THE ECONOMIC CONVERGENCE IN THE EUROPEAN MODEL

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The economic convergence consists in the very close, even identical evolutions of one variable in two different countries or regions. Within the European model, the macroeconomic and cohesion policies insure a good substantiation of the sustained economic growth. The achievement of the Single Market had positive effects upon the European economy as a whole, but these benefits have not been equally distributed among states, regions and social groups. The market is the most efficient mechanism of resource allocation within the economy, but it is not the tool insuring the distribution of the registered benefits. For this reason, the mechanisms of the cohesion policy can improve the tendencies of the economic activities concentration, once the economic integration process has intensified.
In this paper, the authors propose to explain the defining elements of the European model, emphasizing the connection between the convergence process and real economic growth process. In this sense, we will present the European model of reginonal growth, which contributes to the achievement of a real economic convergence process.

1. Introduction

The theories regarding regional growth have met a gradually evolution, marker at the beginning by treating regions as non spatial elements of the national economy, and then by taking the space into consideration.

The neoclassical models are based upon the hypothesis of perfect competition, of full used of production factors and their perfect mobility. Maybe one of the most concerning economic issues, for economists, mathematicians and statesmen is the one of the economic growth. This is because of the major impact the economic growth has upon the whole population of a country, so consequently, the achievement and maintenance of a sustained growth rhythm is a major objective of macroeconomic policy in any country.

The direct consequence has been that the long term growth rate of these models becomes dependent upon demographic factors, such as population growth rate, labor force structure, the increase of labor force productivity (the technological change), all these factors being considered, until the Solow – Swan model, exogenous. Only the policies could contribute the long term growth, although it was clear that population growth and the qualification programs were determining an increasing efficiency of the labor force. From that moment, the theory of economic growth evolved rapidly, with two distinct generations of models.

The first generation is inspired by the **neoclassical Solow – Swan model** which, until the '60s of the last century, has dominated the specialty literature. These models had associated exogenous sources of long term growth, so they have been called the **models of exogenous growth**. The interest for such models started to decrease around the year 1970, when economists focused their attention upon other things with a more important immediate significance, such as inflation, unemployment, and oil shocks, so the models of exogenous growth have become obsolete, being replaced by macroeconomic of macroeconometric models[302]

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302 Solow, R., A contribution to the theory of economic growth, Journal of Economics, nr. 70, 1956, p.63.

Starting with the '80s, (Romer,1986), there is an increased interest for the theory of economic growth, consequently the second generation of economic growth models is born. Within these models, there are substantial improvements, such as: an attempt of explaining aspects related to data which were not discussed in the neoclassical model; a more satisfactory explanation of the differences among the economic growth rates of different countries; a central attention on knowledge accumulation; a more important role for the instruments of macroeconomic policy in explaining the growth process. These new models try to explain the long term growth rate as a result of rational agents' behavior in the economy, who are optimizing their behaviors, reflecting the structural characteristics of the economy, such as technology and preferences for consumption and savings, as well as the role of macroeconomic policy. For these reasons, these models are known under the name of models of endogenous growth.

A region can have a reduced growth of the total output and a rapid growth of the per capita output at the same time, if the process of emigration from the particular region registers significant quotes in the studied period. The most common of them are: total output growth of a region, output growth per occupied person or output growth on each inhabitant. The output can be measured with the help of: the total production of a region, the Internal Brute Product of the region or the internal net product of the region.

This is why this problem appears: how do find the most appropriate way of measuring regional growth? This, however, depends on the purpose for which you are about to make the measurement. Because of this, the growth of the total output is utilized as an indicator of the growth of the productivity capacity of a certain region, which mainly depends on the extent in which that region attracts capital and workforce from other regions. The output growth per occupied person is often utilized as an indicator of changes in the completion of the region through the growth of productivity. The growth of output per capita indicates the changes in the economical welfare of a region. Therefore, you can't say that one of these measures is the best, because each one is useful in its own way[303].

Another controversial problem which is connected to the disparities from regional growth refers to the long term vision over the consequences if regional growth. Therefore, according to the neoclassic model, which accentuates the role of the offer, regional growth can lead to convergence in the economical and social development of regions, whilst the vision of the models based on the post-Keynesian approach of demand (model which was based on the potential of export, the model of cumulative causes) regional growth accentuates divergence. In connection with the two visions upon the consequences of regional growth, the complementary method has started to appear, according to the general level of development, the options for economical policies of a country and the specific problems of different parts of the territorial system.

2. The European model

The development of the macro-economical approach of the economic growth was based on the contributions offered by Solow (1956) and Swan (1956). Their arguments were later applied in the case of regions (Armstrong and Taylow, 1993, 2000, Richardson, 1973, McCann, 2001). The neoclassical approach of the regional growth has to major components. The first one refers to the problem of allocating productions factors in a regional plan and their migration, the analysis being based upon the analytic frame offered by the unisectorial and bisectorial neoclassical model. The second part refers to the relation between production factors and the technological changes.

In essence, the neoclassical models are based on the hypotheses of perfect competition, on the full use of production factors and their perfect mobility. Maybe no other economical problem has

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303 Berinde M., Regionalism şi multimaterialism în comerţul internaţional, Editura Universităţii din Oradea, 2004, pag. 75.

trouble economists, mathematicians and politicians as much as the problem of economic growth. We think that this problem has appeared because of the major impact that the economic growth has on the entire population of a certain country, which makes reaching for maintaining a sustained growth rate a major objective of the marco-economical policy from any country. The concept of long term economical growth was first used by Solow (1956) and Swan (1956) in a macro-economic model which has become a classic, adding within the growth models created by classic economists (Ramsey and Haveelmmo) a relation which expresses the growth of population and a condition regarding the effective use of workforce. The direct consequence was that the long term growth rate of these models become depended of demographic factors, such as the population growth rate, the workforce structure, its productivity growth (technological change), all of these factors being considered external, until the Solow – Swan model. Therefore, only policies could have contributed to a long term increase, even if the population growth and the programs for enhancing qualifications were obviously determining the growth of workforce. From that point forward, the economical growth theory evolved rapidly under the form of two distinct generations of models. The first generation is inspired by the neoclassical Solow – Swan model, which, until the early 60's of the past century, dominated literature in this field. These models had associated exterior long term growth sources, which led to them being named external models of growth. The interest for these types of models has started to wear off around 1970, when economists have turned their attention towards other things which had a more important role at that time, such as inflation, unemployment and petroleum shocks, thus the models of exterior growth have been forgotten, being replaced by macro-ecometric and macro-economic models.

Besides these factors, the interregional migration of production factors also exerts a considerably large influence upon regional growth. According to the neoclassic model, capital will move towards the regions which offer the highest rates of efficiency, producers will search for the most profitable locations for their plants and equipments and workers will be attracted by the regions which offer the highest paychecks. As a result, disparities in regional growth are manifested not only as a result of endogen capital and workforce growth (through growth of population and accumulation), but also as a result of the interregional migration of factors. [304]

The problem which appears is identifying the regions with the fastest growth, if we assume that the workforce and capital are completely mobile. According to the neoclassic model, the regions with a high fixed capital-workforce ratio will offer high salaries, while investments in these regions will be lowered. This leads to the prediction that the workforce and the capital will go in opposite directions: regions with a high ratio of capital-workforce will notice a high flow of workforce and a reflux of capital, whilst regions with a low capita-force ration will go the opposite.

The regions in which salaries are at a lower level will attract capital and they will lose workforce, and regions in which salaries are high will attract workforce and they will lose capital. Because the capital-workforce ratio will be increasing in the low salary regions (as it will be decreasing in regions with higher salaries), the output per worker will grow more rapidly in the regions with lower salaries than in those which high salaries. In conclusion, taking into account the fact that spatial mobility of production factor and the direction of interregional fluxes determined by regional disparities, the neoclassical model leads to the idea of long term convergence of the economical development on a regional plan.

The classical analysis of regional growth and appropriate regional policies refers to *the possibility of solving the conflict between efficiency and equity*. If the regions with low incomes were offering the perspective of a high efficiency in using their capacities, these goals wouldn't be anymore opposite. But the agglomerations economies, the market opportunities and other factors

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304 Constantin D.L., Introducere în teoria şi practica dezvoltării regionale, Editura Economica, Bucureşti, 2000, pag.95.

action in favor of rich regions. This is why, usually, one must admit a series of "compensations" between efficiency and equity.

The construction of the European model of regional growth is based on identifying an *indifference curve between the alternative rates of economic growth and the index of regional equity*. A flat preference function implies a society orientated towards economic growth. More abrupt the preference functions are, more the society is receptive to the regional redistribution measures. However, in such cases, one must identify the circumstances that allow the choice of a positive growth rate and that achieve an ex-post redistribution of the economic growth results. In conclusion, each economic growth rate implies a certain inter-regional distribution. In this way, there are many alternative inter-regional distributions who can lead to the same economic growth rate. In the European model, the objectives of the regional policy can be reduced at two: the maximizing of economic growth on the national economy level (efficiency); the reduction of inter-regional disparities concerning the incomes, the well-being, the regions economic growth (equity).[305]

However, it is not absolute necessary to hierarchy the two objectives, or to adopt the hypothesis of linear programming problems. A less restrictive approach is the *construction of an indifference curve between the alternative economic growth rates and the index of regional equity*. In a simplified manner, one assumes that each economic growth rate implies a certain inter-regional distribution. But in reality, there are many inter-regional alternative distributions, who can lead to the same economic growth rate.

3. The economic convergence

The economic convergence consists in the very close, even identical evolutions of one variable in two different countries or regions. The nominal convergence refers to the close evolutions of economic variables, which influence the stability of the exchange rate and of prices (prices, costs, balance sheet, etc.).The real convergence refers to the close evolutions of variables concerning the economic and social conditions.

In order to measure the real convergence, some quantitative *criteria* have been proposed: the GDP growth; the GDP/capita; the level of unemployment; the current account, as % of GDP; the competitive indicator, in comparison with Germany[306].

The real convergence among the candidate countries and the member countries is important, assuring the cohesion at the EU 25, EU 27 level.

The real convergence becomes possible if: there is a consistent investment effort favourised by a high rate of savings and of FDI (as part of GDP);there is an increase in the qualification level and receptivity at new of the labour force; there is an increased competition and productivity; there is an increasing social cohesion and a generalized modernization of the country.

The progress of the real convergence process is emphasized by the economic growth rate and productivity rate[307].Is there a process of real convergence among the EU 25 members, synonymous with catching-up for the 8 Central and Eastern Europe new members? If such a process exists, what is the speed of economic catching-up? In order to answer these questions, we will use the β-convergence hypothesis[308].

It has been noticed that less-developed countries, such as Romania, Bulgaria, Latvia and Lithuania, have greater convergence speeds than the richest EU countries. Romania has the biggest convergence speed of the sample (4,66% per year), while Luxembourg and Ireland have

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305 H.Richardson, Regional ant Urban Economics, Pitman Publishing Ltd., London,2000, p. 125.

306 C. Hen and J. Leonard, Uniunea Europeana, Editura CNI Coresi International, Bucuresti, 2002,p.201.

307 D. Marin, C. Socol and M. Marinas, Economie Europeana. O prezentare sinoptica, Editura Economica, Bucuresti, 2004,p. 129.

308 Anna Tykhonenko, L'élargissement de l'UE vers l'Est : vers une Europe à combien de vitesses ?, Université de Nice Sophia-Antipolis, 2003, p.263.

the lowest convergence speeds (3,3% per year for Luxembourg, 3,34% per year for Ireland). These numbers are not surprising, because the 2 countries had an economic "take-off" (in the '80, for the Luxembourg, and more recently for Ireland).The other members of the EU 15 have an average convergence speed of 3,78% per year. The new EU members have an average convergence speed of 4% per year, while Bulgaria's speed is of 4,137% and Romania's of 4,66% (the highest). These results indicate, once again, that the poor countries have greater convergence speed than the rich countries.After May the 1st2004, the EU has seen its heterogeneity increasing. Ever, during the previous enlargements, there have not been such disparities per capita. The EU must face a very large and unequal fan of resources and development. After the last enlargement, the EU surface has increased by 33%, while its GDP in PPP only by 15%. This indicates the increased heterogeneity within the Union.

Even taking into consideration the previous enlargements, it is difficult to estimate the possibilities of a quick catching-up with the average European level. Greece and Ireland are two examples of different catching-up speeds. For the new EU members, the catching-up capacities are more uncertain, given the structural and institutional inertia. This inertia, as well as the economic delay, represent obstacles for a homogeneous Europe. The EU accession doesn't mean necessarily the standardization of the economic development directions, on the contrary. It is likely to see a "Europe at multiple speeds". In December 2004, Romania has officially closed the accession negotiations with the EU. According to the Commission Report, Romania has a competitive market economy, as well as the capacity of facing the competitive pressure and the market forces within the Union. Also, Romania has the capacity of fulfilling its member obligations. But are these Copenhagen criteria enough to ensure Romania's successful participation at the EU single market? The standard of living, the GDP/capita in Romania are strongly bellow the EU average. How will Romania be affected, after its accession to the EU?

In order to better appreciate Romania's preparation for the EU accession, we must understand the concept of convergence, with its two components: the nominal and the real convergence.

4. Conclusions

The classical analyze of regional growth and regional polices refers to the possibility of solving the conflict between efficiency and equity. If the regions with low revenue would offer the perspective of higher efficiency of using the capacity, these purposes wouldn't be opposite to each other. But in agglomerate economics, the opportunities offered by the market and other factors acts in the favor of proper regions. Because of this, you will usually have to accept a series of compensations between efficiency and equity.

The European model of regional growth is based on identifying an indifference curve between alternative economical growth rates and the regional equity index. A function of flat preference implies a society that is orientated towards economical growth. The more abrupt the preference functions are, the more receptive society will be when faced with the redistribution measures in regional plan. However, in such cases you need to identify the circumstances which make choosing a positive growth rate possible and you need to realize an ex-post redistribution of the resulted economical growth. In conclusion, each economical growth rate implies a certain interregional distribution. Therefore, there are many alternative interregional distributions which can lead to the same economic growth rate.

The capacity of a country for a sustainable real convergence process is influenced by the following factors: the employment of the labour force, by restructuring the economic activities; the capital accumulation, through the foreign direct investments, the financial sector and the structural funds; the increase of the overall productivity of the factors, through technology transfers, an adequate economic and institutional environment, and through the education and the qualification of the labour force; infrastructure investments, research-development investments;

efficient use of money, for each purpose; macroeconomic stability for a sustained economic growth rate.

The partnership with the EU does not guarantee the catching-up process, although it turns it easier to be accomplished. The real convergence is a long term objective, so the economic growth should be supported internally and externally as well. We must also notice that the real convergence process is not necessarily a continuous one. The economic integration is easier for a high competitive economy. In this process, the most important role is played by the internal potential of the countries. Romania has done remarkable efforts, trying to accomplish the Copenhagen criteria and to successfully close the negotiations in 2004. Still, in order to benefit from the advantages of the Single Market, more efforts are to be taken, concerning the catching-up process.

In 2004, Romania's GDP/capita represented 29% of EU's GDP. What are the measures to be taken, in order to insure a decrease of Romania – EU disparities? The main priorities, for the Romanian authorities, should be a stable economic growth, on the long term, conditioned by financial discipline, macroeconomic stabilisation, the development of the financial system, improved business environment. If these measures are not taken, the nominal convergence process can negatively affect the real convergence process.

In this respect, some institutional measures to be taken are: rigorous establishment of the property rights; the consolidation of the institutional framework, in order to avoid informal institutionalisation, generating corruption; investment in education and technology, in adequate institutional infrastructures; support to the financial and telecommunication sectors.

In the governmental field, the following measures can be taken: the restructuration of the public financial system; the cut of fiscal transfers towards inefficient sectors, and their reorientation toward the institutional consolidation effort; governmental decentralization, and an increased fiscal autonomy for the local authorities.

Also, the private initiative should be stimulated in less developed regions, because the income inequalities can affect the efficacy of structural and institutional reforms.

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