ANALYSIS OF THE PRODUCTION SPECIALISATION OF THE REGIONAL ECONOMY

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Abstract: *In the present work, a study has been conducted to clarify the notion of "specialisation of the regional economy" and its contextual system. The types of production specialisation and the current concepts regarding the concentration of production activities and the differentiation of the competitiveness of the regions are analyzed. An overview of the production specialisation in Bulgaria is made. As a result, the types of production specialisation have been analyzed and summarized in order to more accurately identify the trends in the development of the regions, their competitiveness and uniqueness.*

Keywords: *specialisation, economy, region, production, competitiveness.*

1. INTRODUCTION

Economic activity is inextricably linked to space. This statement is dictated by the natural observation that all forms of production require space. Economic activity arises and develops in a spatial environment that is an irreversible factor in the functioning of the economic system and is essential for the competitiveness of the regional economy. Space is an environment for the location of the business itself, for the location of production factors (uneven distribution), it is also a real production factor [40]. So, the location of resources and the wealth market requires companies to choose their location as they choose other factors of production.

Space is a source of agglomeration advantages associated with the cumulative nature of manufacturing processes in the economy. The territorial proximity of business units generates savings that reduce production costs (for example, transport costs for nearby economic activities) and transaction costs (market transaction costs, negotiation and contract execution). The aggregate system of production, distribution and consumption of goods and services determines the broad meaning of the concept of regional economy.

Regional specialisation is part of a variety of economic research trends. According to Churski et al. [11] the theoretical foundation of regional specialization is the result of the interaction of various sciences and their branches presented in Figure 1. The figure shows the genesis and specifics of the concept of specialisation, which evolved from specialisation in the production of goods and services at national level to regional specialisation, which is mainly determined by the specific characteristics of regional and local economies.

Traditional trade theory explains specialisation models based on differences in productivity (technology), while new trade theory and new models of economic geography highlight rising returns on production, agglomeration economies and cumulative processes as an explanation for a particular regional specialisation.

Figure 1. Theoretical foundations in identifying specialisation

2. TYPES OF SPECIALISATION

Specialisation is generally known as a method of production, in which a business, region or country concentrates on the production of certain goods or services, in order to achieve a higher level of production efficiency within the business system.

As defined in the Oxford Dictionary of Economics [20], the economic notion of "specialisation" is "concentrating on the provision of specific types of goods and services, relying on other manufacturers to provide what the relevant entity does not produce. This is

characteristic of different levels - individuals ...; company - concentration on specific industries; regional or national - specialisation in certain activities.

Specialisation may be full or partial. In full specialisation, the goods and services used by the economic entity are provided entirely by others. This is a very common practice at the individual and company level. With partial specialisation, only some goods and services are acquired by others. This is most common at regional and national level...“.

What we can assume clearly is that regional specialisation is partial and macroeconomic, reflects the regional aspect in the distribution of sectorial, represented in the structure of the regional economy. That is why regional specialisation is most often understood as the relative uniqueness of the region, which is identified by analyzing the economic structure of the region in comparison with the economic structure of other regions or countries [4; 22].

Regional specialisation tries to lead to economic growth, by promoting specific sectors where the region has a competitive advantage [15].

Specialisation of Territorial Systems is a broad concept, so it is also a subject of discussion. Proceedings specializing in the area can be divided into two groups: specializing in a broad and narrow sense. Specializing in the broad sense are those proceedings, which are involved in the inter-territorial division of labor, regardless of their relative share in the total volume of the regional product.

In a narrow sense, those industries are specialized, whose output is mainly designed to meet needs in other areas and which has a relatively high share in the structure of the regional economy.

Specialisation, along with the opposite concept - "diversification", is being debated exclusively on the tradable part of the regional / national product. Although most of the economy (regional or national) is made up of goods and services that are not intended for export (outside the region / country), what the firm does in the export goods sector has a strong impact on the overall level of regional employment and income. This is natural, considering the fact that the overall regional product is dependent on the share of goods traded outside the region, as their demand is not limited by income within the region, as demand becomes much wider.

This is also the basis of the theories of international trade, as there are hardly any regions and countries that have enough capacity to be completely independent.

Here is the point to emphasize that in the context of globalization it is important in the theory of specialisation to integrate the concept of the "economic base" – recognition of a regional core sector makes it possible to highlight export-oriented activities, as a potential for economic growth and to expand the region's competitive potential.

In a narrow sense, a region is generally considered to be specialized if a small number of industries have a large share in the economy of that region, and geographic concentration refers to a specific industry and reflects the distribution of its regional shares. When shares are internally related to other activities in a given region, they mean specialisations and when they are externally connected with the same activities, but in other regions (to an external reference system), the measurement shows the concentration [16;26]. A highly concentrated industry, for example, means a very large share of it is located in a small number of regions.

Debates, whether it is better for an economy to be diversified or highly specialized, are long-lasting. The importance of one or the other direction of development of a firm is being explored and defended by a number of scientists [8; 27; 28]. The role of specialisation for the economic growth of the regional economy is intertwined with the concept of its classification according to the way of measuring its relative and absolute specialisation.

Relative specialisation is considered on the basis of a comparison of the actual sectorial structure of the economy of the region and the sectorial structure, which is the result of the average distribution of activities in the sectors in an aggregated reference group based on territorial units [3; 5; 9; 13; 18; 21; 31]. In the relative sense, regional specialisation is defined

as the ratio between the shares of a given production in a particular region as compared to its share in a reference territorial unit.

Absolute specialisation means a comparison of the actual sectorial structure of the economy of the region and the sectorial structure, resulting from the equal distribution of activities in the sectors of the region [6; 7; 19; 24; 29; 30].

In absolute terms, a region is "specialized" in terms of production, if this production takes a high share of the region's productive activities. This means that the production structure of a region is highly specialized if one or a small number of productions have a high overall share in the total production activity of the region. Absolute specialisation would therefore mean many jobs in the activity concerned, a high level of the product being created, or a large number of companies in that activity.

Therefore, relative specialization provides information mainly for comparative assessment of the structure of the regional economy, while a clearer basis for the specialisation of a region is the absolute production capacity of a particular activity in the region, which means an assessment of its concentration there.

When considering the essence of relative specialisation, one important scientific and applied interpretation should not be missed - the region is relatively specialized if an economic activity has a higher share in the regional economy than its share in the national economy. This concept is also the basis of the "localization coefficient" method. In looking for an assessment of the relative specialisation's favorability, we need to take into account whether the sector with a high localization coefficient (> 1.0) is a base (relying on external demand), because the aim of a specialisation is the positive impact on regional income and employment. In this case, the existence of regional specialisation means that the economic structure of the region deviates from the adopted reference system. The scientific approach requires discussing how both (relative and absolute) aspects of specialisation can impact differently on selected indicators of regional economic development.

The concepts of absolute and relative specialisation create different ideas for the economy. This is important to note because a small region whose local employment is dominated by jobs in a particular manufacturing activity, would have a higher degree of specialisation than a large region with a low share of employed in a specific activity but a much higher absolute level of employment or production or vice versa.

3. SPECIALISATION AND CONCENTRATION

Often, in regional science literature, production specialisation of regions is considered in parallel with geographic concentration of production activities as "two sides of the same coin". "... Specialisation is usually combined with the concentration of production where the latter is related to the size of the geographical distribution of production" [1].

Concentration - the concentration of an economic activity is analyzed by a geographical and / or sectoral approach. In the first case, a relative concentration is defined - the specific production is "concentrated" if a large part of it is carried out in a small number of regions [2]. In relative terms, the geographic concentration of industries / sectors is defined as the ratio of the regions' share to a particular sector industry compared to the reference unit. The second approach determines the absolute concentration - the share of activity in the economic structure of the region [17; 34].

Although most of the literature on specialisation and concentration in the regional economy views these two phenomena as interconnected, there are some empirical results that lead to the view that they can be seen as independent processes as they "do not always move in the same direction and are likely to run at different speeds" [14].

4. SPECIALISATION AND AGGLOMERATION

In connection with the implementation of the modern integrated approach in identifying and measuring the specialisation it is necessary to clearly distinguish another concept corresponding to the specialisation - agglomeration:

Agglomeration – consolidation of economic activities in space. It is measured indirectly or directly, which is conditioned by the nature of the space - discreetly or continuously [12; 25; 32]. In the case of discreet space, agglomeration is synonymous with concentration, most commonly viewed as a geographic concentration that some authors call a relative concentration. The measurement here is indirect and shows the level of economic activity in a given spatial unit compared to the levels in units taken as reference. In the case of uninterrupted space, the degree of agglomeration of economic activity is determined by direct measurement of the density / intensity of the activity, for example based on localization of firms in the geographical coordinate system. Agglomeration in this way is sometimes called a topographic concentration [10] or a common regional production mass [16].

It is with the agglomeration of the producers that the other positive aspect is related to the role of relative specialization. Knowing that agglomeration effects include interaction in the supply system; compliance system in the labor market; creating an environment for the exchange and dissemination of knowledge, we must note that the overall result is not just a sum of the effects mentioned. The agglomeration of activities is a prerequisite for the emergence of new economic entities and other supportive governmental and non-governmental organizations. Such a local environment can be built and sustained if many leading economic activities are not localized in the region, there is relative specialisation.

5. ANALYSIS OF THE PRODUCTION SPECIALISATION IN BULGARIA

Concerning Bulgaria, the only comparative study is that of Traistaru et al. [33] for the period 1990-1999. According to Traistaru et al., Bulgaria is among the countries with changes in regional production specialisation for the monitored period. Another finding of this study is that regions in Bulgaria bordering on EU regions and those outside the EU are more specialized than the country average, while domestic (unlimited) regions have a lower degree of specialisation. The survey shows that the leading factors for the establishment of a certain regional specialisation are two: the "glamor" of regions with production factors; geographic proximity to European markets.

Surveys on manufacturing specialisation in Bulgaria since 1990 are linked to an emphasis on the sectorial aspect [35; 36; 38], and some assessments of regional specialisation [37]. In connection with the integration of the Bulgarian regions into the Smart Specialisation Initiative [41] there is also research focusing on the possibilities for smart specialisation at the regional level [39].

6. CONCLUSIONS

As stated in Midelfart-Knarvik et al. [23], regional specialisation and concentration patterns are determined by the interaction between the characteristics of the region and the characteristics of production. First of all, the regions differ in size, availability with production factors and geographic position (central or peripheral). The production activities themselves demonstrate differences in economies of scale and intensity of the factors of production used. Undoubtedly, the pursuit of individual productions is to locate as close as possible to the place where their most important manufacturing factors are available.

The onset of development is closely linked to the availability of usable natural resources in the region, not to the abundance of labor and capital. With the passage of time, in the wake of the expansion of trade, the relative supply of labor and capital becomes a factor for the development of the regional economy. Regional comparative advantages change over time because natural resources can be depleted, making their use more expensive; capital and labor move to regions with higher returns. Regardless of the losses incurred by certain regions at a given time, convergence between regions will be established over the long-term incomes and the overall level of development.

With increasing globalization, success and economic growth at regional and national levels depend on innovation and more effective use of capital by people, knowledge and available resources.

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