Correlations between the investment process and economic growth

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Abstract: The importance of investments within the economic growth process is a phenomenon pertaining to the scientific proofs. The modern growth theories designate the development process in which knowledge is the main internal factor, while the economic development process is the result of the final production growth, accompanied by the quantity growth and information quality. In the spirit of this theory, the human capital, technologies and information become pertinent elements of the sustainable economic development.

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1. INTRODUCTION

In the practical economic culture and the daily language, investments have adjudicated their position as a central element in the economic development of a company, with implications in the economic development of the country, social development, and provision of the social and economic welfare of the individual, as an investor or employee. The investments, irrespective of their typology, can provide and consolidate the material, educational, cultural and health status of a nation or person regarded individually or at family level.

Macroeconomically, irrespective of how positive the indicators proving the economic development of a country would be, if investments, the foundation of the economic activity by means of the attribute of property and free initiative, do not help the individual, both as an investor and as a beneficiary of the products and services, or as an employee of the investing company, the investment has no utility and end.

The importance of investments within the economic growth process is a phenomenon pertaining to the scientific proofs. The fact that the promotion of the economic growth can no longer be continued as a global growth of the economic performance macro indicators (GDP or GNP), by ignoring waste and irrationality in consuming resources, has led to taking into account the economic development processes. Besides the idea that the level of investments regulates the dynamism of economic growth, one also includes the thesis according to which the objectives of achieving the development also implies the social ethics, as well as the anthropic transformations caused to the natural environment. Whenever they discuss the economic growth or development, investments are aprioristically considered the foundation of this process. The way they are reflected, the way they contribute to attaining certain rates of growth, is however different from one model of growth to another.

2. Investments, economic growth and development

The role of investments in the economic development of a country is especially complex, because they influence the property structures, affect the branches and sub-branches of economic structures, contributing to the development of the effective ones to the detriment of the ineffective ones, influence the technological structures, the employment structures, with direct and indirect consequences in the social field, influencing the development rate of the country, that is why the role of investments must be analysed from the perspective of the several connections between branches and sub-branches, between demand and supply, between production and consumption, etc.

Investments occupy a central role between the field of goods and services production and the field of consumption, being a factor stimulating the economic growth and development, simultaneously influencing the demand and supply, generating the increase of the turnover, incomes and profit, favouring the circulation of capitals and accelerating the promotion of the technical progress and providing the business environment. As a support of development, investments lead to the extension of the existing capacities, to creating new capacities, to strengthening the production potential of economy. The beneficial effects of investments for the national economy are not only limited to the economic growth.

Thus, they have built development models which are predominated by what certain specialists call the vicious circle economies-investments-growth-development.[59] These models are used in order to characterize and "justify" the general progress of the countries, which we know under the name of developed countries, countries with a high income per capita, etc. At the same time, on the contrary, most of the countries are confronted with the vicious circle economies-investments-growth-development. This vicious circle is intertwined with other such circles and correlations, such as: the correlation inflation-economic growth; the atypical correlation inflation-unemployment; the vicious circle of the interest rate and tension in the economic field; the negative correlation, the driving effect between the internal and external depreciation of the RON; the vicious circle of privatization, of the great privatization and economic restructuring in its whole; the correlation between a strict fiscality and the investment decline, therefore, of the economic development. [60]

Economically, investments play a double role: firstly, the economic agents triggering investment actions, and implementing several investment projects increase their offer of goods and services by increasing their productive capacity, obtaining additional incomes; secondly, any investment project shall generate additional needs or demands.

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59 Michel Didier "*Economia. Regulile jocului*" Editura Humanitas, 1988, pag. 70

60 Lucian Croitoru, Cornel Târhoacă"*Politica fiscală în România*"în Tranziția economică din România, pag.752

The material basis of the economic and social development of any country is represented by investments, which provide the quantitative and qualitative growth of the fixed capital, the increase of the technical and economic capability of the existing capital, but also the new job creation.

Investments have a decisive role in providing the modernization of the economic activity, as a prerequisite for adapting the technical and economic systems related to the conditions of the transition of the national economy to the market economy, participation of our country in the international economic relations under competition and competitiveness circumstances. They provide a higher degree of employment, jobs with high-performance equipment, improvement of the technological processes, extension and generalization of the leading processes of principles pertaining to the market economy.

Investments give rise to the promotion of the technical progress, growth of production, improvement of the goods quality, increase of the economic effectiveness, contributing to the acceleration of the optimization processes and increase of competitiveness for each activity. The investment policy must be directed in such a way that it would provide the macroeconomic stability and attraction of a large amount of credits from abroad, required for the economic development of the country.

In the context of the market economy, private property and competition between several business operators, investments are the key for providing maximum effectiveness by means of a level as high as possible of the effects per unit of effort.

The economic growth is based on the economic investment, by means of which it is intended to increase the productive potential, the accumulation of human and material capital. Depending on certain criteria, such as the contribution of factors, manner of achieving the economic growth, increase rate of the aggregated indicators per inhabitant, compatibility of the economic effects with the social and ecologic ones, the following concepts pertaining to the economic growth types have been outlined: extensive, intensive, negative, balanced, consolidated, etc.

Thus, we must **understand the economic growth process** not as a dynamic process with a permanently positive ascending evolution; it does not exclude occasional oscillations, possible temporary economic regresses. Supporting the scoring of an economic growth by a national economy is based on the positive progressive trend in a certain time frame and space, which have generated the increased size of the macroeconomic results.

At present, in the economic theory, there are two different approaches (two points of view) regarding the connection between investments and economic growth. According to the first point of view, investments are the essential factor of economic growth: the more a country invests, the higher its rates of economic growth are. The economists sharing the second point of view consider that the demand is the key element, because the very demand *leads to the increase of production, which forces the companies to make investments; the higher the incomes, the more the country saves, and consequently it can invest.*

These two approaches are diametrically opposed, both by means of their nature and the role the state has to play in stimulating the capital accumulation process. Thus, the supporters of the first approach state that it is required to stimulate, in different ways, savings and consumption limitation. The representatives of the second opinion, on the contrary, support the point of view according to which the state must, using different ways, contribute to the increase of demand, especially the consumption demand.

In reality, by consistently applying the proposals of one or another different point of view, the countries obtain great achievements regarding the economic growth rates, as the economic growth theory is a long-term theory, focusing on all the effects of the investments on the increase of the potential national growth.

The theory *regarding the decisive role of the investments in providing the economic growth is* confirmed by the experience of the market economy countries, which, during the post-war period, have taken a sudden leap into the economic development, turning the recession national economies into economies providing a stable growth. Later, in these countries, a balance is obtained, in which the high growth rate of the population's incomes provides the constitution of savings, which are turned into investments, thus creating premises for the continuous economic growth.

The macroeconomic stability is considered to be essential for the economic growth. Although most economists argue that stability itself does not generate economic growth, the instability of the macroeconomic indicators can question any potential growth. Companies cannot make decisions to invest in economic environments where there is hyperinflation, while an excessive fiscality can make investment projects, which are profitable by their economic nature, become unprofitable.[61]

The public institutions are also essential for the economic growth. Although, in the case of a market economy, prosperity is in general created by the private entities, they are subject to the public regulations, and especially due to their interactions with the public authorities, can be prevented in their activity. For example, a property rights system in which the legal system is effective in protecting and re-establishing the violated rights is essential for the favourable development of the economic activity. Furthermore, the economic science approaches more and more the impact of the institutional organization on the macroeconomic performances of several countries.

The third considered element is *technology*. The growth of an economy can only be performed in a long run under the circumstances of the technological progress. The three elements are not obviously independent: strong institutions are necessary for the macroeconomic stability, which promotes the technological innovation.

3. Investment in knowledge and education

The contribution of education to the economic development is mainly achieved using two ways: the first one, the most famous and promoted one, is creating new knowledge, also known as the *Schumpeterian* growth, which is attributed to the growth of the human capital. More highly educated individuals mean, for the economic system, more scientific and technical information, more inventions, a larger stock of knowledge, which cause the appearance of new technological production processes, so a quantitative economic growth.

The investment in education as a manner of forming the human capital – skills and abilities – is a vital element in providing the economic development, increase of

61 I. Cetină, N. Mihail, *Competitivitatea firmelor româneşti faţă de mediul european de afaceri*, în Integrarea României în Uniunea Europeană. Provocări şi soluţii, Simpozion AGER, Bucureşti, 2006.

the living standard, and improvement of social inequalities and iniquities. It is an important element in fighting unemployment and social exclusivism.

By means of the second way, education affects the economic development process by spreading and sending information. The school system sends the individual the information by means of which he is able to manage the new information; in its absence, the new technologies would have a much weaker effect. For instance, if individuals came on the labour market without having information regarding the use of computers, the impact of the information technology could be negative, as the individual would not be able to work with either the machines to be found at his work place, or with the other individuals he should communicate with.[62]

Education produces two types of effects in economy: *qualitative effects and quantitatively/qualitative effects*.

The qualitative effects are closer to the social side, providing and increasing the effectiveness of the economic processes. The individual himself becomes more competent, being able to manage the economic act, and prepare/implement complex interdisciplinary decisions in a clearly different manner to surpass by means of operating speed and performance accuracy. The availability of intelligent business operators (high-performance educational product) provides the democracy of the economic processes, the performance of the activity based on a high-quality competition. A properly educated manager shall be able to foresee the best solutions and opportunities in order to obtain the best performance of the spent money.

The quantitatively/qualitative effects refer to the number of occurring qualitative transformations (for instance, the number of highly educated individuals). Directing considerable financial resources towards the educational system has led to a quantitative and qualitative growth of the human factor. Competent individuals have appeared, capable to exploit high technologies, and even create themselves hi-tech at a high quality level. Considering the human factor as an active and determinant presence in the economic context has led both to an economic leap, and (historically) to the shortening of the period required for this leap to take place. The essential question is how much money a company should allocate in order to obtain the best results. One cannot answer this question without realizing the amount of the relapse flows of the spent money. For this, they generally use a method similar to the *cost/benefit* analysis. The *cost/benefit* analysis is hindered by the fact that an economic leap owed to the education is not reported unless we deal with a coherent and continuous allocation of educational funds, for a long period of time, as the whole educational process implies a long period of time for implementation at the individual level.

Education often affects the quality of life in ways which are rarely perceived as such. The highly-educated individuals can much better adapt to the varied conditions of the life development, and moreover can adapt these conditions in order to meet the individual preferences. Having a higher income, they manage to invest in themselves; the access to a better quality medical assistance, to certain methods of mental and physical care, to certain services (household and tourism) implies better health. We can thus consider that we deal with the maintenance of the human capital.

Education implies a series of modifications of the individual's behavior as a social element, the way he behaves within and regarding the collectivity is an

62 Huru Dragos, Investitiile si dezvoltarea economica, teza de doctorat, ASE, Bucuresti, 2003

immediate result of his cultural level. *Fridman*[63] thus describes a series of these effects: “A stable and democratic society cannot exist without a minimum level of training and knowledge of most citizens and without their broad acceptance of a mutual set of values… a child’s benefits further to education fall back not only on the child or his parents, but also on other members of the society. The education of my child contributes to your welfare, by promoting a stable and democratic society.” Thus, education causes a series of effects called “neighborhood effects" in the Saxon literature, which means a quiet community life, without social or individual conflicts (decrease of crime rate).

4. Direct foreign investments and economic growth

The bidirectional relation between the direct foreign investments and the economic growth is, on the one hand, due to their impact on the economic environment in each country, and on the other hand, to the positive influences of the permanent and sustainable economic growth on the received foreign capital flows. According to the field specialists, for a given country, the intense economic growth periods are characterized by attracting important flows of direct foreign investments[64]. At the same time, the investments (domestic and foreign) are an essential factor of the economic growth, while the models prepared in this respect reflect the actual functional connection between the accumulation rate and the growth rate of the national income, mediated by the capital coefficient.

The interdependence analysis: *direct foreign investments – economic growth* (in the developed countries and the developing countries) proves that ISD has a positive effect on the economic growth only in the case in which the state persistently promotes their own policy in this respect, and attracts ISD considering the national interest and the priorities of the respective country’s development. Where the state transmits its functions to the transnational companies, where they arbitrarily operate, ISD does not provide a stable high-rate economic growth. Moreover, these countries can lose their very sovereignty.

The activities of the multi-national enterprises are much more complex, and their impact on the national economies of the host countries is much stronger than the statistics show. The indirect effect of their activity is reflected by the orders sent to the national enterprises, creating new jobs, encouraging the horizontal industry, indirect export, etc. Consequently, the direct foreign investments have become more and more important in relation to production, trade, transfer of technologies and capital flows from the world economy, while multi-national companies play a more and more important role in the national economies of the host countries[65].

Because the economic science has proved that there is a direct connection between the ISD volume and the rates of the economic growth, the IMF and the World Bank have started to recommend to all countries (which they also do at present) to create the favourable conditions for attracting ISD and thus providing the high rates of

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63 Milton Friedman „*Capitalism şi libertate*” Ed. Enciclopedică colecția BNR, Bucureşti 1995, pag.104
64 Lipsey, R., *Inward ISD and economic growth in developing countries*, Transnational, Corporations vol. 9, no. 1, 2000, p.73.
65 UNCTAD, World Investment Reports 2006.

development. The foreign investments, as a support of development, lead to the extension of the existing capacities, to creating new capacities, and strengthening the production potential of economy. Investments in general and all the more the high-performance and high-productivity ones promote the technical progress, lead to the increase of the economic effectiveness, and strengthening of the possibilities for a higher rate of growth as a fundamental element in reducing the discrepancies.

The contribution of the multi-national enterprises to the economic growth and development process is all the more obvious and acknowledged. The analysts have integrated the direct foreign investments into the theories about the economic growth and international development, besides the benefits of the exterior trade flows, and more and more the benefits of the direct foreign investment flows.

In the structural-sectorial sense, the economic growth induced by the foreign investments in Romania is unbalanced. The foreign investments have come where investors have perceived the obtaining of the maximum profit, but those sectors did not often match the priority interests of economy. Most of the foreign investments – certain considerations speak about almost two thirds – are practically directed towards the financial, real estate and retail sectors, as they are currently the maximum profit sectors. Furthermore, it is not by chance that the sectors in question are also the most dynamic, precisely thanks to the foreign implication.

5. Technology and information investment

The economic development depends on the capacity of the nations to understand, interpret, select, adapt, use, transmit, diffuse, produce and market scientific information and technological knowledge according to the development objectives and national culture. The main factors that the impact depends on are: the status and level of education; the request for information from the private sector; the public policy to orientate the state institutional structure towards competence; the quality and state of development of the market's functional mechanisms in order to allow the manifestation of information as a production factor by inclusion in the products and their marketing.

Watson, Crawford and Farley[66] show that the major importance of information as a production factor for the development phenomenon appears in each sector of activity, causing an effect of dynamization and shortening of the time required for reporting an economic leap due to the reduced costs of information multiplication. The information is also the one holding the *"blame"* for the differences of development among several countries considered to be under the development process because this is where the capacity of each nation to manage new information intervenes.

The investment in technology as a production factor imprints a strong growth effect of the economic development rates, identifiable both as national income and as income level per capita. We must mention that the investment in technology-economic development relation is two-way: an important leap of development imprints a growth effect of the technology level in the economic system. If the economy operates around a potentially growing GDP level, the economic agents that do not involve in their activity strategic decisions for increasing the technology investments, shall very

66 Robert Watson, Michael Crawford, Sara Farley, *"Strategic approaches to science and technology in development"* World Banck-working paper 3026, April 2003; http://econ.worldbanck.org

quickly be characterized by non-competitiveness and shall consequently be excluded from the market.

The information technology, the most modern component of technologies, already exists under several forms (from the most rudimentary to the most complex ones), in any economic system, having spectacular beneficial effects on people, business, institutions, governments, nations in general. Even if the information technology requires quite high costs, these can rapidly be recovered (both due to the fast commissioning of the investment, and to the fact that the profit rates in activities implying hi-tech are in general quite high), the subsequent maintenance costs in operation are much lower than the initial ones. The importance of technology transfers by means of the export/import of capitals, from the technologically advanced economies, becomes obvious within the economic development process. The technological quality of the domestic industries, would give, before the internationalization phenomenon of the real capitals market, the value of the comparative advantage at national economy level. Bringing in the imported technologies determines the transformation of the internal production systems, but the manner in which the effectiveness modifications occur in several sectors varies substantially.[67]

The quantity and quality of the information available at the level of a national company, as well as the manner in which it circulates and is managed (so in relation to the human capital, depending both on its intellectual competence - the management -, and its emotional competence – communication) influence both directly and indirectly the economic development process.

A direct connection is created among specialization, labour division and economic development within the classical models. The creativity and quantity/quality of the increasing information oblige to a higher specialization in order to acquire and operationalize as much specific information as possible, which leads to a division of labour as serious of possible. The research/development investment (as implementation of research) is the key of long-term development by means of the constant growth of the labour productivity. So practically, the production and consumption of information determines, in the long run, the occurrence of economy operation at the potential level and its increase, consequently the occurrence of an ascending economic trend.

6. CONCLUSIONS

Investments occupy a priority field of the economic life, both regarding the significant resources they consume, and the multiple effects they generate: their orientation towards certain fields of activity and towards certain objectives must be performed depending on necessities but also depending on the trends available at world level, and the status of economy.

The decisive role in creating a functional market economy, compatible with the principles, norms, mechanisms, institutions and policies of the European Union, mainly regard the provision of a sustainable economic growth, the creation of a favourable business environment, the promotion of a coherent investment policy, the modernization and sustainable development of the entire social and economic life.

67 Naresh Kumar; K.S. Krishnan Marg. "*Foreign direct investment and technology capabilities in the developing countries: a review*" International Journal of Public Administration, May-August 2000 p123

By means of the investments, the relation between capital and labour is rearranged. The modification of the capital volume and structure draws the improvement of the production technologies and development of the human factor in the sense of perfecting its qualification. In the long run, the human investment seems to be the safest and most profitable, turning the individual into the most valuable capital, i.e. the "human capital".

If the contribution of the foreign investments is strong and beyond doubt regarding the economic growth, the issues must be toned regarding the content of the economic growth and implicitly the contribution to development. The economic growth regarded from the perspective of the direct foreign investments depends on the attractiveness degree of the economic and social system.

The modern growth theories designate the development process in which knowledge is the main internal factor, while the economic development process is the result of the final production growth, accompanied by the quantity growth and information quality. In the spirit of this theory, the human capital, technologies and information become pertinent elements of the sustainable economic development. The way they are integrated within the functional processes by means of which an increased development rate is attained, is a specific one, and at the same time, relatively new for the economic science. The analytical and lucrative approach of the investment processes by means of which the presumptions of highly educated human capital, advanced technologies and consistent and varied information are created, implies a decisional and control behavior, outlined on new managerial principles.

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