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## IMPACT OF EUROPEAN COHESION POLICY ON THE COMPETITIVENESS OF THE WARMIAN-MASURIAN VOIVODESHIP

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In the modern economy, not only individual employees, entrepreneurs and companies compete, but also territorial units, such as regions. Moreover, competition has always been an integral part of human existence and it concerns many different aspects of life. However, competitiveness at the regional level is a special phenomenon. While competition between workers relates to getting a well-paid and rewarding job, and competition between companies involves maintaining or increasing market position and maximising profit, competition between regions is about increasing the number of inhabitants, acquiring the highest possible amount of public development funds, as well as about attracting new external investors and ensuring the most favourable conditions for conducting business activity.

The competitiveness of a particular region is caused by many different factors and is the result of different potentials. Therefore, the sources of competitiveness at the regional level are attributable to economic, cultural, social, innovative, environmental and institutional factors as well as to the development of human capital. They refer both to the internal quantitative and qualitative development potentials of a particular region. However, it is not possible to define a universal set of development competitiveness factors that would work well at all times and at all geographical latitudes.

Despite the fact that the process of competition is widely recognized and considered as important at the regional level, there is no single universal definition of the competitiveness of the region. There are many different definitions that reflect different approaches to this multifaceted and complex phenomenon. For example, the competitiveness of a region can be defined, on the one hand, as the resultant competitiveness of companies operating in a given area, and, on the other hand, as creating conditions for the development of entrepreneurship and improving the standard of living of residents in a given region. For the purposes of this dissertation, the competitiveness of the region was defined as the ability to offer an attractive and sustainable environment for companies and residents to live and work<sup>1</sup>.

Increasing the competitiveness of regions is one of the main objectives of the European cohesion policy, as the development of individual regions is reflected in the competitiveness of the Member States and the European Union as a whole. In the years 2007-2019, i.e. during the financial perspective of the EU for the years 2007-2013 and during the first six years of the budgeting period 2014-2020, one of the voivodeships with the highest value of EU co-financing per capita was the Warmian-Masurian Voivodeship. The amount of EU funds used

L. Dijkstra, P. Annoni, K. Kozovska, A New Regional Competitiveness Index: Theory, Methods and Findings, "European Union Regional Policy Working Papers" 2011, No. 2, p. 4.

in the Warmian-Masurian Voivodeship per capita was PLN 14.8 thousand and constituted 143% of the national average (PLN 10.1 thousand). In this respect, the Warmian-Masurian Voivodeship ranked first among all Polish voivodeships. The inhabitants of the region at the national level were therefore the main recipients of financial assistance offered to Poland under the European cohesion policy. Between the years 2007 and 2019, however, the rank of the Warmian-Masurian Voivodeship deteriorated as compared to the national average in terms of key indicators showing the level of competitiveness and presenting the scale of social and economic development. Therefore, this proves the deepening polarisation process, which takes place between the average situation in the country and the Warmian-Masurian Voivodeship.

Taking into account the above-mentioned facts, the aim of this dissertation was to examine whether implementation of the European cohesion policy in the Warmian-Masurian Voivodeship in the years 2007-2019, in connection with spending of UE funds, had an impact on an increase in the competitiveness of the Warmian-Masurian Voivodeship as compared to other Polish voivodeships.

This dissertation consists of an introduction, five chapters and a summary.

The first chapter is theoretical and was developed on the basis of a critical analysis of the source literature concerning competitiveness, including competitiveness in a regional context. In the introduction the general concept of competition and competitiveness, taking into account their importance in economic life, was presented. This part of the dissertation also provides an analysis of different aspects of competitiveness and its levels, at the same time presenting differences in this respect. Moreover, the concepts of competitive position (understood as the achieved result of competition between economic competitors) and competitive ability (identified with the factors that decide about and influence the possibility of competition) were also presented. In the further part of the chapter, the focus was on competitiveness from the regional perspective, at the same time presenting different approaches to its definition. Then, selected theories of regional development in the context of strengthening the competitiveness were presented, as each of the main schools of the theory of regional development brings practical implementation, which may contribute to increasing the competitiveness of a particular region. The last part of the chapter is devoted to the factors shaping the competitiveness of the region, which determine the failure or success in competition with other regions.

The second chapter presents the assumptions of the European cohesion policy. At the beginning of the chapter, the genesis and evolution of the European Union's cohesion policy was presented, which allowed an analysis of how the policy itself and its priorities, as well as objectives, have changed over the years. In the further part of the chapter, the focus was on Lisbon Strategy and Europa 2020 Strategy goals, because the European cohesion policy was the primary implementing tools of them. Afterwards, the financial instruments to ensure the coherence of the European regions were presented, such as the Structural Funds and the Cohesion Fund. The last part of the chapter is review of operational programs that implemented the assumptions of the European cohesion policy in Poland.

The third chapter presents implementation of the European cohesion policy in the Warmian-Masurian Voivodeship with the use of EU funds. At the beginning of the chapter analysis of the use of the European cohesion policy funds in the Warmian-Masurian Voivodeship was presented as compared to other Polish regions, with the division into particular operational programmes of the EU financial perspective for the years 2007-2013 and the EU budgeting period 2014-2020 as at the end of the year 2019. Further in the chapter, the focus was on the structure of spending the European cohesion policy funds, taking into account infrastructure investments, human capital development and support for the production sector. The last part of the third chapter presents the impact of the use of EU funds on the social and economic situation of the Warmian-Masurian Voivodeship in view of evaluation studies and the results of simulations carried out on the basis of macroeconomic models. This was possible due to the use of materials commissioned by the Ministry of Regional Development and the Marshal's Office of the Warmian-Masurian Voivodeship in Olsztyn.

The fourth chapter presents the general characteristics of the region and addresses the question: how did the social and economic situation in the Warmian-Masurian Voivodeship change as compared to Poland and other voivodeships between the year 2007, i.e. the first year of implementation of the European cohesion policy in the EU financial perspective for the years 2007-2013, and the year 2019, which illustrates the situation in the region after six years of implementation of the EU funds of the financial perspective for the years 2014-2020. At the beginning of the chapter, the basic information about the Warmian-Masurian Voivodeship and its internal diversity were presented, thus showing the internal conditions of its competitiveness. Then, in order to show the transformations in the situation of the Warmian-Masurian Voivodeship as compared to other Polish regions and the country, the changes in statistical data that took place between the years 2007 and 2019 in the most

important areas of social and economic life were compared. To this end, the analysis covered mainly data concerning: demographics and material living conditions of the population, access to public services, the state and structure of the economy, entrepreneurship, investments and innovation, the labour market, as well as technical and transport infrastructure. The data were presented both in absolute (numerical) and relative terms, referring the values observed in the Warmian-Masurian Voivodeship to other voivodeships and average values recorded in the country. The dynamics of changes in particular statistical data was also analysed, as well as the changes in the ranking position of the Warmian-Masurian Voivodeship as compared to other regions. In order to better illustrate the changes taking place in the social and economic situation of the region, some of the data are presented in graphical or tabular form.

The last chapter of this dissertation presents the results of own research on the impact of the European cohesion policy on the change in the level of competitiveness of the Warmian-Masurian Voivodeship. In the first part of the chapter, an analysis of the relationship between the spending of the European cohesion policy funds per capita and the pace of changes in the value of GDP per capita were presented, which reflects the position of the region in economic competition. Next, on the basis of indicators illustrating the competitiveness of the region as a place where it is worth living and conducting business activity, based on the method of linear ordering by Hellwig, a synthetic indicator of the competitive position of regions in the years 2007 and 2019 was prepared. The difference between the values of the synthetic index in the years 2007 and 2019 enabled an assessment of how the competitive position of Polish regions, including the Warmian-Masurian Voivodeship, changed in the period under analysis. The next stage of the research was to determine whether these changes were influenced by the manner of spending the funds under the European cohesion policy. Further in chapter five, a comprehensive competitiveness indicator was developed on the basis of a selected set of statistical indicators concerning the position and competitive capacity of regions. For this purpose, the correlation-weighting method was applied. Subsequently, the above-mentioned indicator was correlated and subjected to a regression analysis with the value of EU funds used in particular regions per capita. This approach allowed for the determination of the relationship between the use of EU funds and the level of competitiveness achieved. Finally, it was examined whether increased EU support to the manufacturing sector increased regional competitiveness.

The research carried out in this dissertation shows that the Warmian-Masurian Voivodeship did not improve its competitiveness as compared to other Polish voivodeships

in the years 2007 and 2019, regardless of the adopted method of its measurement. For example, one of the commonly used indicators reflecting the scale of the competitiveness of the regions is GDP per capita. Despite the real increase of this indicator between the years 2007 and 2019, position of the Warmian-Masurian Voivodeship in the ranking of voivodeships dropped by one position – from 14th place in the year 2007 to 15th place in the year 2019. In addition, in the period under analysis, position of the Warmian-Masurian Voivodeship in the ranking of voivodeships in terms of comprehensive competitiveness indicators prepared for the purposes of this dissertation dropped – a drop from 15th place in the year 2007 to the last place in the year 2019. Thus, the Warmian-Masurian Voivodeship became the least competitive voivodeship in the country, taking into account various social and economic factors shaping the competitive position of the region.

However, the low competitiveness of the Warmian-Masurian Voivodeship as compared to other voivodeships does not mean a lack of development. According to the analyses conducted, the social and economic situation of the Warmian-Masurian Voivodeship improved between the years 2007 and 2019. In the analysed period, the vast majority of key factors reflecting the social and economic condition of the region improved. This concerned, among others, such diverse indicators as: GDP per capita, the number of business activities per 1000 inhabitants, the ratio of expenditure on research and development activities to GDP, labour force participation rate, employment rate, registered unemployment rate, job search time, extreme and relative poverty rate, migration balance, share of expenditures on the basic needs, road density, percentage of children participating in preschool education, etc. In the year 2019, all of the above-mentioned indicators had higher values than in the year 2007, as stimulant increases and destimulant decreases were observed. The condition of the transport infrastructure has also improved significantly as well as access to public services. Unfortunately, the dynamics of changes in the values of indicators describing the social and economic situation in the Warmian-Masurian Voivodeship in most cases was lower than in other voivodeships and on average in the country. This resulted in the decrease in position of the Warmian-Masurian Voivodeship in the ranking of voivodeships, at the same time contributing to an increase in discrepancies between the region and the rest of the country. Therefore, despite the development of the Warmian-Masurian Voivodeship, other regions developed faster, which made them more competitive.

At the beginning of this dissertation, the following thesis statement was formulated: the implementation of the European cohesion policy within spending of UE funds of the EU

financial perspective for the years 2007-2013 and the budgeting period for the years 2014-20020 as at the end of 2019 accelerated economic growth in the Warmian-Masurian Voivodeship, but it did not improve the competitiveness of this region as compared to other Polish voivodeships, because the majority of the funds were spent on infrastructure projects, and it was not allocated to support the production sector.

The results presented in this dissertation indicate that the amount of the UE funds spent in particular regions contributed to the increase of the dynamics of GDP growth per capita. The more EU funds were spent in a particular region, the faster the growth rate of GDP per capita was. At the same time, the research conducted by the Ministry for Regional Development indicated that only in the year 2019 the value of regional GDP in the Warmian-Masurian Voivodeship was 10.9% higher than in the alternative scenario, assuming the lack of use of EU funds<sup>2</sup>. It is undisputed that the additional amount of money in the form of the European cohesion policy funds contributes to an increase in aggregate demand and thus stimulates GDP growth. In this way, EU funds accelerate economic growth. Another issue to be considered is whether the scale of spending of EU funds contributed to an increase of competitiveness.

Our own research has shown that there is no significant statistical relationship between the change in the level of competitiveness of particular voivodeships and the scale of spending the European cohesion policy funds in such voivodeships per capita. A notable example of this is the Warmian-Masurian Voivodeship, where between the years 2007 and 2019 competitiveness of this region weakened as compared to other Polish voivodships, although in the years 2007-2019 the highest amount of the European cohesion policy funds was spent per capita in this region. On this basis, the part of the assumption that the implementation of the European cohesion policy within spending of UE funds of the EU financial perspective for the years 2007-2013 and the budgeting period for the years 2014-20020 as at the end of 2019 accelerated economic growth in the Warmian-Masurian Voivodeship, but it did not improve the competitiveness of this region as compared to other Polish voivodeships, was accepted as true.

However, on the basis of this dissertation, no correlation between the support provided under the European cohesion policy and the change in the competitive position of the region or the increase in its overall competitiveness was found. The conducted research did not show

<sup>&</sup>lt;sup>2</sup>IMAPP Consulting, Instytut Badań Strukturalnych, Ocena wpływu realizacji polityki spójności na kształtowanie się wybranych wskaźników makroekonomicznych na poziomie krajowym i regionalnym za pomocą modelu EUImpactMOD, Warszawa 2019, p. 43.

that more funds allocated to direct support for the production sector would increase the competitiveness of regions. Moreover, the conducted research did not prove that spending more funds on infrastructure projects resulted in a decrease in the competitiveness of a particular region. Therefore, the part of the assumption that implementation of European did not improve the competitiveness of the Warmian-Masurian Voivodeship as compared to other Polish voivodships, because most of the funds were spent on infrastructure projects, and were not allocated to support the production sector wasn't accepted as true.

However, on the basis of the analyses conducted we can conclude that competitiveness at a regional level is an extremely complex phenomenon shaped by many different factors, and the use of EU funds is not the main determinant of the competitiveness of Polish voivodships. This is undoubtedly due to the fact that the amount of EU funds in proportion to GDP is not too high, therefore their impact on competitiveness is limited. For example, in the years 2004-2019, the average annual amount of European policy funds used accounted for only 3.5% of the average annual GDP generated in the Warmian-Masurian Voivodeship<sup>3</sup>. Nevertheless, this dissertation may contribute to further research on the factors shaping competitiveness at the regional level in Poland.

Ministerstwo Funduszy i Polityki Regionalnej. Wpływ polityki spójności na rozwój społeczno-gospodarczy Polski i regionów w latach 2004-2018, Warszawa 2019, p. 5.