Section IV
STRATEGIC MANAGEMENT AND ENTREPRENEURSHIP

ECONOMIC GROWTH THEORIES, CONCEPTUAL ELEMENTS, CHARACTERISTICS*

Florina, Popa[1]

Abstract:

The approach of economic growth involves understanding the concept and growth factors, respectively, analysing the growth theories, their trend in the context of the development of economic and social life.

The economic growth signifies a process aimed at increasing activities in the national economy, expressed by macroeconomic indicators, respectively, the dynamics of the overall Gross Domestic Product or per inhabitant. It can appreciate that, in the short term, this process signifies phases of economic prosperity and on the long-term, expresses an upward trend, a consequence of the succession of increases and decreases.

The study presents some elements which outlines the concept of economic growth, that is, definitions, meanings and the main characteristics of the theories of growth, as well as some of its determinant factors.

Also, it gives a brief overview of the main theories of economic growth, as they have evolved over time, in line with the economic reality dynamics and the development of the instruments of economic analysis, starting from the classical theories to the new theories and models of economic growth of the modern age.

Keywords: *economic growth, neoclassical theories, models.*

JEL Classification: E10, E12, E13, E19

1. Introduction

In the actual stage, the economic growth is, both economically and politically, an important objective of development, the main factor that can ensure the long-term economic success of a nation, one of the fundamental premises of poverty eradication efforts. In this respect, it is pointed out that the economic literature has expressed a special interest in the problems of growth and its determinants.

Regarding the methods of achieving economic growth, the theoreticians and economics decision-making factors offer different alternatives, some specialists emphasis being turned to the need for capital investments increase, the others being followers of measures for stimulating the activity of research and development and technical progress or, another category pays particular attention to the role of the workforce well prepared.

The theories of growth have seen a new incentive in the late ′80s of the last century. Compared with the old theories, which considered about some of its determinants - active population increase, technical progress growth - as being exogenous, so growth didn′t mean a self-sustained process, was not a cumulative process, the study of growth discrepancies among different areas of the world, has led to new views that no longer regarded growth, as natural phenomenon. In relation to these findings, other economists of the modern age, have founded the new theory of growth – the theory of endogenous growth - the main directions of which can be expressed synthetically through: the accumulation of knowledge and technological capital; the accumulation of human capital; public spending on infrastructure.

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* The study is part of the research paper of the Institute of National Economy, in 2014, entitled „*Dezvoltarea economică endogenă la nivel regional – aspecte teoretice şi practice,* (coordonator Dr. Daniela Antonescu);

[1] Phd. Student, SR III, ACADEMIA ROMÂNĂ – Institutul de Economie Naţională, florinapopa2007@gmail.com

2. Conceptual definitions

The characterization of economic growth can be tackled both in terms of production, respectively, of the evolution of GDP per inhabitant, but also from the perspective of increasing standard of living, so of the welfare of consumers.

The economic growth signifies a process targeted towards the development of the activities of national economy, expressed by macroeconomic indicators, respectively, the dynamics of Gross Domestic Product overall or per capita. About the economic growth, one can appreciate that, in the short term, it signifies phases of economic prosperity and in the long-term, expresses an up trend, a consequence of the succession of increases and decreases.

Considered from the perspective of a complex process which reflects the dynamics of the economic systems, also, can be cited the definitions of the authors:

"Increasing the capacity of a country to supply, in a growing measure, economic goods, through leading technologies and institutional and ideological arrangements" (Kuznets, cited in I. Imbrescu, 2008);

"The increase of income overall and per capita" (Arrow, cited in I. Imbrescu, 2008);

"Increasing the size of the national economy" (Perroux, cited in I. Imbrescu, 2008).

As a form of this process exhibit, it could occur:

- *zero* economic growth – where the GDP per inhabitant remains constant in the period, as a result of the existence of the same rate of growth in GDP and total population;
- *positive* economic growth - GDP per inhabitant increases in the period, as a result of experiencing a rate of growth of GDP upper to that of population growth;
- *negative* economic growth - an opposite occurance situation to that set out above – GDP per inhabitant decreases during the analysed period.

The economic growth is characterized as a function of production at macroeconomic level, having a number of determinant factors, the following being, generally, accepted:

- **The human resources** (including the workforce and education) take into account the employed population; the offer of employment, employment dynamics of available labour resources, having consequences for the economic growth; the skill level and the motivation at work is reflected in the level of productivity, giving a measure of this indicator quality;
- **The material resources,** respectively, **the real capital** include the natural resources drawn in the economic circuit and the production equipments. The economic growth is influenced by the volume of the exploiting real capital, the funds allocated to the investments. The level of technical and technological performance of the production equipments, correlated with the degree of qualification of the human factor, determines the real capital productivity;
- **The informational-technological item** - the share of information in economic growth lies in relation to the potential of technical innovation, expressed by the proportion of investments for research and development in GDP and with the efficiency of research, the criterion being to maximize the competitive advantage.

As its *form*, the economic growth may refer to:

- **linear** – the Gross Domestic Product- has a regular growth;
- **exponential** – the growth of Gross Domestic Product is accelerated.

The economic growth may have a *character*:

- **extensive** - in which case the contribution to growth is given mostly by the quantitative growth of the production factors (the extensive use of the work factor, or of the capital factor).
- **intensive** - to economic growth, higher quality production factors contribute: labour productivity growth, the improvement of the existent capital exploitation.

The figure below expresses the elements which distinguish the two forms of growth, according to the contribution of production factors (figure no.1):

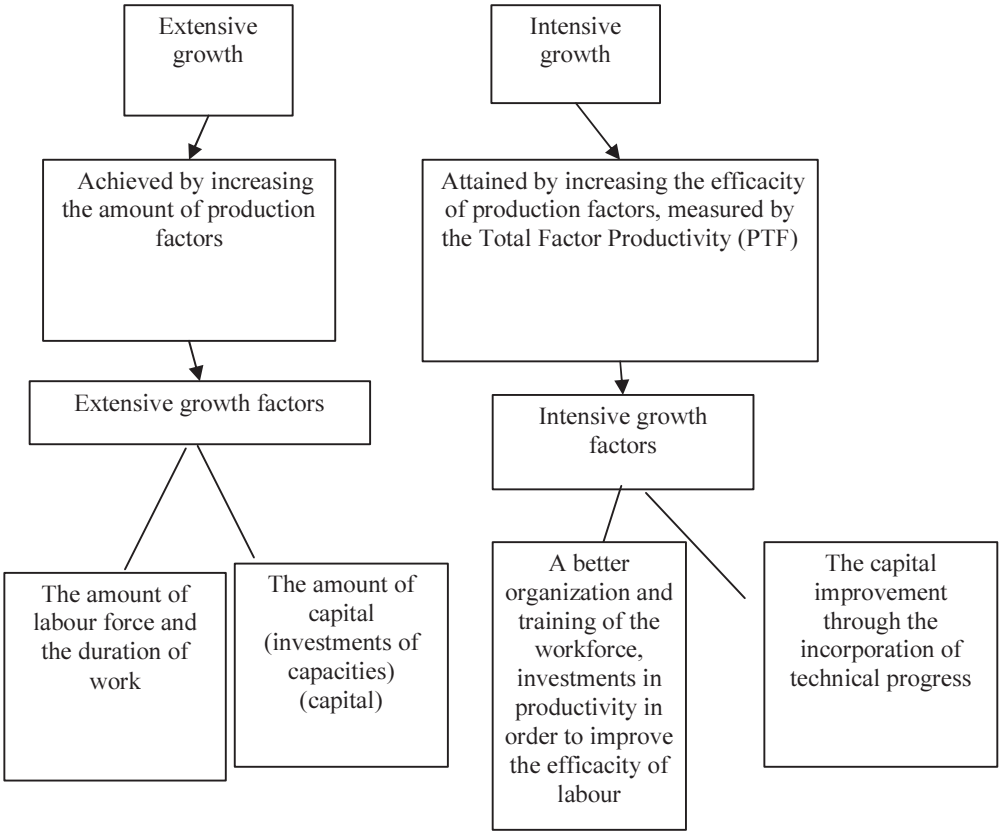

Figure no. 1 Forms of growth
Source: Quelles sont les Sources de la Croissance Économique ?,
http://www.cours-seko.fr/resources/ECONOMIE/CROISSANCE/COURS-croissance-1.pdf

The approach of economic growth implies understanding the concept and the factors of economic growth, respectively, the growth theories analysis, their evolution in the context of development of economic and social life.

Through the theories and models of economic growth it is aiming at the research of possibilities of steady growth, finding out the patterns in which future work can be influenced and forecast on the basis of current experience data, identify ways that can lead to a continuous growth.

The economic growth models are mathematical expression form, by functions and parameters, of the relationships involved among the factors of economic growth process by which there are highlighted its tendencies.

Defining models implies taking into account some representative elements, such as:

- *The macroeconomic models* that use macroeconomic indicators that reflects the structure and functionality of national economy on the whole.

- *The economic dynamics models*, expressing the change, over time, of the values of a few increasing-corresponding parameters, of correlations among them; the trajectory of economic growth expresses the succession of stages (achieved or perspective) on a given time horizon.

After *the degree of aggregation*, there are two different types of models: *single-sector* and *multi-sector*:

- *Single-sector models* are characterized by a high abstraction, the inputs and outputs do not differentiate by economic branches, combining the factors is on the economy as a whole.
- *Multi-sector models* are differentiated by branches, both the functions of transformation of growth factors in results and the contribution of each branch to the achievement of synthetic macroeconomic indicators.

The variables used refer, as a rule, to the Gross National Product per inhabitant, its dynamics, the rate of capital accumulation, the volume of capital and labor, the volume of investments etc.

3. A summary of growth theories evolution

The evolution, over time, of growth theories and models was manifested in correlation with the dynamics of economic reality, with the evolution of instruments of economic analysis.

3.1. The classical theory

The first elements of the economic growth theory belong to classical authors A. Smith, Th. Malthus and D. Ricardo, who considered the evolution of the economy dependent on two factors: the land (with a limited character), and the labour force, respectively, population (increasing).

Adam Smith considers that the determinant element of production growth is the population growth, respectively, of the number of workers (the salary per worker remaining constant).

The population growth leads to supplement the number of workers on the same area (the land being limited), which means reducing the quantity of goods per worker, the decrease in the marginal product of labour, the decline in real wages.

In the Malthus's conception, the economic growth involves the reinvestment of the surplus but it is limited by the population growth. According to his theory, the economic equilibrium is reached when the salary is below the subsistence level, at which time, the job offer is no longer reproduced at the same level. As such, the economy is in a stationary state, there is no prospect of growth in per inhabitant production.

In the Ricardo's theory, the land is not a factor of accumulation, but also a source of rent for owners, the capital is a substitute for the labour force and not an element of productivity growth. The reinvestment of the surplus is limited by the decreasing yield of the land. For D. Ricardo, the effect of introduction of technical progress is jobs decrease.

Karl Marx considers that the origins of growth are in the accumulation of capital; the growth is limited in time, because of the tendency of the rate of profit to decrease.

The characteristics can be expressed as follows:

- decreasing yields to factors;
- the technical progress is ignored, as factor in the analysis of growth;
- the accumulation of capital is motivated to profit achievement, a source of investments financing.

3.2. The Keynesian and Neo-Keynesian theory

The economic and social distortions that affected the national economies at the beginning of the 20th century, led to the enhancement of research and their orientation towards new concepts to meet the needs of analysis of the dynamics of macroeconomic processes relevant to the adaptation of the economic science to the demands of the new society.

J.M. Keynes used new concepts concerning the theory of economic growth; the aim of the newly created model is a better understanding of the level of economic activity and of the relationship among its different variables.

Keynes takes into account two types of variables: endogenous and exogenous.

The most important **endogenous** variable for the functioning of the market economy is considered to be *the effective demand of goods*, of which depend on the other variables: the global income; final consumption; savings; the global investments and the volume of occupancy. Their mutual interdependence is influenced by the exogenous variables.

The **exogenous** variables consist in rates concerning the behaviour of the economic agents:

→ as *consumers* – the consumption propensity;

→ as *entrepreneurs* – the marginal efficiency of the capital (the percentage of the profit obtained to the last investment) and the rate of interest (paid for the loan capital).

The demand models are based on three functions:

The consumption function: take into account the consum, the marginal propensity to consume and the income;

The investment function depends on the marginal propensity to save;

The liquidity function explains the formation of the interest rate, which depends on the behaviour of the economic agents in relation to the saved proportion from the income;

Characteristic features of the Keynesian models:

- pursue the balanced economic growth in the short term;

- the economic system is in a steady state under employment; the employed labour force depends on the effective demand of goods (the returns from the sale of production), i.e. the solvent demand; when a part of production cannot be sold, the level of employment decreases, involuntary unemployment occurs;

- the effective demand of goods is the important endogenous variable for market economy functioning.

The neokeynesian theories have been developed in the postwar period, the starting item being the Harrod-Domar model that pursues three issues:

- the possibility of a sustained growth;
- the likelihood of a sustained growth in terms of full employment;
- the existence or not of the guaranteed rate of increase.

In the Harrod-Domar economic growth model there are involved both **endogenous** variables: income, investments, savings, capital, income growth rate and **exogenous** variables: the population growth, technical progress, labour productivity level - basic conditions of growth.

Trying to explain the instability of the market economy, the Harrod-Domar model and the corresponding growth theory distinguishe three types of growth rates:

- the **guaranteed rate** of economic growth – **Gw -** meets the interests of entrepreneurs without the full use of the labour force, involves the existence of unemployment;
- the **natural rate** of economic growth – **Gn -** ensures the use of all available factors of production, without guaranteeing the interests of entrepreneurs meeting;

- the **real rate** of growth - **G** - may be higher or lower than the guaranteed rate and, as a rule, lower than the natural rate. This drift toward guaranteed rate expresses the instability of the contemporary economy: if the real rate is below the level of the guaranteed rate (G < Gw), it manifests the recession and, conversely, when the real rate is higher than the guaranteed rate, the economy is in expansion.

For correcting the market oscillations (excesses or insufficiency) concerning the demand of goods, the size of savings, interest rate, money flow on the market, Harrod considers the need of the State intervention in the economy, through the use of fiscal and monetary policy, in order to influence the behaviour of economic agents and to balance the divergent trends ("stop and go" policy).

The contributtion brought by the theoreticians Harrod and Domar, in the macroeconomic analysis, asserts by highlighting the contradictions and possible encounter situations in the economy.

3.3. The neoclassical theory

In the second half of the last century, the theory of economic growth has become a component of the contemporary economic science, the new direction of research being generated by the economic context of the age.

The neoclassical growth theory – the modern analysis core - incorporates the capital accumulation, the neoclassical model explaining how capital accumulation and the technological changes constitute the leading force able to entail the economic growth.

The neoclassical models stand out through a series of characteristic features:

- the achievement of economic growth through the full employment of labour;
- the working assumptions refer to the perfect competition, price and wages flexibility, the substitution of production factors;
- the economic rate increase is in correlation with the growth rate of population;
- the dependence of investments on the level of saving, the relations between the two economic categories being balanced by the rate of interest;
- the balance of the economic system is reached at full employment, made possible by maintaining a certain level of wages;
- the capital exposes decreasing yields.

Significantly for the analysis of the economic growth process is the Sollow`s neocalssical model. Along with the labour and capital, Sollow has integrated a third factor, to explain the process of growth on the long-term, respectively, the technical progress, but its role was considered exogenous.

The following guidelines issue from the Sollow model:

- the *economic growth* of a nation as well the standard of living of individuals depend on the level of saving and investment; if the investment per capita exceeds the depreciation increase of existent capital per capita, every worker will benefit from a more advanced equipment and it should be able to produce more;
- it is developed the *principle of decreasing yields*: the capital per capita increase leads to the production growth but not proportionally, the production will rise at a lower rate than the costs associated with, and the growth will cease over time;
- it allows explaining the convergence among some countries but also the emphasis in global inequalities between the rich and poor countries. The convergence of the late countries, as level of development, can be achieved through the efforts of investment in human capital and technical capital, that can recover the gap, benefiting from the production technique of some advanced countries, in the extent in which they dispose of well skilled labor;

- he introduced the technical progress, considered as **exogenous** factor, able to increase the productive efficacity of labour and capital factors – so, explaining the long-term growth.

Considering the growth rate over the long term, dependent on two exogenous variables – the rate of technical progress and the rate of demographic growth, the model does not explain the long-term growth, but only the possibility to avoid the stagnation of production, as a result of a technical progress generated by the positive external effects.

3.4. The new theories and models of economic growth

The development of informational technologies has led to the emergence of some theories and models that have included new production factors, among them, the most important being the endogenous economic growth theory, also known as the new economic growth theory, developed by P. Romer and R. Lucas.

The new theory of growth brings new elements representing major changes beside the previous research:

- the technological progress is an endogenous factor, a product of economic activity, different from the previous theories, where it was of exogenous nature, produced by external forces, outside the market - the technology is internalized into a pattern of economy functioning;

- the new factors – the knowledge and technology – are characterized by increasing yields; by the reuse of the ideas, the process of growth can enhance indefinitely.

The economic growth models can be grouped in two categories:

- the AK type models - without research and development (R&D) - are those in which the economic growth is encouraged in the absence of technical progress; this has no concern in an explicit manner;

- the models in which the technical progress is the result of the economic activity undertaken in the research and development (R&D) sector of the economy:

→ the sustained process of economic growth is possible if the newly-created ideas, applied in each step, are growing;

→ the creation of new ideas is of endogenous nature because, to the extent that new creative ideas people, in the research and development, will be more numerous, their impact will be more significant, through the dissemination of these ideas.

Both in the neoclassical Sollow`s model and in the endogenous growth model, the engine of economic growth is the innovation – the growth ceases when the technical progress is no longer carried out.

4. Conclusions

Over time, the economic growth theories and models have evolved, surprising the situations specific to processes development, in correlation with the dynamics of the economic realities, covering the stages of classical, neoclassical theories to the new theories and models of growth in the modern era.

The strategy, generally, the instruments of an economic continue growth are materialized in the substantial promotion of the activities that involve innovation and creativity, the permanent training of high-qualified labour force, result of a professionalized education, the existence of an infrastructure appropriate to requirements.

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