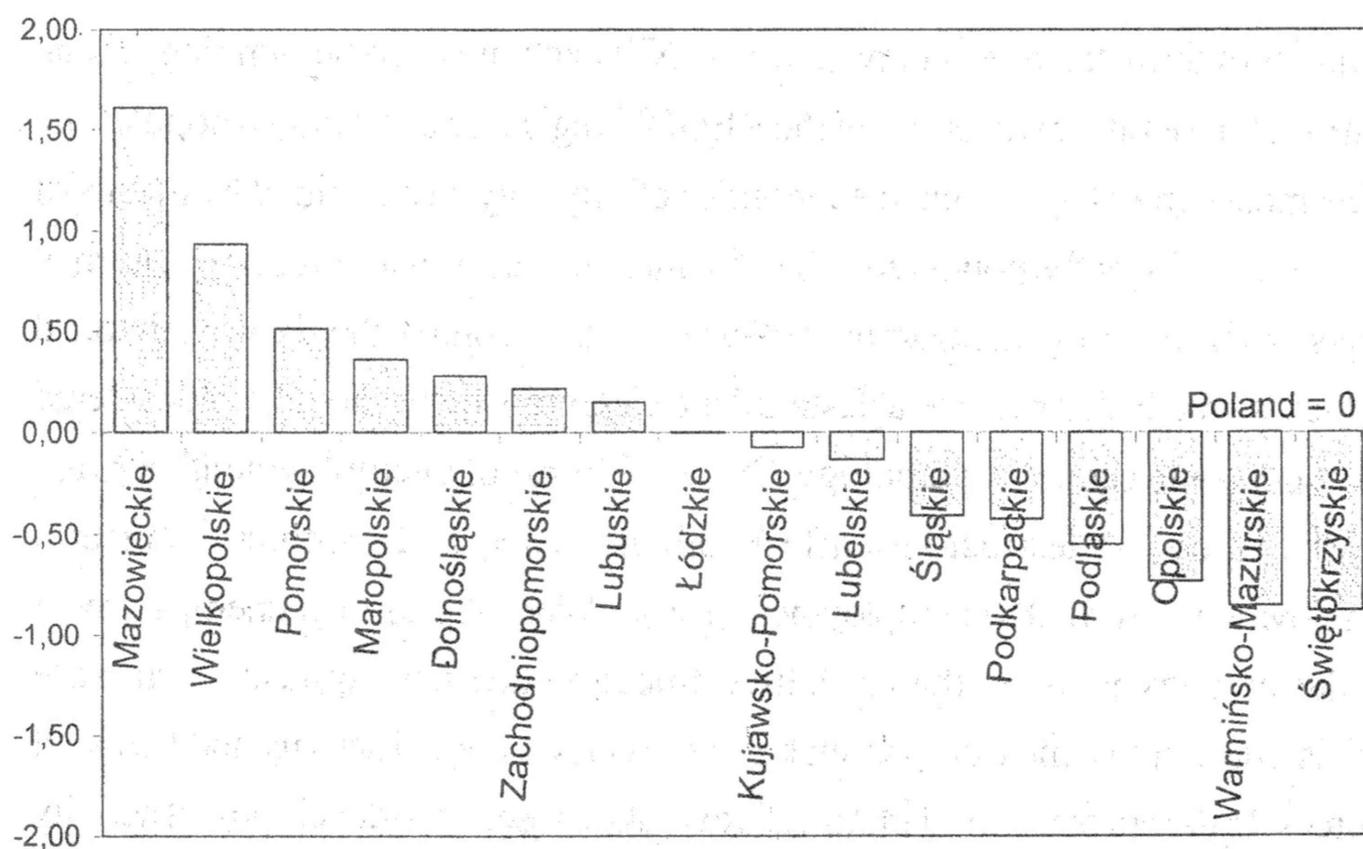


Figure 1. The assessment of economic activity in voivodships in 2003

Source: Author's own elaboration based on data by GUS (Central Statistic Office).

Wielkopolskie Voivodship takes the second place. There are three factors which account for its position: inhabitants of Wielkopolska have been known for their high level of economic activity for quite a long time; the capital city of the region, Poznań, is renowned for its economic potential; proximity to Germany is also of great importance.

The third group is made up of voivodships of an average level of economic activity (they range from Pomorskie Voivodship to Lubelskie Voivodship). There is no common denominator to clearly explain why these voivodships belong to one group. It seems that a few different factors make account for it. On the one hand it is their location. All of them lie in attractive tourist areas (Pomorskie, Małopolskie, Dolnośląskie and Zachodniopomorskie). On the other hand, an important role is played by big urban centers which function as regional development centers (particularly Tricity in Pomorskie Voivodship; Kraków in Małopolskie Voivodship; Wrocław in Dolnośląskie Voivodship and Łódź in Łódzkie Voivodship). Last but not least, the proximity of the EU borders, especially German borders (Dolnośląskie, Zachodniopomorskie and Lubuskie) contribute to the above mentioned classification.

The last group consists of the remaining regions (from Śląskie to Świętokrzyskie voivodeships). All of them, except Śląskie Voivodship, do not have any big urban centers which could act as development centers. In the case of GOP (in Polish: Górnośląski Okręg Przemysłowy) that is situated in the area of Śląskie Voivodship we have to do with an old raw material region. It is currently undergoing a rather slow process of restructuring. Besides, they are voivodships lying mostly in the east of Poland where neighbouring countries have much weaker economies than that of the EU.

While analyzing financial resources the following five variables were used:

1. Gross domestic product (current process) in zł per capita.
2. Revenue of gminas, poviats, cities with poviat status and voivodships budgets in zł per capita.
3. Gross value of fixed assets as of 31 XII (current book - kemping process) in zł per capita.
4. Average monthly gross wages and salaries in zł.
5. Nominal income gross disposable income in the households sector in zł per capita (attention: Data were revised in relation to data published in the previous edition of publications).

GDP (Gross Domestic Product) is the most general variable to describe the economic well-being of a region. Thus it also depicts financial resources. The remaining four variables describe chosen aspects of economic well-being. So, financial resources of local governments are characterized by the variable called revenue of gminas, poviats, cities with poviat status and voivodships' budgets. It is quite difficult to describe the financial resources which are currently engaged. All available variables describe them partially. Finally, the variable called gross value of fixed assets for a given year was chosen. The last two variables describe the financial situation of the population.

If we take a closer look at the results of the analysis we become aware that they present merely an approximation of what should be obtained as the analysis does not include direct foreign capital outlays. It is obvious that such outlays exert a great impact on financial resources engaged in particular regions. However, they are indirectly shown in the analysed variables (especially in GDP).

While analyzing financial resources divided according to NUTS-2, the dominating position of Mazowieckie Voivodship can be seen even more clearly (Figure 2). It results from the same factors as shown in the previous analysis.

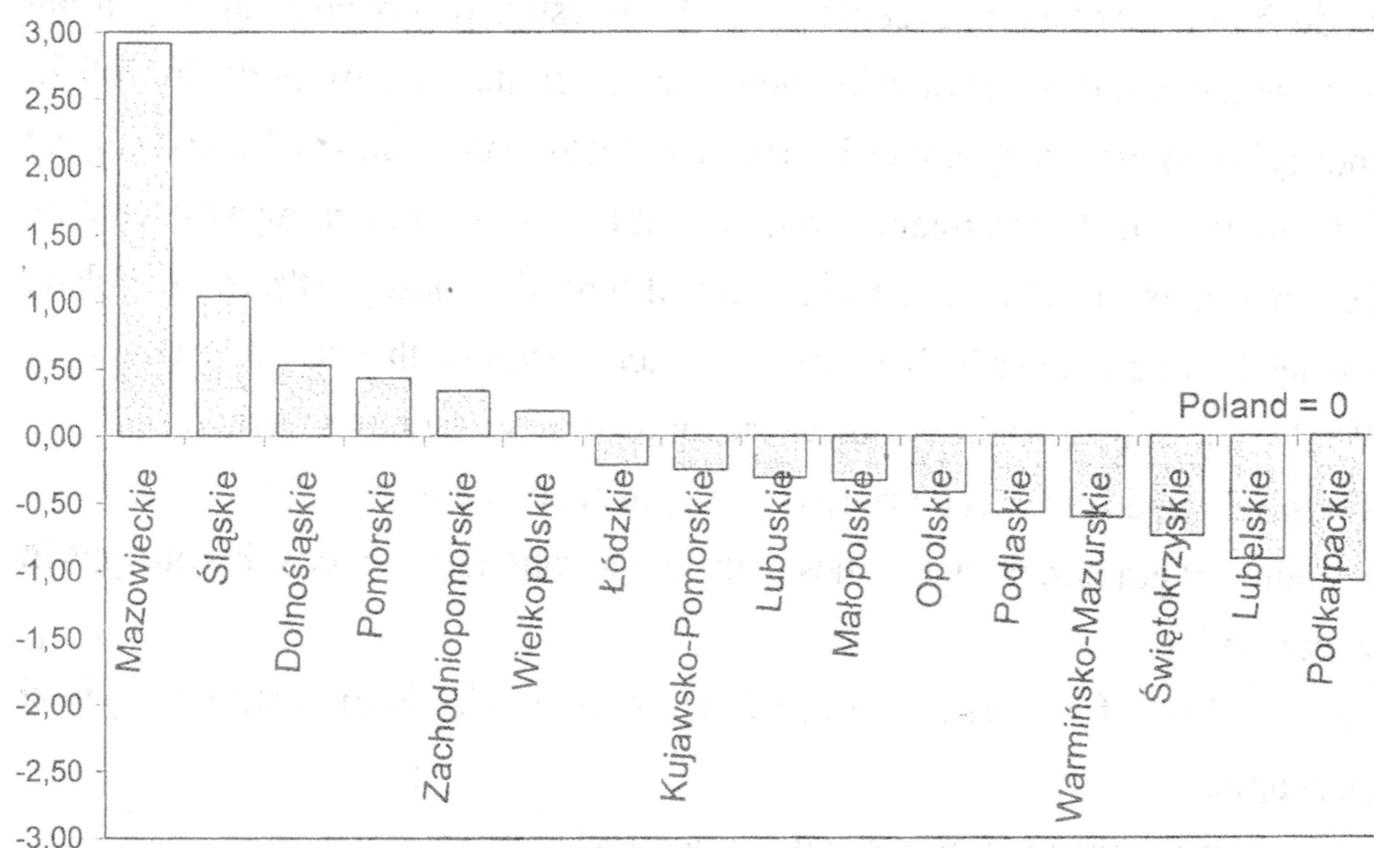


Figure 2. Assessment of the size of financial resources in voivodships in 2003

Source: Author's own elaboration based on data by GUS (Central Statistic Office).

The second place with respect to financial resources per capita is taken by Śląskie Voivodship. It is mainly due to high revenues of local governments. This voivodship sees also high disposable income in the households sector (all three variables describing it rank second in the country, directly after Mazowieckie Voivodship). Surprisingly, gross value of fixed assets is at a relatively low level (it ranks the fifth).

The above mentioned data confirm that the so called heavy industry in the era of the third industrial revolution is no longer a decisive factor in terms of economic well-being of a region¹. It is not as if raw material regions could not develop dynamically but their development requires substantial outlays on restructuring processes.

The third group includes voivodships (from Dolnośląskie to Wielkopolskie) situated in the western part of Poland. Each of them has a big urban center where considerable financial resources concentrate.

The last group is characterized by the least financial resources per capita. This group consists of voivodships (from Łódzkie to Podkarpackie) which lie mainly in the central or eastern Poland. They most often do not have a big city.

To characterize economic effectiveness five variables are needed:

1. Sold production of industry (current process) in zł per capita.
2. Dwellings completed per 1000 population.
3. Procurement of agricultural products per 1 ha of agricultural land in terms of cereal units in dt (a cereal unit is the average energy and protein equivalent of 1 dt of cereals).
4. Gross value added per employed person in zł.
5. Own revenue of gminas, poviats, cities with poviat status and voivodships budgets in % of grand total revenue.

The first three variables depict production output: the first refers to industry, the second refers to construction and the third to agriculture. The last two variables characterize revenues of local communities.

The variable gross value added per employed person characterizes economic effectiveness per employed person. The last of the applied variables characterizes economic effectiveness of local governments.

¹ It was recently a common belief that industrial regions that provided raw materials and needed huge investment outlays on heavy industry were important in the economies of postcommunist countries. It was only a short time ago when GOP in Poland was considered extremely important as an "economic base" of the country due to dynamic development of mining and metallurgy. Nowadays such views are past and forgotten. However, they seem to be still valid in Ukraine where representatives of eastern regions claim that they are "the future and economic base" of the whole Ukraine. This is an anachronism which should be done away with as quickly as possible.

Economic effectiveness shown in Figure 3 refers to similar situations to those that have already been described. Once again Mazowieckie Voivodship ranks first. Its high position is due to financial results, i.e. gross value added per employed person in zl & own revenue of gminas, poviats, cities with poviat status and voivodships budgets in % of grand total revenue. Getting the upper hand over other voivodships is accounted for by situating in the metropolitan area numerous foreign firms (particularly their representatives for Poland) and all kinds of central institutions. It all results in employed persons getting higher income than the national average. The local government's revenues also exceed the average level.

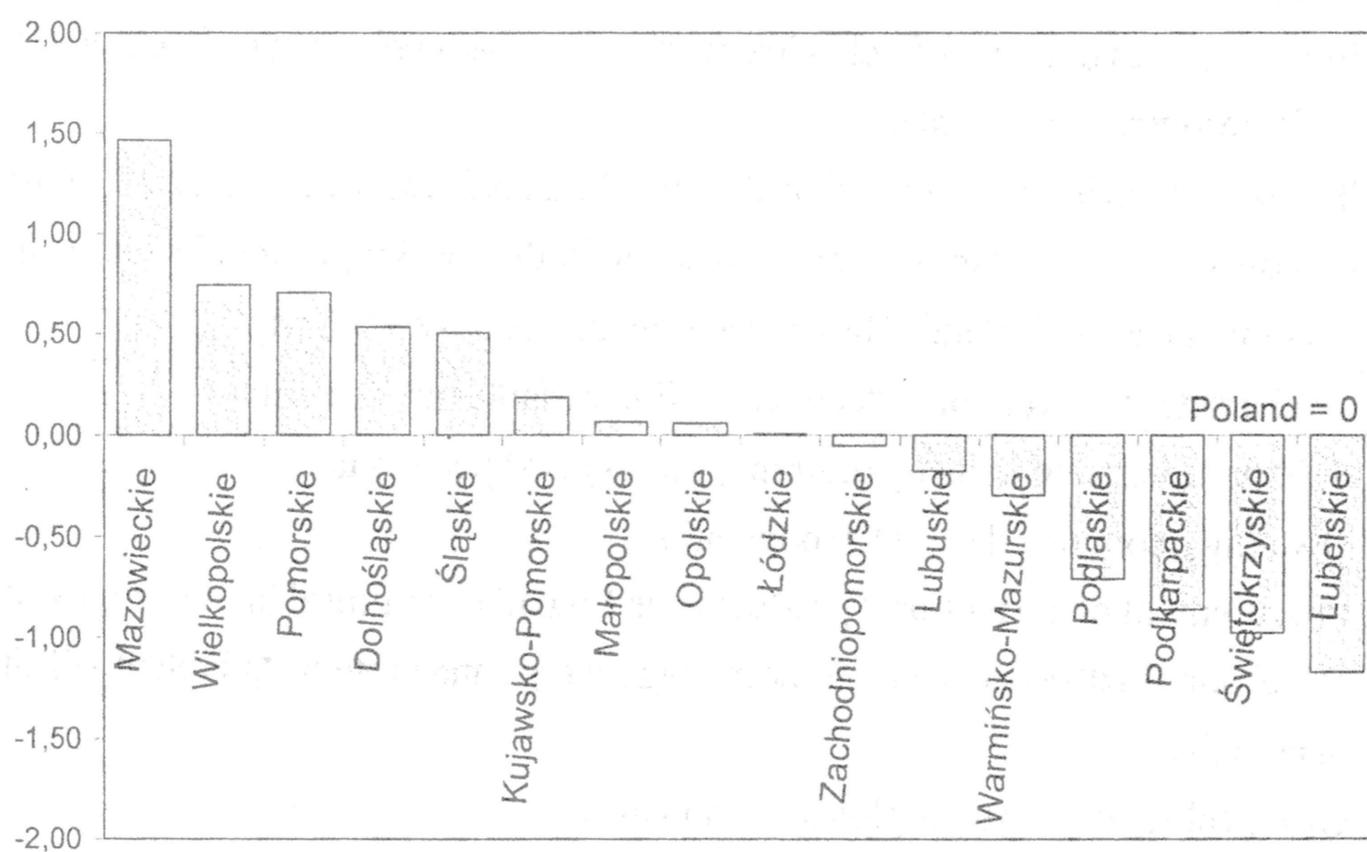


Figure 3. Assessment of economic effectiveness in voivodships in 2003

Source: Author's own elaboration based on data by GUS (Central Statistic Office).

The second group with a high economic effectiveness level includes the following voivodships: Wielkopolskie, Pomorskie, Dolnośląskie and Śląskie. It may seem strange but Zachodniopomorskie Voivodship did not find itself in this group. Big agglomerations situated in the voivodships account for the increased economic effectiveness. Behavioural factors also seem - to a certain extent - to contribute to economic effectiveness. Diligence and honesty which are believed to be natural qualities of people who live in Wielkopolska and Pomorze (Kaschubs and Kociewiaks) are undoubtedly their great assets strengthened by German patterns

in the close neighbourhood. However, separate research is needed to confirm or reject this thesis.

The biggest third group is made up of voivodships representing medium economic effectiveness (from Kujawsko-Pomorskie to Warmińsko-Mazurskie). This group is internally differentiated. In practical terms one can hardly find a common denominator which could account for all these voivodships belonging to one group.

The last fourth group is easier to explain as it includes regions of the least economic effectiveness (from Podlaskie to Lubelskie). Except for Świętokrzyskie Voivodship classified as a NUTS-2 region all other areas are part of so called Eastern Wall which suffers from severe social problems. Moreover, all these regions do not have any big urban centers and their own revenues make up the smallest share of the budget.

A general overview of the economic situation in voivodships

The general level of economic development of the analysed voivodships allows to distinguish five groups of regions (Figure 4). Mazowieckie Voivodship, as it was safely assumed, enjoys the best economic situation (type I). The main advantage of this region is the capital city.

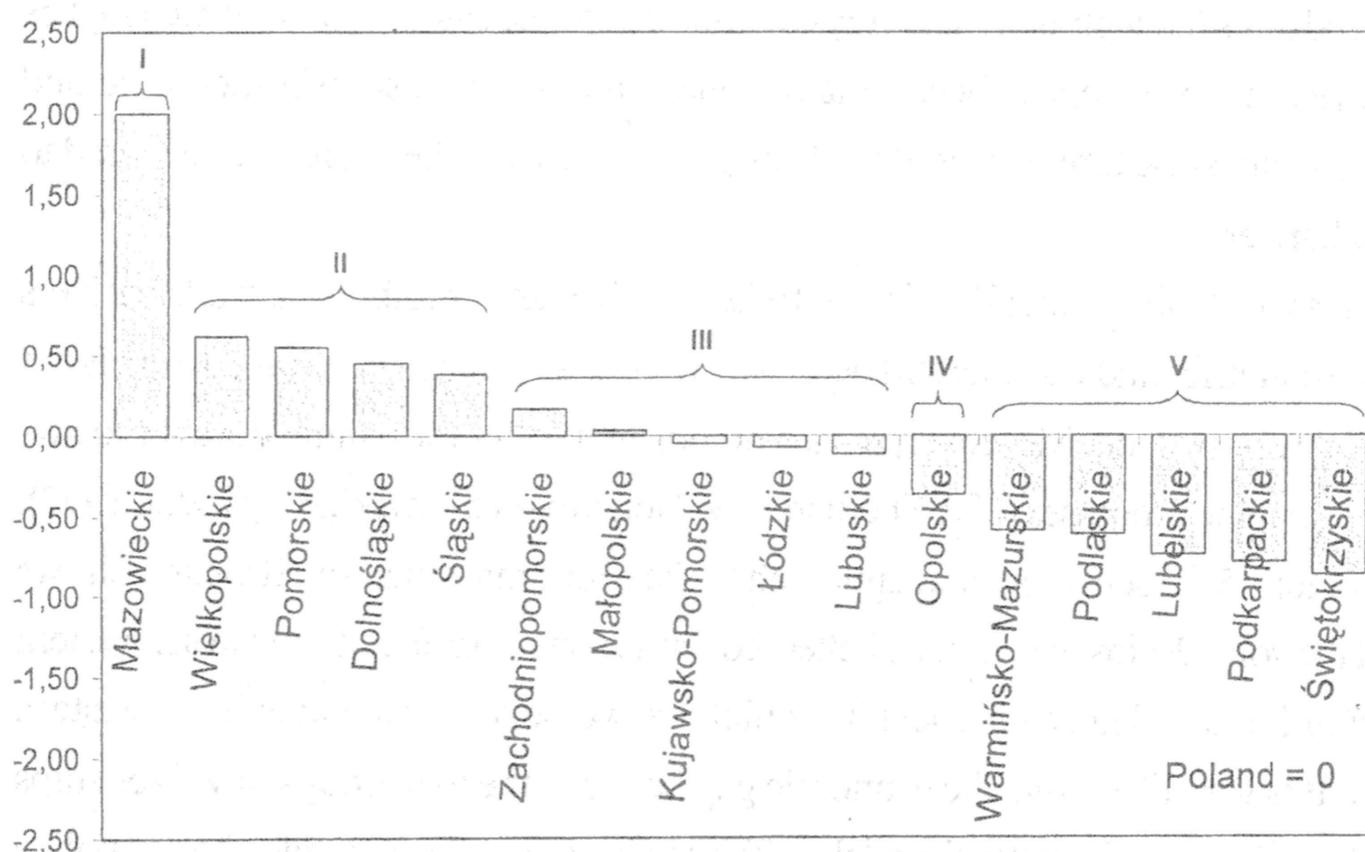


Figure 4. A general assessment of economic situation in voivodships in 2003

Source: Author's own elaboration based on data by GUS (Central Statistic Office).

The second group (II) consists of the following voivodships: Wielkopolskie, Pomorskie, Dolnośląskie and Śląskie. All these regions have big urban agglomerations. Besides, excluding Pomorskie Voivodship, they are favourably situated close to big agglomerations of the "old" European Union. They also have the best developed transport infrastructure (particularly motorways) in Poland. Pomorskie Voivodship finds itself in a worse situation as it lies out of the main transport routes and is endangered by turning into a peripheral area (cf T. Michalski, M. Tarkowski, 2004). On the other hand Pomorskie Voivodship is known for well-qualified workforce and the best usage of the EU funds.

The voivodships which belong to the third group (III) are diversified (from Zachodniopomorskie to Lubuskie). It seems that different factors contribute to factors which improve or deteriorate their economic situation.

The fourth group (IV) has only one element, i.e. Opolskie Voivodship. It is a very distinctive voivodship because a numerous German minority lives there.

The last group of regions (type V) is made up of economically weak voivodships (from Warmińsko-Mazurskie to Świętokrzyskie). Most of them lie in the eastern part of Poland. None of these voivodships has a big city which might play the role of the driving force behind the development of neighbouring areas. Furthermore, these voivodships (excepting Świętokrzyskie) lie close to the eastern border which makes them even more prone to becoming peripheral areas. The eastern border of Poland is the furthest eastern border of the European Union and therefore is considered to be a barrier.

It is worth noting that Russia and Belarus rather lack credibility as trade partners (both countries and Ukraine still belong to WTO). The transport infrastructure is not well developed too. Moreover, some voivodships suffer from unfavourable socio-demographic processes (cf P Eberhardt, W. Gorzym-Wilkowski, A. Misztal, 1997).

Figure 5 presents a spatial approach to the economic situation. It clearly shows that the voivodships which enjoy better economic conditions are situated in the western part of Poland. Those voivodships which are worse off are situated in the eastern part. It is very likely that the economic gap between the two groups of voivodships will continue to widen despite all the efforts being made; for example, the EU policy of cohesion. Such a spatial layout of economic situation is not conducive to the local and regional cooperation with Poland's eastern neighbours.



Figure 5. A general assesement of economic situation in voivodships-spatial layout in 2003

Source: Author's own elaboration based on Figure 4.

An analysis of relationships between particular factors depicting economic situation in voivodships was also carried out (Figure 6, 7). The analysis proves that Polish regions can be divided into two distinctive groups. If the classification becomes more detailed then three groups of voivodships can be distinguished.

Mazowieckie Voivodship belongs to the first group (type A). The economic factors of development in this voivodship show specific relationships because of the capital city situated in this region. The second group (type B) incorporates the majority of voivodships situated in the central and western part of Poland. In turn, type C is made up of voivodships lying in the east and south-east of the country. It seems that

the above mentioned division of voivodships may well be accounted for by the history of Poland, particularly by the period when Poland was partitioned and annexed by invaders. A rather challenging thesis can be put forward that in that period the base of the Polish society's mental qualities was formed (among others economic attitudes). Neither the period between the two world wars nor the communist era were able to destroy these qualities.

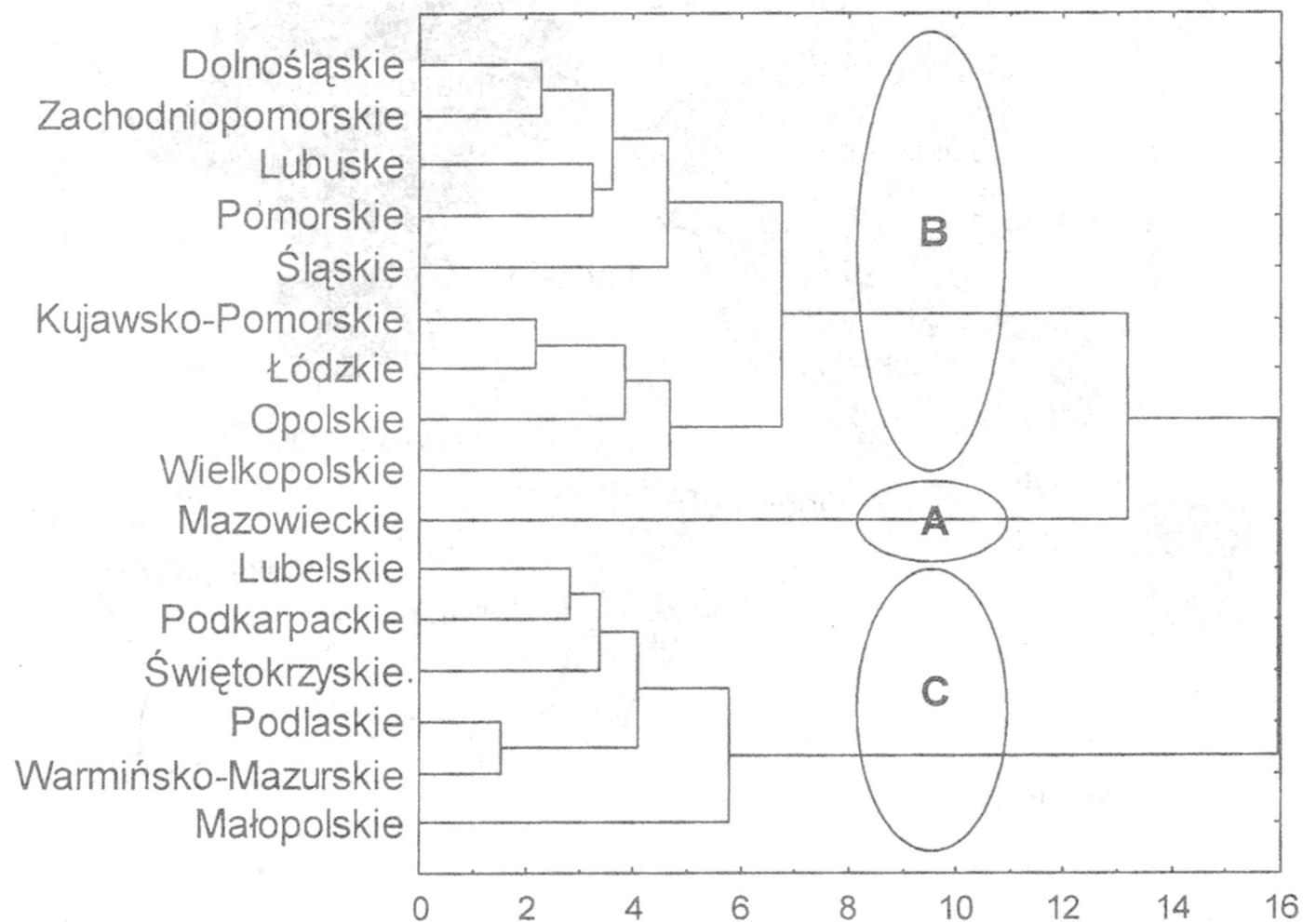


Figure 6. Classification of voivodships by relationships between economic factors of development in 2003

Source: Author's own elaboration based on data by GUS (Central Statistic Office).

Conclusions

In order to sum up the economic situation in voivodships shortly before Poland's accession to the European Union the results presented in Figure 4 and 6 were used. The effects are presented in Table 1. In all likelihood the spatial differentiation of the economic situation in voivodships will not change in the foreseeable future. For example, if we compare the voivodships' differentiation related to as important factor as the base of knowledge which is fundamental for an economy based on knowledge (cf Z. Chojnicki, T. Czyż, 2003) then a similar spatial layout of this phenomenon is

obtained. This comparison is valid even though financial outlays on education in Poland are smaller than in other European countries (cf J. Heller, M. Bogdziński, 2005).



Figure 7. Classification of voivodships by relationships between economic factors of development - spatial approach concerning 2003

Source: Author's own elaboration based on Figure 6.

The analysis carried out above shows that there were two factors which affected the economic situation in voivodships shortly before Poland's accession to the European Union:

1. The presence of a big city in a region which could play the role of a center of growth (cf M. Opałło, 1998). This factor is particularly distinct in the case of Mazowieckie Voivodship which has the capital city within its borders.
2. The geographic factor which explicitly shows the deterioration of the economic situation in voivodships from the west towards the east of the country. This factor

acts in two ways:

- 2.2. As a contemporary factor which proves that the proximity to rich countries of the "old" European Union is conducive to economic development, particularly in Poland where the transport infrastructure is underdeveloped.
- 2.3. As a historical factor which confirms that the areas annexed by Russia and, more importantly, by Austria are characterized by a worse economic situation these days.

Table 1. General characteristics of the economic situation in voivodships in 2003

		Types of economic situation (Figure 6)		
		A	B	C
Levels of economic situation (Figure 4)	I	Mazowieckie		
	II		Wielkopolskie Pomorskie Dolnośląskie Śląskie	
	III		Zachodniopomorskie Kujawsko-Pomorskie Łódzkie Lubuskie	Małopolskie
	IV		Opolskie	
	V			Warmińsko-Mazurskie Podlaskie Lubelskie Podkarpackie Świętokrzyskie

Source: Author's own elaboration based on Figure 4 and Figure 6.

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