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ENDOGENOUS GROWTH THEORY AND REGIONAL DEVELOPMENT POLICY

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The numerous versions of endogenous explanations of economic growth emphasize the importance of technological change driving forces, as well as the existence of appropriate institutional arrangements. Endogenous growth theory contributes to a better understanding of various experiences with long-term growth of countries and regions. It changes the key assumptions of the Neoclassical growth theory and participates in the modern regional development physiology explanation. Based on these conclusions, the paper: a) explicates the most important theoretical postulates of the theory, b) explains the most important factors of economic growth in the regions in light of the Endogenous growth theory messages and c) emphasizes the key determinants of regional competitiveness which in our view is conceptually between the phenomena of micro- and macro-competitiveness and represents their necessary and unique connection. First of all, micro-competitiveness is transformed into a regional competitiveness; then regional competitiveness is transformed into a macro-competitiveness. In turn, macro - influences the microeconomic competitiveness, and the circle is closed. After that, the process starts over again.

Key words: **endogenous growth, endogenous growth theory, regional development, regional development policy, regional competitiveness.**

INTRODUCTION

A region is considered to be a geographic area that is smaller than the national territory in which it is located. As a rule, the region area does not coincide with administrative borders, as its determination depends mainly on the issue under studying.

Regional development means the process of initiating, structuring and achieving sustainable development, while taking into account the complex regional characteristics, by using appropriate instruments and measures. Regional development policy seeks to unify two fundamental and basically contradictory goals: on the one hand, increased efficiency of the national economy, and the balanced development of its individual parts, on the other hand.

The regional policy primary goal is to create economically strong regions which are able to integrate into the global economic trends (Maskell, 2000). Balanced regional development cannot be realized independently of the institutions and instruments that ensure stability, continuity and harmonization of development processes at the national level. Therefore, in recent decades strategic planning of regional development has become increasingly important, given that it takes into account not only economic but social and environmental dimensions of economic development, as well.

Neoclassical school tells us that growth in the value of production at national and regional level is the result of an increase in the quantity and quality of labor (by population growth and labor-saving technological changes), increase in physical capital (by savings and investment mechanism), and the production technological level rise via its own R&D activities or transfer of the knowledge and technology (Barro and Sala-i-Martin, 2004). Less innovative regions with less developed educational system, *ceteris paribus* have more moderate economic growth rates compared to the regions that are characterized by progressive territorial innovation systems, competent educational systems, etc. Research on the economic growth factors in the United States during

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1948-1982 emphasized the role of education, technological innovation and growing know-how (Solow, 1988). The neoclassical explanations of the regional economic growth physiology start from the assumptions about manifestation of constant economies of scale, behavior of economic entities in accordance with the prices established in perfectly competitive markets, absence of externalities, existence of exogenous technological change. The neoclassical explanations also abstract potential impact of institutional factors and neglect the potentially stimulating role of public management on generating economic growth in certain territories (Kurz and Salvadori, 2001: 14-16).

On the other hand, *Endogenous growth theory* argues that the growth dynamics are internal result of forces largely determined by the character of key attributes of the economic system, i.e. economic and development policies of the country or region, and not the forces that act outside (Todaro and Smith, 2011). The numerous versions of endogenous explanations of economic growth also emphasize importance of the appropriate institutional arrangements existence. (Cvetanović *et al.*, 2010). "New approaches point to the fact that specific location of industry can be crucial for regional development, and that synergetic effects of locations are important for technological and other impacts of spillover effects and innovation" (Dragičević, 2012: 20).

At the end of the 20th century largely as a result of the globalization process, a new generation of regional development policies emerged (not only in leading economies but also in developing countries) substantially affirming new development strategies for companies and territories. Previous regional development policies, characterized by redistribution of financial resources between developed and less developed regions, increasingly give its place to policies aimed at strengthening the endogenous potential of the regions. There is a consensus in the regional economy that the Endogenous growth theory represents their most important conceptual framework (Vazquez - Barquero, 2002). The global crisis of 2008 has further underlined the relevance of such statements.

The context for research on Regional Development has been changed significantly in last 30 years. The global changes in economic, political and social relations that happened meantime influenced the treatment of regional growth in economic theory (Capello, 2007). New theoretic concepts has been developed in which space has important role for economic growth of the region (Capello and Nijkamp, 2009). Policy of regional development begun to stress importance of the space in context of efficient allocation of limited resources. Spatial availability and specificity of territorial and social context makes precondition of rational and effective policy of economic growth of the region (Stimson *et al.*, 2011).

By their importance two group of theory inside regional economics stand out: Location theories and Theories of regional growth (Capelo, 2009: 24). Location theory is a theoretical-methodological basis of regional economics. This microeconomic discipline is of a static character. This theory research a space as a cathegory without any limits. This fact enable in location theory that the choice of the microeconomic subjects related to location considers independetly of limitations that exists (physical borders between the states, as well as all other borders without administrative characters, like natural, linguistic, cultural and other barriers). At the other hand, theory of regional growth has mainly macroeconomic characteristics. From pure macroeconomic character it differ by taking into account territorial criteria. Theory of regional growth treats the space as territorial totalities that are mutually separated, but are internally homogenious. By combining the two extremes, there are also different perceptions of space as a research subject, which represent analytical starting point for other groups of theories on regional development. The third way to space included in the economic analysis is his view as full territorial integrity, internally diversified, and associated with other territories. The theories arising from these needs space are theories of regional development based on the interconnectedness and interdependence of the participants in the economic life within each area.

The above three approaches in the spatial conception in economic theory, they are still separate concepts, though newer theories about local growth, which are based on increasing returns microeconomic entities enabled concentration treated as linked. It is an approach that assumes that rising yields achieved at the level of individual companies, not due to characteristics of the area in which the companies operate (Capelo, 2007).

It is an indisputable fact that the Endogenous growth theory to a significant degree contributes to a better understanding of various experiences with long-term growth of countries and regions. It challenges the key assumptions of the Neoclassical growth theory and participates in the modern regional development physiology explanation. Based on these conclusions, the paper: a) explicates the most important theoretical postulates of the theory, b) determines the factors of economic growth of the regions and c) emphasizes determinants of regional competitiveness which is conceptually between the phenomena of micro- and macro-competitiveness and represents their necessary and unique connection.

THEORETICAL POSTULATES OF ENDOGENOUS GROWTH THEORY, WHICH ARE IMPORTANT FOR REGIONAL DEVELOPMENT POLICY

Endogenous explanations seek to find out the way in which market forces, decisions in public policies and various institutional solutions influence the shaping of economic dynamics in individual countries and regions, i.e. they try to explain the causes of difference in growth rates between various countries and regions (Todaro and Smith, 2011: 150). Key differences between Neoclassical (exogenous) and Endogenous growth theories are their diametrical points of view regarding: a) the nature of technological change (exogenous and endogenous), b) the economic growth dynamics (zero growth/constant growth) and c) the existence of market equilibrium (perfect market/market failures) (Fagerberg, 2001).

Endogenous nature of technological changes

The diffusion of innovation and knowledge, flexible organization of production and urban and institutional development generate efficiency growth and high quality of production system key performances. In turn, each of these mechanisms increases the capital accumulation efficiency by stimulating the manifestation of economies of scale, various externalities and reduces transaction costs, thereby contributing to productivity growth and maximizing the rate of return in urban territories (Vazquez - Barquero, 2002: 16-17).

Technological change is the most important factor of economic growth in both Neoclassical and Endogenous growth theories. It increases production for a given set of inputs and is a key growth factor of countries and regions. Endogenous growth theory tends to reveal the processes that cause technological change, as neoclassical economic thought completely abstracted this issue. Endogenous growth theory emphasizes technological change as an outcome that is subject to severe market failures (Samjuelson and Nordhaus, 2009).

Technological changes alter the importance of certain production factors, and also influence the qualitative transformation of all elements of economic potential in the companies and territories, expanding the boundaries of their use, based on increase in available production factors usage efficiency (Togaty, 2009: 29-31). By increasing factors usage efficiency, technological changes enable the development processes to less drastically show their limitation, making economic progress of the regions possible, thanks to the substitution of scarce production factors for less limited ones. The consequence of technological change is an efficient recombination of developmental factors with a tendency toward a more complete utilization of the production factors.

Technological changes also affect the transformation of the regional economic structure, by including a variety of products, groups or sectors, unequally; also they have diverse directions of spreading as well as diverse manifestation effects intensities (Link and Siegel, 2003: 18).

By pointing to the importance of technological changes for the economic advancement of certain regions, many analysts indicate the importance of technology transfer in generating endogenous economic growth (Dragutinović *et al*., 2014). Therefore, technology trade is gaining in importance, as well as numerous ways for transferring technological knowledge from one region to another.

In many cases technological changes push the limits of productivity almost to the theoretical maximum. At the same time, they change the focus in economic value creation from production of goods and services to creation of new knowledge and technologies, whose synergetic character exceeds the total cost of their creation, many times over. Technological development allows creating new or improving existing products, services and processes. The goal and purpose of technological development is to enable faster, more comprehensive and higher-quality meeting of human needs (Pokrajac, 2004). The choice of means and methods for accomplishing the goals of technological development is the issue of strategic orientation of corporations, as well as certain regions and the national economy as a whole.

Endogenous theories explain technological change as an internal outcome of public and private investments in human capital and investment in R&D. All endogenous growth models advocate an active development policy in supporting the regional growth, inter alia, through direct and indirect investments in the education of human capital and stimulating foreign direct investment into research-intensive areas of production (Vukotić, 2002: 779).

Non-diminishing returns of production factors

The endogenous growth theorists reject the neoclassical assumption of diminishing marginal returns. They start from the premise that situation of non-diminishing returns is possible. Thereby, endogenous growth explanations reject the stagnant growth theorem of Neoclassical theory according to which the economic growth is (in the absence of technological shocks) time-limited phenomenon and in the long term tends toward stagnation or zero growth (Barro and Sala-i-Martin, 2004). Quintessence of the explanation of this possibility is in the synergetic nature of technological change impact on productivity growth and economic efficiency growth at the national or regional levels. It is believed that the American economist Paul Romer formulated the idea and constructed an endogenous model in which knowledge leads to continuous economic growth (Romer, 1986, 1987).

In contrast to Neoclassical growth theory, Endogenous growth theory states that developmental convergence of countries and regions might not occur. So, economically advanced regions are able to improve living standards of its residents forever, and less developed may remain poor forever. Assuming that public and private investments in human capital generate externalities and productivity improvements that compensate for the tendency of diminishing returns of factors, Endogenous growth theory attempts to explain the possibility of long-term economic growth of countries and regions.

Market failures

Theorists of endogenous growth emphasize the existence of many market failures in real life. This means that market incentives cannot achieve optimal allocation of resources in case of creating new ideas and innovations (Atkinson and Ezell, 2012). Technological development is not a random phenomenon regulated by the free market operations. To a great extent, economic growth of countries and regions is the result of designed development policy and social capability of the country, and the ability of its regions to organize their institutions that stimulate the creation and the broadest diffusion of technological change (Švarc, 2009: 16).

Special types of external effects, in the theoretical analysis context of new generation of regional development policies, are spillover effects. In short, the spillover effects are external effects of economic activities influencing those entities that are not directly engaged in these activities.

Economic theory knows both positive and negative effects of these spillovers. An example of positive effect can be

knowledge that is acquired in a region and that could be applied in other regions (although they were not directly involved in the acquisition of the knowledge). Usually, negative example is pollution affecting also entities which do not participate in the production of goods that (during its production and usage) cause the pollution.

Elementary retrospective literature on the importance of technological spillovers in the last thirty years enables the following conclusions. *Firstly*, there is no consensus between economic analysts regarding the character of technological spillovers effect on economic growth of the host region. *Secondly*, the disagreement of some theorists range from claims that there are positive technological spillovers whose effect on the economic growth dynamics in the host region is positive, to statements that in general spillovers are of negative character. Thirdly, recent studies highlight the existence of positive technological spillovers whose effect on the economic growth dynamics is essentially positive without doubt, though it is very difficult to quantify those spillovers precisely.

In synergetic way, technological spillovers encourage the value increase in production of goods and services at a regional level. In the contemporary economic conditions the existence of spillovers is most frequently associated with pervasive and propulsive character of new technologies, especially Information and Communication Technologies (ICTs). A higher volume of transfer of new technological solutions into specific region, results in greater spillover effects of knowledge, technologies and productivity, which consequently intensify economic growth of the region (Antevski, 2008).

ENDOGENOUS GROWTH FACTORS OF A REGION

The most important factors of the endogenous development of a region are: 1) human capital, 2) social capital, and 3) innovation.

What follows is an explication of their most important characteristics, primarily in the light of endogenous regional development policy.

Human capital

Human capital is an economic expression for knowledge, skills, competencies and other attributes that individuals have, and which are important when they carry out economic activities. These elements of human capital constitute individual attributes that have a permanent character.

The initiators of the idea of human capital are A. Smith – specialization and division of labor, K. Marx – the role of science and technology in production, J. S. Mill – quantity and quality of human capacity for work, J. Schumpeter – recombination of knowledge into the innovation process as a factor of economic growth (Savvides and Stengos, 2009). According to Gary Becker, Nobel Laureate in economics, human capital is a set of human abilities which enable him to obtain income (Becker, 1992). He is famous for his statement that human capital is formed on the basis of investments in man, including (as the most important) training, preparation for production, costs of a healthy diet, migration and searching for information on prices and income (Becker, 1993).

To a great extent American researcher Theodore Schultz deserves credit for shaping the concept of human capital (Schultz, 1961). Schultz treated the costs of education and health care in an almost identical way as the investments in physical capital. Human capital is reflected in the intangible assets, which have the capacity to initiate or to support production activities, innovation and employment. It is formed through a process of learning in various institutions (educational institutions, family, enterprise). The combination of knowledge, skills and abilities is an individual rather than uniform process. Analysis of the creation and use of human capital must take into account the influence of various social institutions: school, labor market, community, etc.

It can be said that knowledge has become a decisive factor to business success and competitive advantage of companies and territories (Mroczkowski, 2012: 272). Over the last thirty years developed regions have turned to processes which imply less use of simple labor, raw materials and energy, parallel to the growing use of new scientific solutions and increasingly sophisticated equipment. The importance of investment in human capital is recognized in modern economies, especially under conditions of the comprehensive application of scientific results in the production process, intensive development of new technologies and continuous improvement of forms and methods of production management. Certainly, education, skills and knowledge are the key components of the productivity growth of individuals, regions and the economy as a whole in modern society. Nowadays, many relatively rich countries and regions have achieved their progress primarily due to investments in education and improving human capital (Cvetanović and Despotović, 2014).

Social capital

Social capital is the capital of cooperation, mutual operations, mutual trust and mutual help, which are formed during the economic relations of individuals; it cannot be privately owned and has the attributes of a public good. It is not clearly visible because people carry it inside. Different environments support certain forms of social capital differently, resulting in possibility of its different economic valuation. The social capital is a special form of public goods, potentially available to everyone involved in the system of social connections and relationships (Coleman, 1988; 1994).

Social capital includes the institutions, relationships, attitudes and values which govern interpersonal interactions and contribute to the economic and social development. To a great extent, social capital is a result of the legal, institutional and political environments where economic actors operate i.e. perform their functions and achieve their goals. It is a capital of permanent and to some degree institutionalized relations between individuals and organizations, which facilitate activities and contribute to the creation of economic value (Stimson *et al.,* 2011: 10-11.). In a word, social capital is the "glue" that holds the community together. For economists, social capital includes intangible assets (such as rules, habits and relationships) that facilitates the exchange of innovative processes, resulting in economic growth. The proper functioning of the market mechanism assumes the

existence of generally accepted norms, institutions and behavior patterns that work towards reducing transaction costs, ensure contract compliance and quickly resolve any disputes. If we take into account the additional elements of social capital - a sense of belonging to a community that shares the same values and cherishes the same patterns of behavior, participation of civil society in the decision-making processes of importance to the development of the community - then the sites that have a high level of social capital creates "climate" that encourages responsibility, cooperation and synergy (Osborne *et al*., 2007).

Social capital consists of the attributes of society organization such as *trust*, *norms,* and also *various networks*, which can improve social efficiency through coordinated action (Putnam, 1993; 1995). Relationships between people have value and some potential for development, both for individuals who are involved in many social connections, as well as for groups and the entire community.

Networks are a component of social life and they allow participants to efficiently join the realization of a number of common goals. Almost all researchers consider networks as very important prerequisite for the creation of social capital (Baar, 1988). In the economy, networks occur as informal connections (institutions) in already formed formal relations, which complement, enrich and strengthen existing connections and relationships. The most important features of the network in the economy refer to trust, responsibility and punctuality.

Trust is one of the most important elements of all business transactions. Economic literature's approach to trust is mainly based on the observation and analysis of the relationship model seller-buyer, where we can observe influence of several variables associated with confidence, as its prerequisites or its outcomes (Ostrom, 2003).

The regions with a high radius of trust also have a significant level of social capital which is a prerequisite for economic prosperity. Economic activities that rely on future actions of individual agents are achieved at a lower cost, if they are realized in an environment that is characterized by a high level of trust. Conversely, low levels of trust among economic agents will result in higher costs and correspondingly lower economic efficiency. Regions with low overall trust levels are lagging behind in terms of economic development (Vazquez – Barquero, 2002).

As a rule, the regions with low trust levels have an unfavorable innovation climate. By directing available resources to the protection of property rights, prevention of fraud by employees, business partners and the state, entrepreneurs have less and less funds to direct towards the realization of the activities related to creating new products, improving existing ones and increasing the productivity and economic efficiency (Quevit, 1991).

Regions with high trust levels are less dependent on formal institutions dealing with the protection of property rights and contracts. Also, in regions with undeveloped formal institutions, high level of trust among transactors has a positive effect on the volume of economic transactions and is a good substitute for undeveloped or inefficient regional institutions (Vazquez – Barquero, 2002). In regions with high levels of trust, the credibility of the regional administration is also higher, which has a positive effect on investments and economic activity volume.

Furthermore, the high level of trust at a regional level has not only a positive effect on the accumulation of physical capital, but also has considerable effect on the human capital improvement. In those regions, local labor and knowledge markets are much more developed. In contrast, in regions where the level of trust is low, employment decisions to the greatest possible extent are based on connections and corruption and less on objective criteria of abilities, compared with regions where the level of trust is high.

Social capital plays a prominent role in the creation of economic value. It significantly increases the efficiency of knowledge and skills transfer from one part of the organization to another or from one region to another. Economic function of social capital is reflected in the reduction of transaction costs related to the mechanisms of formal adjustments such as contracts (Cvetanović and Mladenović, 2015). No contract can foresee every single detail that could occur between the parties.

Innovations

The 1980s and 1990s witnessed a series of theoretical concepts of regional development based on innovation activities as a source of economic growth. The literature knows them as "new industrial spaces", "industrial clusters", "innovative milieus", "self-learning regions", "regional innovation systems" (Puljiz, 2009).

Although some of the above-mentioned names refer to a slightly lower territorial level (industrial clusters), while others cover wider areas (regional innovation systems, self-learning regions), they are in the economic literature usually under the name of *spatial innovation systems* (Cheshire and Malecki, 2005). In every case, the economic growth is based on regional concentration of innovative companies that continuously invest into new technologies and products development, while maintaining very close relations with other actors at regional level.

The literature on regional development mostly consists of works about clusters as organizational form of spatial innovation systems. In less developed regions, the promotion of clusters is based on less costly labor, natural resources, etc.; in contrast, in more developed regions cluster affirmation is based primarily on high technology, specialization, developed infrastructure, etc.

Development of clusters involving innovative companies and research institutions has become an important priority in many regions; not surprising if we bear in mind that their jobs are distinguished in terms of productivity and earnings. However, the problem is that there is still a huge gap between the results of scientific research and specific advice on particular interventions of regional authorities. Some analysts reasonably note that future research must much more thoroughly examine the nature of regional prerequisites for the formation and success of clusters, necessary organizations and territorial level of their functioning, for researchers to be able to recognize their

economic effects (Armstrong, 1995). The challenge is even more evident when one takes into account the imperative of reducing the growing imbalance in regional development. It is clear that functioning of the high-tech clusters is closely linked to the educational structure and that the majority of such clusters are located in the most prosperous regions. The mechanism of cumulative causation tends to increase the economic advantage of the most advanced regions, while at the same time globalization processes increase the competitive pressure, especially in less developed regions. Therefore, concrete actions aimed at increasing innovativeness in less developed regions, are faced with the additional risks and difficulties. Knowledge, information, skills, innovations and new ideas have become essential wealth and production resources in the post-industrial society.

REGIONAL COMPETITIVENESS – CONCEPTUALLY LOCATED BETWEEN MICRO- AND MACRO-COMPETITIVENESS, REPRESENTING THEIR NECESSARY AND UNIQUE CONNECTION

In theory there are diametrically opposed views on the relevance of the concept of competitiveness. Because of the number and complexity of factors, as well as the very nature of the competitive processes, the concept of competitiveness is often very difficult to understand, and sometimes it's even confusing (Snieška and Bruneckienė, 2009). Some economists believe that competitiveness has characteristics of "the natural law of modern capitalist economy" (Kitson *et al*., 2004), while others think that definition of competitiveness refer to productivity which measures the value of goods and services per factor unit, produced in a particular territory (Krugman, 1995).

Without going deeper into analysis of issues related to the character and nature of the concept itself, it should be noted that level at which the phenomenon of competitiveness is examined is the most important aspect of this phenomenon (Kitson et al., 2004). In short, we should distinguish between *microeconomic* and *macroeconomic* aspects of competitiveness complex.

At a *micro level*, *competitiveness* is the ability of companies to compete, grow and be profitable (Martin, 2004), or the ability of a company to produce and sell products and services at a lower price compared to its competitors and/or under non-price terms that are more attractive than competitors' offer. So, competitiveness is the ability of companies to consistently and profitably produce output that meets the requirements of an open market in terms of price, quality, etc. A company that is more competitive than its rivals will have better chances to gain larger market share.

Unlike the competitiveness of enterprises, the concept of *macroeconomic competitiveness* is theoretically controversial phenomenon. It is often identified with ability to produce goods and services and bring them into the foreign markets, and is expressed through the growth dynamics of real gross domestic product per capita, or the capacity for increasing wealth (Marginean, 2006).

Regional competitiveness is a new phenomenon in economics. It has been considered only in the late 20th and early 21st century. In highly developed countries research in this area is extensive and of high quality; in contrast, it is almost absent in developing countries (Kitson *et al*., 2004; 2008). Regional competitiveness is spatially located between the micro - and macro - and represents their necessary and unique connection. Micro- is first transformed into regional and regional into macro-; in turn macro- influences the microeconomic competitiveness, and the circle is closed. After that, the process starts over again (Figure 1).

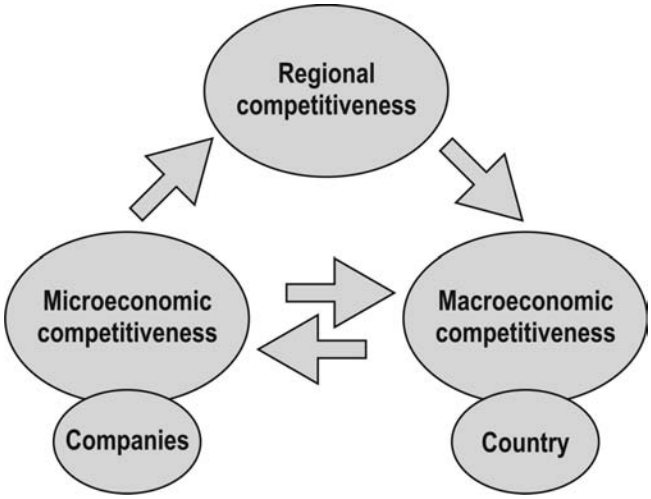

Figure 1. The concept of regional competitiveness (Source: authors)

Regional competitiveness is ability of a region to ensure economic growth over time, including ability to attract and retain productive capital and competent human resources, as well as to be innovative, in the broadest sense.

Regional competitiveness is based on identifying and strengthening the unique combination of specific resources of a region. It is reflected in the region's ability to ensure economic growth over time, including the ability to attract and retain capital and human resources, as well as to be innovative. This indicates that the concept of competitiveness is not just about productivity, but also market structures and institutional arrangements (Porter, 1990). Thus, a region can be characterized by highly-competitive companies in the micro-economic terms, but if these firms generate low value added per employee, then we cannot speak of the competitive region. This statement suggests that regional competitiveness is far more complex phenomenon than productivity of labor, as some authors argue.

In the literature there are many approaches to sorting of key factors of the regional competitiveness. One of them states the following seven factors of regional competitiveness: *economic structure*, *innovative activity*, *regional accessibility*, *skills of the workforce, social structure, decision centers* and *regional identity* (Lengyel, 2004). Another approach to regional competitiveness modeling states the following factors: *quality of human capital, innovations, connectivity and entrepreneurship* (Ecorys, 2007).

Some authors make a distinction between static and dynamic factors of the regional competitiveness (Ručinska

and Ručinsky 2007). The former are source of static competitive advantage of the regions and refer to natural and geographic conditions in a region (constant conditions) such as regional location, natural resources and historical heritage. The latter are source of dynamic competitive advantage of the regions, and they are not the result of natural and geographic relevance of a particular region but they are acquired over time. They may be affected by the companies or regional institutions.

The above-mentioned factors are part of the absolute competitive advantage of a region. This advantage will depend on their presence and development. Regions characterized by development and presence of many different factors (for example, high-quality human capital, clusters, strong support from the formal and informal institutions, good geographic location, developed infrastructure) have better competitive position, meaning that competitiveness of a region depends on superiority and interaction of its factors. The regional competitiveness is based on high-qualitative productive performance and economic ability to produce the output with the highest possible productivity, which in turn generates high levels of real wage. Competitiveness is closely related to the rise in living standards, better employment opportunities and ability of the country (the economy) to fulfill its international obligations. Whether we look at competitiveness only as productivity (Krugman, 1990: 9) and/or through the rising living standards (Porter, 1992), competitiveness is based on the cumulative results achieved on the basis of existence of endogenous factors of the region. Regions which develop faster and own many different factors also have a better competitive position (Vuković, 2003).

CONCLUSION

Endogenous growth theory contributes to a better understanding of various experiences with long-term growth of countries and regions. It changes the key assumptions of the Neoclassical growth theory and participates in the modern regional development physiology explanation.

Key differences between Neoclassical (exogenous) and Endogenous growth theories are their diametrical points of view regarding the nature of technological change, the economic growth dynamics and the existence of market equilibrium.

Endogenous growth theories explain technological change as an internal outcome of public and private investments in human capital and investment in R&D. All endogenous growth models advocate an active development policy in supporting the regional growth, inter alia, through direct and indirect investments in the education of human capital and stimulating foreign direct investment into research-intensive areas of production (e.g. software industry, telecommunications, etc.).

Theorists of endogenous growth emphasize the importance of the market failures. This means that market incentives cannot achieve optimal allocation of resources in case of creating new ideas and innovations. Economic development is not a random phenomenon regulated by the free market operations.

The most important factors of regional endogenous development are human capital, social capital and innovation.

Nowadays regional competitiveness is mostly based on high-qualitative productive performance and economic ability of region to produce the output with the highest possible productivity, which in turn generates high levels of real wage. Competitiveness is closely related to the rise in living standards, better employment opportunities and ability of the country to fulfill its international obligations in a timely manner.

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