REGIONAL DEVELOPMENT OF THE REPUBLIC OF SERBIA IN THE LIGHT OF KEY MESSAGES OF ENDOGENOUS THEORY OF GROWTH AND IMPERATIVES FOR IMPROVING COMPETITIVENESS

Slobodan Cvetanović[1]*, Vojislav Ilić[2], Dragan Turanjanin[3]

[1]University of Niš, Faculty of Economics, Niš, Serbia
[2]University of Prishtina with temporary headquarters in Kosovska Mitrovica,
Faculty of Arts, Zvečan; University of Kragujevac,
Faculty of Philology and Arts, Kragujevac, Serbia
[3]Union-Nikola Tesla University, Faculty of Management (FAM),
Sremski Karlovci, Serbia

Abstract

At the end of the twentieth century, a qualitatively new concept of regional development policies appeared, and was affirmed, in many world economies. In short, at its center, there is the imperative to improve the region's competitiveness. The focus of new regional development policies is on initiatives that favor networking, the development of cooperative relationships, and the growth of confidence in regional economic actors. In these circumstances, people's readiness for new business ideas and organizational solutions have become far more important drivers of regional development than the number of businesses located in the region. The new concept of regional development policy is predominantly based on the postulates of endogenous growth theory. The imperative to improve the region's competitiveness is at its epicenter. Starting from such prominent theoretical explanations, our own composite index was constructed by analyzing the achieved level of development of individual regions of the Republic of Serbia in 2008 and 2018. The analysis showed that all regions in Serbia have development potentials, but that they manage to increase their level of development to a different extent, both in relation to the previous period and in relation to other regions in the country.

Key words: economic growth, regional development policy, endogenous
                development, regional competitiveness, the Republic of Serbia

* Corresponding author: Slobodan Cvetanović, University of Niš, Faculty of Economics, Trg kralja Aleksandra Ujedinitelja 11, 18105 Niš, Serbia, slobodan.cvetanovic@eknfak.ni.ac.rs

РЕГИОНАЛНИ РАЗВОЈ РЕПУБЛИКЕ СРБИЈЕ У СВЕТЛУ ПОРУКА ЕНДОГЕНЕ ТЕОРИЈЕ РАСТА И ИМПЕРАТИВА УНАПРЕЂЕЊА КОНКУРЕНТНОСТИ

Апстракт

У годинама с краја другог миленијума у многим светским економијама појавио се потпуно нови концепт политика регионалног развоја. Најкраће, у његовом центру налази се императив унапређења конкурентности региона. Тежиште нових политика регионалног развоја је на иницијативама које фаворизују мрежну повезаност, кооперативне односе, као и поверење регионалних економских актера. У таквим околностима, спремност људи за нове пословне идеје и организациона решења су неупоредиво важнији покретачи регионалног развоја у односу на број предузећа лоцираних на одређеном простору. Нови концепт политике регионалног развоја се доминантно темељи на постулатима теорије ендогеног раста. У његовом епицентру се налази императив унапређења конкурентности региона. Полазећи од тако истакнутих теоријских експликација, конструисан је властити композитни индекс путем кога је анализиран достигнути ниво развијености појединих региона Републике Србије. Анализа је показала да сви региони у Србији располажу развојним потенцијалима, али да у различитој мери успевају да повећају свој ниво развоја, како у односу на претходни период, тако и у односу на друге регионе у земљи.

Кључне речи: економски раст, политика регионалног развоја, ендогени развој, регионална конкурентност, Република Србија

1. INTRODUCTION

The economic development policies of countries and regions have always been predominantly based on the most important messages of current growth theories. However, despite the great challenges that the phenomena of economic growth and development impose with their actuality, it is evident that there is still no generally accepted theory of economic growth and development. The basic goals of economic growth and development are well known and relate to increasing the quantity and quality of production, and increasing the standard of living of the population, as well as reducing inequality in the distribution of value created over the long term. Some economies and regions are underdeveloped either because they lack economic growth factors or because they lack the knowledge and ability to use those factors effectively. Despite this fact, the explanations for the causes of economic underdevelopment in countries and regions, as well as the recommendations offered by economic researchers to overcome the underdevelopment situation, differ depending on the theoretical explanations for growth which they directly rely on (Dragutinović, Filipović, & Cvetanović, 2015). For example, a number of economists and policy makers emphasize the importance of investing in physical capital. Others point to the importance of human capital in accelerating the rate of economic growth. Also, they play a decisive role in

increasing the value of production at the national level concerning the knowledge of innovation (Cvetanović, & Mladenović, 2015; Dragutinović, et al., 2015).

Towards the end of the twentieth century, new explanations for the importance of key drivers of economic development began to emerge as a result of the impact of globalization on the dynamics of production and spatial systems and the growing use of information and communication technologies in the production process in almost all areas of social life. One of the manifestations of these transformations is certainly the emergence of new regional development policies, at the epicenter of which is an effort to improve its competitiveness as much as possible.

Having in mind the previously stated, the aims of the paper are: a) the explanation of the essence of the concept of modern regional development policy whose main goal is to improve competitiveness and b) the construction of our own composite index of individual region development in the Republic of Serbia that takes into account the messages of endogenous theory of growth.

The structure of the work, the four sections, relates to the defined goal of the research. After the introductory notes, the second section presents a review of significant theoretical explanations of the factors of economic growth of countries and development of the region, ranging from neoclassicists to a wide range of endogenous theories of growth. The third section discusses the essence, purpose, models, as well as the key drivers of improving the competitiveness of the region. Finally, in the fourth section, the analysis of the regional development of Serbia is presented based on the created composite index of regional development.

2. SIGNIFICANT THEORIES OF ECONOMIC GROWTH OF COUNTRIES AND REGIONS

There is no consensus in the literature on the most significant theoretical explanations for the economic development of countries and their regions. This is, among other things, a result of the fact that the classification of certain studies into specific theories of economic development of countries and regions is to a considerable degree arbitrary and depends largely on the specific attitudes of researchers regarding the most important drivers of economic growth at a given time. Despite this, we believe that by elementary reproduction of significant growth theories, it can be observed that at times some economic growth analysts insist that only their approaches are relevant to the conception of appropriate policies, while other opinions regarding explanations of growth factors are generally incorrect. It should be noted that such claims are fundamentally wrong. Because, with a more careful and impartial analysis, it is possible to note in each of the theories some contribution to the study of the

complex problems of economic growth and development (Cvetanović, & Mladenović, 2015).

Throughout history, many theories of economic growth have evolved with the aim of exploring and defining the path of stable and long-term growth. Thus, for example, Mervar (1999; 2003) believes that historical retrospective theory of economic growth goes from classical growth theory, Schumpeter growth theory, Keynesian theory to neoclassical theory and endogenous explanations of key drivers of growth. Smith and Todaro (2015) divide all theories of economic development into two major groups: conventional (old) and endogenous (new). According to the opinion of these authors, there are four most important directions within the first group of theories: the theory of stages of economic growth, the theory of structural changes, theories of dependence, the theory of neoclassical counterrevolution (Smith, & Todaro, 2015).

A number of researchers are of the opinion that we should make difference between the neoclassical, one the one hand, and the so-called alternative explanations of economic growth, on the other, where the emergence of the latter marked a break with neoclassical orthodoxy (Schwartz, 2009). As two directions of alternative growth theories, endogenous and Schumpetrian explanations for the growth of countries and regions should be singled out (Schwartz, 2009). Both theories seek to overcome the simple approach of neoclassical economists who view technological change as a phenomenon that is independent of the nature of the economic and social environment in which it emerges and expands. The situation is identical when considering the theoretical explication of the essence and the most important factors of economic development, viewed exclusively at the regional level. In short, the opinions of relevant researchers are divided here as well. For example, Armstrong (2002) highlights seven regional growth theories that play an important role in shaping regional development policy: neoclassical economic growth theory, endogenous economic growth theory, post-Fordist and other radical regional development theories, social capital theories, new economic model geography, a model of evolutionary economic geography, a theory of innovative, or *self-learning* regions, and demand-driven models of export competition. Puljiz (2011) is of the opinion that the following theories of economic growth are the most important for regional development policy: classical economic growth theory, neoclassical economic growth theory, endogenous economic growth theory, access to new economic geography and spatial innovation systems approach.

Starting from the view that the key issue of regional development policy is the manifestation of large regional inequalities, Vuković (2013) distinguishes two different approaches to the problem of overcoming uneven regional development. The first approach is interventionist, while the starting point is the position on the primary role of the market and the

confidence in the forces of its laws in the economy. Both approaches share a common top-down approach and confidence in instruments and measures that can be applied uniquely and as a recipe to all regions, regardless of their specific characteristics and causes of uneven regional development (Amin, 1998, p. 365). The top-down approach starts from the hypothesis that economic success is based on a number of common factors, such as: rational individual, profit maximizing entrepreneur, firm as a basic economic unit, free market. However, analyzing the domains of both doctrines, Amin (1998, p. 366) concludes that they are modest in terms of stimulating sustainable improvement of the economic competitiveness of lagging regions. In addition to the top-down approach, various modalities of the opposite, that is, the bottom-up approach, have been considered in the economic literature, in which the centralist and decentralist models differ. Centralist means the intervention of regional authorities and redistributive measures at the local level, while decentralist is related to the affirmation of market laws at the local level (Shankar, & Shah, 2009, p. 10).

2.1. The Scope and Limitations of Neoclassical Growth Theory for Regional Development

Neoclassical explanations of the physiology of economic growth in countries and regions emerged with the discovery of technological change as a key driver of economic growth by Robert Solow (1956). Solow found that other factors had a far greater impact on economic growth than standard productive factors (capital accumulation and increase in labor force), marking them as residual. In short, residual is a term for technological change, the content of which includes all growth factors except fixed assets and employment. Technological change has a stimulating effect on the growth of relative marginal productivity of capital on the basis of education and training of the workforce, the knowledge gained by investing in research and development, as well as other forms of investment in intangible capital. This is the fact that can be labeled as a radical theoretical novelty in economic science.

All of the above characteristics of the Solow model are essentially not debated from a theoretical point of view, but the main problem arises in the empirical confirmation of the whole theory. The basic question that arises is whether the model can account for the large differences in the development of countries in the world, as well as differences in growth rates. If we want to answer the question of why some countries have high growth rates, while others stagnate, the model could not provide satisfactory answers.

This limitation of the model is a direct consequence of declining returns on capital. Large differences in the technical equipment of labor (the ratio of physical capital to labor) lead to small differences in output per capita (due to the low rate of productivity elasticity in relation to the

coefficient of technical equipment of labor). Because of this fact, differences in the accumulation of physical capital cannot be the basis for explaining the large differences in per capita output between countries and the region (Lukas, 1988).

The neoclassical growth model focuses on the accumulation of physical and human capital, while economic growth is generated exogenously by a given rate of technological change. While such a model provides a good starting point for observing differences in production between countries that have access to the same technology, it does not explain how to generate sustainable long-term growth. Also, the neoclassical model says very little about the sources of technological differences between countries (Acemoglu, 2009).

The neoclassical literature binds the process of economic growth to an adequate coefficient of technical equipment of work and the process of establishing long-term equilibrium. In the absence of radical technological change, all economies will strive for zero growth. Therefore, an increase in GDP per capita is considered to be a temporary phenomenon resulting from changes in technology or a short-term balanced process in which the economy approaches its long-run equilibrium.

Neoclassical theory has failed to provide a satisfactory explanation for the incredibly consistent pace of economic growth in most economically advanced countries today. Any increase in gross domestic product that cannot be attributed to short-term adjustments in labor or equity funds is attributed to a third category, most commonly called the Solou residual. This residual is, despite its name, responsible for, roughly speaking, 50% of the historical growth in industrialized nations. In an ad-hoc way, neoclassical theory attributes much of economic growth to an exogenous or completely independent complex of technological change. Although logically possible, this approach has at least two insurmountable disadvantages. By using the neoclassical framework, the first disadvantage makes it impossible to analyze the determinants of technological change, because it is completely independent of the decisions of economic actors. The second disadvantage relates to the fact that the theory fails to account for the large differences in the residuals of many countries with similar technologies (Sredojević, Cvetanović, & Bošković, 2016).

2.2. Endogenous Explanations for the Economic Growth of Countries and Regions

The modest capabilities of neoclassical theory in discovering the sources of long-term economic growth led to the emergence of endogenous growth theories in the years of the last decade of the twentieth century. Depending on the underlying assumptions that seek to eliminate the limitations of neoclassical access, endogenous growth theories can be roughly divided into three categories.

The first group presents models whose primary objective is to eliminate the assumption of declining returns on capital. A number of models in this group take the broader concept of capital, which includes other forms of capital in addition to physical capital. Among the most well-known approaches in this group of models is the Rebelo model (1991), which treats capital in addition to physical and human capital. In other models of this category, declining returns are eliminated through physical capital itself (Jones, & Manuelli, 1990).

The second group presents models that take, as their starting point, the accumulation of human capital as the main driver of economic growth in the long run. Here, Lucas (1988) is the most significant.

The third group are the endogenous growth models which are based on ideas, i.e. on research and development (such as the Romer model (1990; 1986); Grossman, & Helpman model (1991) and the Aghion & Howitt model (1992). In these models, human capital is essential. The category of technological change is the key driver of economic growth, and it is endogenous as the result of the activities of companies and individuals, or inventions that lead to technological improvements. The level of the technological advancement can be influenced by investing in education to improve the quality of growth. Education can intensify growth by improving the quality of work and the quality of physical capital through the use of knowledge, as well as acting on the spillover effect of knowledge and technology on other parts of society that offset declining returns on capital. The endogenous theory is also criticized for having paid great attention to the determinants of long-term growth, while the short- and medium-term aspects have not been considered. Finally, in some opinions, empirical studies of endogenous growth theories today have limited support. However, it is an indisputable fact that endogenous growth theory contributes to a better theoretical understanding of the different experiences of long-term growth in developed and developing countries, so its messages are crucial for determining regional development policy (Cvetanović et al., 2015).

Models of endogenous growth have some structural similarities with the neoclassical equivalent, but differ substantially in their important assumptions and conclusions. First, endogenous growth models reject the neoclassical assumption that marginal returns on capital are reduced, assuming that a situation of declining returns is possible. Second, they also emphasize the role of externalities in determining the rate of return on new capital investments. Assuming that public and private investment in human capital generates externalities and productivity gains that offset the declining trend of factor returns, endogenous growth theory looks for a way to explain the existence of yield growth and divergent models of long-term growth across countries. Third, in most endogenous theories,

the category of technological change plays an important role in explaining long-term economic growth.

An important conclusion of the new growth theory is that it remains dependent on a number of traditional neoclassical assumptions, which are often inappropriate for developing countries. Economic growth in countries and regions is often hampered by the underdevelopment of infrastructure, the inadequacy of institutional arrangements, and the imperfection of the capital and commodities, and service markets. Because endogenous growth theory does not take these highly influential factors into account, its applicability to economic development theory is, however, limited, especially when comparing the two countries. For example, the current theory fails to explain the low rates of utilization of production capacity in countries with low gross domestic product per capita, where capital is an insufficient factor of production. In fact, non-incentive structures can be responsible for slow economic growth, as well as low savings rates and inadequate human capital ratios. This theory is not supported because it has paid great attention to the determinants of long-term growth, while the short- and medium-term aspects have not been considered. Finally, according to some opinions, empirical studies of endogenous growth theories have limited support today. However, endogenous growth theory contributes to a better theoretical understanding of the different long-term growth experiences of developed and developing countries. Although endogenous growth models come from neoclassical theoretical postulates, they modify the broader assumptions of traditional growth theory and function as a deeper explanation of key growth patterns of individual countries.

3. IMPROVING COMPETITIVENESS AS A KEY OBJECTIVE OF NEW REGIONAL DEVELOPMENT POLICIES

At the end of the twentieth century, a new concept of regional development policies began to emerge, both in developed and developing countries. Vazquez-Barquero (2002) refers to this concept as the third generation of regional development policies. In doing so, the author, as the primary goal of the first generation of the development policies of the region, created in the 1950s, signifies the construction of infrastructure and the attraction of huge investments through a number of economic and non-economic instruments. The second generation of regional policies has emphasized the importance of initiatives to improve the intangible resources of development by building business incubators, innovation centers, training centers and the like. This generation of regional policies is tied to the 1980s.

Finally, since the late twentieth and early twenty-first century, the third generation development policies of the region have dominated. In

short, the primary goal of a new generation of regional development policies is to improve the competitiveness of the region (Fig. 1) (Vazquez-Barquero, 2002). There is agreement that the endogenous development approach is the theoretical basis of a new generation of regional development policy, conceptually and functionally (Capello, & Nijkamp, 2009).
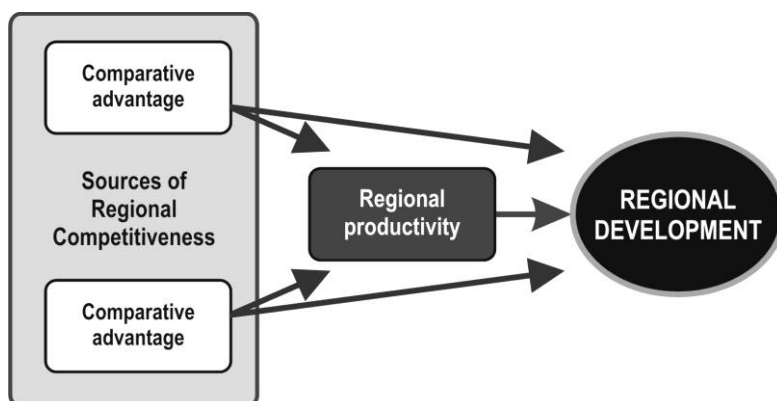
Figure 1. Regional development through competitiveness
Source: Author, according to the Santoso, et al., 2013.

There are two basic trends that have decisively influenced the design of regional development policy in this period: the need for more realism and the need for a dynamic instead of a statistical approach.

The need for more realism involves:
- appreciation of the drivers of endogenous growth,
- appreciation of the importance that interactive behaviors have in growth models, as well as processes that take place in space: both have, as an effect, increasing returns to scale,
- determinants of success for small, medium-sized enterprise clusters, local agglomerations,
- respect for imperfect competition in growth models,
- the active role of the region in the process of knowledge creation,
- growth as a long-term competitiveness-based process,
- the endogenous nature of technological change as a growth factor (Capello, & Nijkamp, 2011, 306).

The new regional development policy emphasizes the importance of local actors in creating the potential to stimulate productive restructuring, increase employment and provide social assistance at the regional level. By taking the initiative to drive structural change, regional authorities are involved in finding solutions to problems caused by the restructuring of the international production system in the economies of local areas and territories (Vazquez-Barquero, 2002).

Current regional economic development strategies highlight the role of local initiatives in development processes. However, they also underscore the importance of unifying the strengths of local initiatives of each region and those of other administrations and organizations that promote structural change. However, it is only possible to coordinate local initiatives with the sectoral and regional policies of other administrations and organizations in places where there are joint projects supported by civil society and social and political actors.

Globalization has created a new scenario for regions that compete directly with one another to attract investment. In this context, regions that seek to increase the standard of living of their residents and improve their position in relation to competitors must find an effective way of attracting foreign direct investment. If they fail to do so, the competitive position of the observed regions will deteriorate in the long run, which will certainly affect the reduction of well-being.

New approaches to regional development are encouraging the formation of networks. Globalization has also stimulated new aspects of the organization of production activities and new entrepreneurial strategies. Informal relationships between companies are increasing, as are direct contacts between companies and company executives, the number of cooperation agreements and strategic alliances of companies is increasing. Globalization has stimulated the creation of numerous links between companies and participants in different environments, linking market success to the efficiency of production and institutional networks. This implies fundamental changes in the development strategy.

Improving competitiveness is undoubtedly one of the primary objectives of new regional development policies. The competitiveness of the region speaks of the ability of the region's economy to optimize the resources available, in order to better adapt to the opportunities that prevail in national and global markets (Skokan & Rumpel, 2007). More specifically, it speaks of a region's ability to accelerate the economic activity of business entities in a particular location so that its residents have a high level of economic well-being (Alanen, Huovari & Kangasharju, 2001). In other words, it is about the ability of the region to "produce while simultaneously being exposed to external competition, with relatively high levels of income and employment" (Vuković, 2013).

There is an opinion in the literature that a distinction needs to be made between three basic concepts of regional competitiveness: regions as places of export specialization, regions as sources of income increase, and regions as a core of knowledge (Andersson & Karlsson, 2006; Martin & Simmie, 2008).

There are a number of factors for improving the competitiveness of the region, among which are:

- the possibility of structural transformation of the economy, in particular by increasing the share of industries that have high added value with a multiplier effect on other economic sectors,
- high share of the service sector contributing to the creation of added value (research and development, higher education, culture and business services),
- production based on knowledge,
- decentralization of the decision-making system,
- numerous and successful middle class,
- urban policy of high standards, availability of quality public utilities, quality regional government and environmental protection,
- the achieved level of business networking of economic factors of the observed sector.

In the view of many theorists, the dominance in the creation and application of product, service and process innovations has enabled individual regions to become a symbol of economic power worldwide. In the strategy of enhancing the competitive advantage of the region, spatial innovation systems have a threefold role:

- to increase productivity, since specialization in a particular industry allows productivity to grow,
- to specify long-term directions of development, thereby directing investments and innovation activities,
- to stimulate the development of new business forms and act on the expansion of the existing economic structure.

The two best known models of improving regional competitiveness are the so-called cylinder model and competitive tree model.

The cylindrical model of regional competitiveness was promoted by the European Commission in 2004. The determinants of regional competitiveness can be found at the bottom of the cylinder, and in various rings around the productive cylinder. These guidelines are either on national, regional level or local level, depending on their characteristics. Production factors (labor, capital and land) are in the base ring. Labor and land are less mobile than other factors of production and are therefore more determined by regional factors. These determinants are related to the basic conception of regional competitiveness as a place of production. These are determinants of competitiveness, such as institutions, technology, innovation, entrepreneurship, internationalization, social capital, knowledge infrastructure, culture, demographics and migration, as well as the quality of geographical location. It is necessary that all drivers of economic growth be placed in the function of increasing regional productivity for a given region to be able to grow and develop in a contemporary context, or to improve its own competitiveness.

The competitiveness tree model illustrates the complex factors that affect competitiveness in collaboration with positive outcomes, such as

social inclusion, social protection and sustainability. The organic nature of wood emphasizes the cyclical character of the concept of competitiveness. The quality of the soil and the effective functioning of the root system, tree and branches determine the strength of the tree and the ability to give birth. Tree root is made up of human resources, innovation, connectivity and industrial structure, while tree stands for productivity. The tree expands into branches that work to shape competitiveness: employment and income, profits and investments, taxes and contributions. Taxes yield the fruits of the tree canopy, and the fruits of the tree are prosperity, sustainability and social inclusion, consumables, housing, health, culture, mobility. The synergy of these components forms the concept of competitiveness.

The contemporary regional development policy marks a shift in the treatment of drivers of economic growth from functional to cognitive. The cognitive approach involves a fundamental change in the importance of certain factors for improving the competitiveness of a region: a) from developmental to innovative factors, and b) from "hard", i.e. tangible to "soft", i.e. intangible competitiveness factors (Stimson, Stough & Nijkamp, 2011, 125).

The cognitive approach to enhancing regional competitiveness emphasizes the importance of region-specific factors. These factors enable regions to attract private and public investors through various incentives, which enhance their competitiveness. Regional competitiveness, in modern economic conditions, is based on the cooperation, trust and connection to the relevant actors. It is based more on creativity than on the availability of manpower and the abundance of natural resources. In these circumstances, people's readiness for new business ideas and organizational solutions is far more important than the presence of a number of small and medium-sized enterprises. Also, the improvement of regional competitiveness is related to factors related to networking, cooperation, regional identity, quality of life.

4. ANALYSIS OF REGIONAL DEVELOPMENT OF THE REPUBLIC OF SERBIA BASED ON THE COMPOSITE INDEX OF REGIONAL DEVELOPMENT

The following two hypotheses were set in the research:

X1: Regional development in the Republic of Serbia in the period 2008-208 did not follow the messages of endogenous growth theory and the imperative of improving competitiveness.

H2: Regions in the Republic of Serbia in the period 2008-2018 did not reduce the lag behind the most competitive region.

Hypotheses will be tested by constructing a composite index by which the achieved level of development of individual regions will be quantified, on the basis of which the development lag of individual regions of the Republic

of Serbia in the appropriate years will be established behind the most developed and most competitive region in the country.

Starting from the previously stated theoretical reflections, the subject of research in this paper is the analysis of the development lag of individual regions in the Republic of Serbia behind the best region in the period 2008-2018. For this purpose, we constructed our own composite index of regional development, the value of which also speaks of regional competitiveness.

Dynamic, sustainable and balanced regional development is an imperative of any development policy. Measuring the development of individual regions or areas requires the construction of complex, composite indicators consisting of several individual derived development indicators that measure different aspects of the achieved level of development of a particular territorial unit (region or area).

Derived indicators were used to build a composite indicator of regional development: GVA per capita (one thousand RSD), number of employees per 1,000 inhabitants, average salary per employee and new investments per capita. Based on the standardization of the values of these individual development indicators (using the MIN / MAX method to reduce heterogeneous data to the same unit of measure on a scale from 0 to 1) a unique, composite indicator was defined, on the basis of which an overview of the situation and the relative level of development of individual areas in the Republic of Serbia was obtained. Regional ranking and grouping of areas in Serbia according to the level of development (I - relatively most developed area; V - relatively least developed area) enables the perception of differences between developed areas, available development opportunities and their utilization (Table 1).

The analysis of the regional development of the Republic of Serbia based on the regional development index, indicates large differences in the level of development between the areas of the Republic of Serbia. According to the data from the Table 2, in 2018, the most developed area in Serbia is the City of Belgrade (Belgrade area), followed by South Bačka, South Banat, Bor and Braničevo areas, which form a group of the most developed areas in the Republic of Serbia according to the values of the Regional Development Index. In the second group of development are: Srem, North Bačka, Central Banat, Moravica and North Banat area, and in the third group of development are: Šumadija, Pirot, Colubara, Nišava and the Zlatibor area. Areas which belong to the fourth group of development are: West Bačka, the Danube region, Mačva, Rasina and the Toplica area, and in the fifth, least developed group are: Pomoravlje, Zaječar, Jablanica, Raška and the Pčinja area.

Compared to 2008, the rank of development in four areas remained unchanged (Belgrade, South Bačka, North Banat and Zlatibor areas), in 9 areas it was reduced, and in 12 areas they improved their development position (Table 3).

Table 1. Indicator of the level of regional development of Serbia

Area	Regional development index[*]		Area ranking[**]			Level of development[***]		
	2008	2018	2008	2018	Rank change	2008	2018	Level change
Belgrade	1.0	1.0	1	1	0	I	I	0
West Bačka	0.3	0.2	6	16	-10	II	IV	-2
South Banat	0.4	0.5	4	3	1	I	I	0
South Bačka	0.6	0.6	2	2	0	I	I	0
North Banat	0.3	0.3	10	10	0	II	II	-1
North Bačka	0.4	0.4	3	7	-4	I	II	0
Central Banat	0.3	0.3	11	8	3	III	II	0
Srem	0.2	0.4	14	6	8	III	II	2
Zlatibor	0.2	0.2	15	15	0	III	III	0
Kolubara	0.2	0.3	18	13	5	IV	III	1
Mačva	0.2	0.2	20	18	2	IV	IV	1
Moravica	0.3	0.3	7	9	-2	II	II	0
Pomoravlje	0.2	0.1	16	21	-5	IV	V	-1
Rasina	0.2	0.1	21	19	2	V	IV	0
Raška	0.2	0.1	19	24	-5	IV	V	-1
Šumadija	0.3	0.3	8	11	-3	II	III	0
Bor	0.2	0.4	12	4	8	III	I	1
Braničevo	0.3	0.4	9	5	4	II	I	0
Zaječar	0.1	0.1	23	22	1	V	V	0
Jablanica	0.0	0.1	24	23	1	V	V	0
Nišava	0.2	0.3	13	14	-1	III	III	0
Pirot	0.2	0.3	17	12	5	IV	III	2
Podunavlje	0.3	0.2	5	17	-12	I	IV	-3
Pčinja	0.1	0.0	22	25	-3	V	V	0
Toplica	0.0	0.1	25	20	5	V	IV	1

[*]*Normalized value in the range from 0 to 1*
[**]*The ranking of development is done by sorting the districts according to the value of the regional development index (1 to 25)*
[***]*The level of development is determined by grouping the normalized values of the index of regional development, so that each area is classified into one of five groups of regional development*
Source: Calculation of the author, according to the data from Statistical Office of the Republic of Serbia

Table 2. Regional development index in 2018

Area	GVA per capita	Number of employees per thousand inhabitants	Average salary per employee	New investment per capita	Value of the Regional Development Index[*]
Belgrade	1.0	1.0	1.0	0.8	1.0
West Bačka	0.2	0.3	0.2	0.1	0.2
South Banat	0.4	0.4	0.4	1.0	0.5
South Bačka	0.6	0.8	0.5	0.5	0.6
North Banat	0.3	0.4	0.3	0.4	0.3
North Bačka	0.3	0.6	0.3	0.3	0.4
Central Banat	0.3	0.5	0.4	0.2	0.3
Srem	0.4	0.6	0.2	0.4	0.4
Zlatibor	0.2	0.4	0.2	0.1	0.2
Kolubara	0.2	0.6	0.3	0.1	0.3
Mačva	0.1	0.3	0.1	0.2	0.2
Moravica	0.3	0.6	0.2	0.2	0.3
Pomoravlje	0.1	0.1	0.1	0.1	0.1
Rasina	0.1	0.3	0.1	0.1	0.1
Raška	0.0	0.0	0.1	0.1	0.1
Šumadija	0.2	0.5	0.3	0.2	0.3
Bor	0.4	0.3	0.4	0.7	0.4
Braničevo	0.3	0.2	0.4	0.9	0.4
Zaječar	0.1	0.1	0.1	0.0	0.1
Jablanica	0.0	0.1	0.0	0.2	0.1
Nišava	0.2	0.5	0.3	0.1	0.3
Pirot	0.3	0.4	0.4	0.0	0.3
Podunavlje	0.1	0.3	0.3	0.2	0.2
Pčinja	0.0	0.0	0.1	0.0	0.0
Toplica	0.1	0.2	0.1	0.1	0.1

* Normalized value in the range from 0 to 1
Source: Calculation of the author, according to the data from Statistical Office
of the Republic of Serbia

Table 3. Regional development index in 2008

Area	GVA per capita	Number of employees per thousand inhabitants	Average salary per employee	New investments per capita	Value of the Regional Development Index[*]
Belgrade	1.0	1.0	1.0	1.0	1.0
West Bačka	0.2	0.3	0.5	0.3	0.3
South Banat	0.2	0.3	0.8	0.3	0.4
South Bačka	0.6	0.7	0.7	0.6	0.6
North Banat	0.2	0.3	0.4	0.2	0.3
North Bačka	0.3	0.5	0.3	0.3	0.4
Central Banat	0.2	0.3	0.4	0.2	0.3
Srem	0.2	0.2	0.3	0.2	0.2
Zlatibor	0.2	0.3	0.3	0.1	0.2
Kolubara	0.1	0.2	0.3	0.3	0.2
Mačva	0.1	0.2	0.3	0.2	0.2
Moravica	0.3	0.5	0.3	0.2	0.3
Pomoravlje	0.2	0.3	0.3	0.2	0.2
Rasina	0.1	0.3	0.2	0.1	0.2
Raška	0.1	0.2	0.3	0.1	0.2
Šumadija	0.2	0.4	0.4	0.3	0.3
Bor	0.2	0.3	0.5	0.1	0.2
Braničevo	0.2	0.2	0.5	0.4	0.3
Zaječar	0.0	0.2	0.1	0.1	0.1
Jablanica	0.0	0.1	0.0	0.0	0.0
Nišava	0.2	0.3	0.3	0.2	0.2
Pirot	0.1	0.3	0.3	0.2	0.2
Podunavlje	0.2	0.3	0.7	0.2	0.3
Pčinja	0.0	0.1	0.2	0.0	0.1
Toplica	0.0	0.0	0.0	0.0	0.0

[*]*Normalized value in the range from 0 to 1*
Source: Calculation of the author, according to the data from Statistical Office of the Republic of Serbia

The largest improvement in the level of development was recorded in the region of Bor and Srem (compared to 2008, it was improved by 8 positions) and the Colubara, Pirot and Toplica regions (by 5 positions), and the largest deterioration in the level of development compared to other areas in Serbia was recorded in the Danube region and West Bačka (compared to 2008, there was a decrease of 12 and 10 positions, respectively), as well as Pomoravlje and Raška, which worsened their ranking compared to 2008 by 5 positions.

In the observed period, 11 areas changed the development group and 6 areas moved to a higher development group (Srem and Pirot areas for two development groups, and Colubara, Mačva, Bor and Toplica areas

for one development group), while 5 areas moved to the lower development group (the Danube region for three development groups, West Bačka region for two development groups and North Banat, Pomoravlje and the Raška region for one development group).

The previous analysis shows that all regions in Serbia have development potentials, but that the regions manage to use their development potentials and increase their level of development differently, both in relation to the previous period and in relation to other areas in Serbia (Fig. 2).
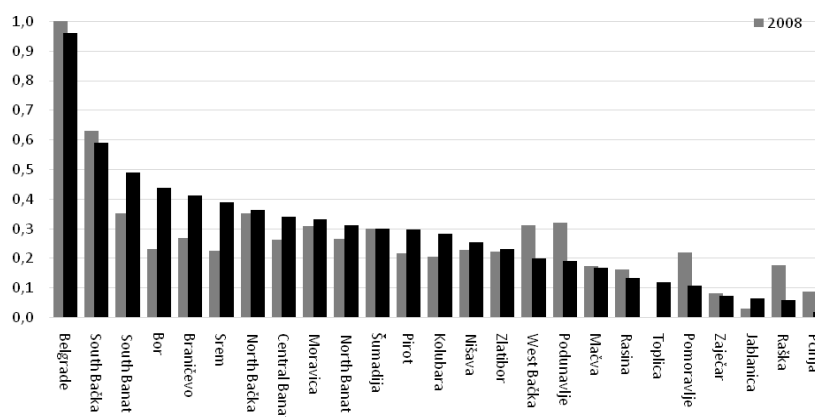

Figure 2. Values of the Regional Development Index in 2008 and 2018
Source: Calculation of the author, according to the data from Statistical Office of the Republic of Serbia

CONCLUSION

The theoretical concepts of regional development policy have always largely reflected the essence of dominant directions in economic growth theory. In the last decade of the previous century, a new generation of regional development policies emerged. In formal terms, it is based on the rejection of the key premise of neoclassical orthodoxy, which refers to the view of the existence of perfect competition and the manifestation of declining factor returns. The introduction of the assumption of declining yields and monopolistic competition is theoretically related to the emergence of endogenous growth theory and the so-called new economic geographies.

Roughly speaking, the key objective of regional development policy, in line with the tradition of the new growth theory, is to improve the competitiveness of the region. At the same time, the competitiveness of the region implies that in the competitive environment, the products of enterprises from the area of the observed region place products and ser-

vices on the market, with relatively high levels of per capita income and high labor force employment.

The modern policy of improving the competitiveness of the region entails a fundamental change in the importance of certain factors of improving the competitiveness of the region. It is largely based on the cooperation, trust and connection of the relevant regional actors. Its effectiveness is predominantly determined by factors related to networking, cooperation, regional identity and quality of life.

The following indicators were used for its construction: gross value added (GVA) per capita in thousands of RSD, number of employees per 1,000 inhabitants, average salary per employee and new investments per capita. Based on the standardization of the values of these individual development indicators, a unique, composite indicator, the Regional Development Index, was defined, on the basis of which an overview of the situation and the relative level of development of individual areas in the Republic of Serbia was obtained.

The results of the research confirmed hypothesis H1 according to which regional development in the Republic of Serbia in the period 2008-2018 did not proceed in accordance with the messages of endogenous growth theory and respect for the imperative of improving competitiveness. Also, the results of the analysis of the regional development in the Republic of Serbia in this period confirmed the validity of hypothesis H2 that there was no reduction in the lag of certain regions in the country behind the region of Belgrade, as the most developed and most competitive region.

Compared to 2008, the rank of development in 2018 in four areas remained unchanged (Belgrade, South Bačka, North Banat and Zlatibor area), in 9 areas it was reduced, and 12 areas improved their development position. The largest improvement in the level of development was recorded in the regions of Bor and Srem (compared to 2008 by 8 positions) and the regions of Colubara, Pirot and Toplica (by 5 positions), and the largest deterioration in the level of development compared to other areas in Serbia was recorded in the Danube and West Bačka region (compared to 2008, a decrease of 12 and 10 positions, respectively), as well as the Pomoravlje and Raška areas, which worsened their rank compared to 2008 by 5 positions.

Improving the competitive position of individual regions in the future should be based on factors of economic development of endogenous nature. In other words, the growth of the region's competitiveness must be based, to a far greater extent, on initiatives that favor network connectivity, cooperative relations, as well as the trust of regional economic actors, than it has been the case so far. In such circumstances, people's readiness for new business ideas and organizational solutions are incomparably more important drivers of regional development compared to the number of companies located in a given area.

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РЕГИОНАЛНИ РАЗВОЈ РЕПУБЛИКЕ СРБИЈЕ У СВЕТЛУ ПОРУКА ЕНДОГЕНЕ ТЕОРИЈЕ РАСТА И ИМПЕРАТИВА УНАПРЕЂЕЊА КОНКУРЕНТНОСТИ

Слободан Цветановић[1], Војислав Илић[2], Драган Турањанин[3]
[1]Универзитет у Нишу, Економски факутет, Ниш, Србија
[2]Универзитет у Пришини са привременим седиштем у Косовској Митровици;
Универзитет у Крагујевцу, Филолошко-уметнички факултет, Крагујевац, Србија
[3]Универзитет Унион-Никола Тесла, Факултет за менаџмент (ФАМ),
Сремски Карловци, Србија

Резиме

Концепти политика регионалног развоја су се временом мењали верно одражавајући кључне ставове доминантних теорија економског раста земаља и региона. Крајем двадесетог века почеле су да се појављују политике регионалног развоја чију теоријску основу концептуално и функционално чине поруке ендогене

теорије раста. У епицентру ових политика регионалног развоја налази се императив унапређења конкурентности.

Регионална конкурентност, у савременим условима привређивања, заснива се на кооперацији, поверењу и повезаности релевантних актера, она се наслања више на креативност становништва, него на расположивости радне снаге и богатству природним ресурсима. У таквим околностима, спремност људи за нове пословне идеје и организациона решења је неупоредиво важнија у односу на присутност одређеног броја предузећа на територији конкретног региона.

Унапређење регионалне конкурентности је повезано са факторима који се односе на умрежавање, кооперацију, регионални идентитет, квалитет живота. Региони који настоје да повећају животни стандард својих становника и побољшају властиту позицију у односу на конкуренте морају такође наћи ефекасан начин привлачења страних директних инвестиција. Уколико то не учине, конкурентски положај посматраних региона ће се дугорочно гледајући погоршавати, што ће свакако деловати на погоршање животног стандарда.

Бројни су фактори унапређења конкурентности региона. Својим значајем се истичу: могућност структурних трансформација привреде, посебно повећањем удела индустрија које остварују високе нивое додате вредности са мултипликативним ефектом на остале привредне секторе, високи удео услужног сектора који доприноси стварању додате вредности (истраживање и развој, високо образовање, култура и пословни сервиси), производња утемељена на знању, децентрализација система одлучивања, бројна и успешна средња класа, урбана политика високих стандарда, доступност квалитетне комуналне службе, квалитетна регионална власт и очување животне средине, достигнути ниво пословне умрежености економских актера посматраног сектора.

Полазећи од претходно експлицираних констатација, у раду је презентована анализа регионалног развоја Републике Србије на основу креираног композитног индекса регионалног развоја, чија вредност у овом раду истовремено говори и о конкурентности појединих региона. За његово конструисање коришћени су изведени индикатори: бруто додата вредност (БДВ) по становнику у хиљадама РСД, број запослених на 1.000 становника, просечна зарада по запосленом и нове инвестиције по становнику. На основу стандардизације вредности ових појединачних развојних индикатора дефинисан је јединствени, композитни индикатор Индекс регионалног развоја, на основу којег је добијен преглед стања и релативни ниво развијености појединачних области у Републици Србији. Регионално рангирање и груписање области у Србији према нивоу развијености (I – релативно најразвијенија област; V – релативно најмање развијена област) омогућава сагледавање разлика између развијености области, расположивих развојних могућности и њихове искоришћености. Анализа путем овог композитног индекса је потврдила постојање великих разлика у нивоу развијености између региона у Србији у 2018. години. У односу на 2008. годину, ранг развијености код четири области остао је непромењен (Београдска, Јужнобачка, Севернобанатска и Златиборска област), код 9 области је смањен, док су 12 области су побољшале свој развојни и самим тим конкурентски положај.