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INFLUENCE OF MASSIVE RESIDENTIAL CONSTRUCTION ON THE INNOVATIVE COMPONENT OF ECONOMIC GROWTH

ABSTRACT

Research objective is the search for criteria to evaluate the accordance of the housing policy with the goals established for the development of national economy and with citizens interests. At that one of the most important aims is to minimize expenditures in the sphere of construction, complying with all requirements to the reliability and security of construction projects. Considering the fact that the expenditures made for the residential construction represent one of the forms of ultimate consumption, that nominally does not create a surplus product, the article argues the necessity to transfer the expenditures to the form of investment. In the long term this form of investment will lead to the emersion of new economic growth factors. One of the factors that determines the economic growth of the advanced economies is the quality of human resources expressed through the factor of development of human capital assets. The effective performance of human capital assets is provided with the competitive life quality, including security, ecology and living conditions. The article substantiates the idea of that the peculiarities of residential construction may indirectly influence the economic growth through the improvement of conditions for the enhancement of human capital assets. Thus the amount of expenses made directly for dwelling erection and creation of living environment may not have the direct meaning. Interdisciplinary approach is applied in the article, as a result the following conclusion is made: for massive residential construction it is necessary to use the series of buildings that create optimal conditions for secure and comfortable dwelling, that provide with the possibility for harmonious development of a personality, that contribute to strengthening of traditional values of the society. Thus the suppositions for the improvement of quality of human capital assets and, consequently, the growth of innovative component of national economy are created.

Keywords: reinforced concrete, dwelling, housing policy, human capital, assets, economic upturn

INTRODUCTION

Reinforced concrete has been the main structural material for residential construction for at least fifty years and in future the relative volumes of its use will only increase. At the same time, reinforced concrete is the most advanced material for massive residential construction. Traditionally, the task of construction science and rationing is to ensure the specified reliability and quality of objects while providing for their lowest possible cost. However, the globalization of the world economy leads to the emergence of new requirements for the use of basic construction materials and to the type of their implementation in finished construction sites through the most massive residential construction.

DWELLING AS NEED AND EXPENDITURES

Availability of comfortable and safe living conditions is the most important condition for a productive life of a person. Dwelling is the main condition for meeting the basic needs of a human. However, it is not only about the conditional four walls. In the broadest possible sense, dwelling should be a place for sleep and rest, providing for a sense of security and personal space; it is a place where people can start a family, where one can develop personal interests and, as a result, have an opportunity for personal growth expressed in the acquisition of new knowledge, skills, and abilities (for example, a significant part of the leaders of high-tech companies in Silicon Valley began their activities in the garages of parent houses). Only in the presence of these factors, the room becomes a home, while the indicator reflecting the physical area of the dwelling does not matter. Consequently, the content of the “home” or “dwelling” concepts is primarily a qualitative value, not a quantitative

one. The most important question in solving the housing problem is to understand whether people can afford appropriate living conditions and whether their need for these conditions will be fully satisfied. In terms of the consumer's expenditures (not the investor's), regardless of the type of dwelling being built, the residential construction objects are final consumption and do not formally create any surplus product. Thus, the dwelling is the subject of commodity-money relations, while it is obviously not a regular commodity. Dwelling is primarily a specific sphere of human needs, without the satisfaction of which, it is almost impossible to live a normal life. At the same time, taking into account the cost of concrete and steel, the problem of their most rational and adequate use in the given conditions becomes not only a technical, but, in many respects, a socio-economic problem as well. The solution to this problem is to develop a new series of buildings for massive construction, as well as to form an appropriate living environment taking into account the aspects of these buildings. The most important element of the housing policy of the state are the norms of design as a tool that ensures the minimum cost of construction objects with their maximum possible durability and reliability.

From a statistical point of view, when calculating GDP and the growth rate of the economy, the cost of residential construction does not depend on the type of finished residential building. In practice, investments in massive residential construction are the final consumption of resources that at least do not have any multiplicative economic effect. At the same time, it is necessary to take into account the economic inexpediency of re-use of concrete and reinforcement, which means the irrevocability of direct material expenses in dwelling. In the context of global competition of national economies, all significant investments should be determined only by direct or indirect stimulation of economic growth, therefore, the use of basic construction materials (concrete and steel) in residential construction should not only be regulated by design standards, but it also should be justified by the impact on the innovative development of the national economy. It is necessary to take into account that in the conditions of an innovation economy, a person, his/her knowledge, skills, and ability to work become the key factors of the reproduction process. The productive forces of a person function and are reproduced no longer in a simple commodity form (which was inherent to industrial society) but in the form of human capital assets. The knowledge, skills, and abilities of workers take the form of capitalized savings, which are contributing to the growth of labor productivity and incomes. In developed countries, a human capital asset is recognized as the key factor in the reproduction process, accounting for 75% of the increase in national income [1]. Thus, the competitiveness of the modern economy is based, among other things, on specific people and their ability to create an innovative product.

HUMAN CAPITAL ASSETS AND ECONOMIC GROWTH

At present, it is the human capital asset that has become a highly efficient productive factor of state progress, thus replacing previous priorities: the material production of the industrial economy and the concentration of finance of the economy of the capital. The concept of "human capital assets" has added an additional connotation to the understanding of the importance of affordable and high-quality dwelling. For example, government support programs for the construction of affordable dwelling has been traditionally viewed as a long-term and profitable investment into each person, and, as a result, into the state economy. The housing sector determines the quality of life of each person, which ultimately changes the social well-being of society as a whole. The solution of the housing problem directly affects the demographic situation in the country and creates favorable conditions for building up the economic potential of the state. Within the framework of the "human capital assets" concept, the interests of a state and an individual citizen are mutually beneficial: the state that invests its funds into improving of the quality of life of each person and creating the conditions for his/her life, receives a large return from him/her as a result [2].

The main forms of investment into the humans usually include: education, mentoring, health care, as well as the full range of costs associated with preparing of a person for production (including finding the necessary information about work, migration in search of employment, etc.). Human capital assets is considered as a stock that can accumulate and be a source of higher income in the future, so the rapid growth of investment into a person is not least related to the high expected income in the modern world [2]. Accordingly, the efficiency of labor costs of a person and the growth of his/her income directly and indirectly affect economic growth (Fig. 1).

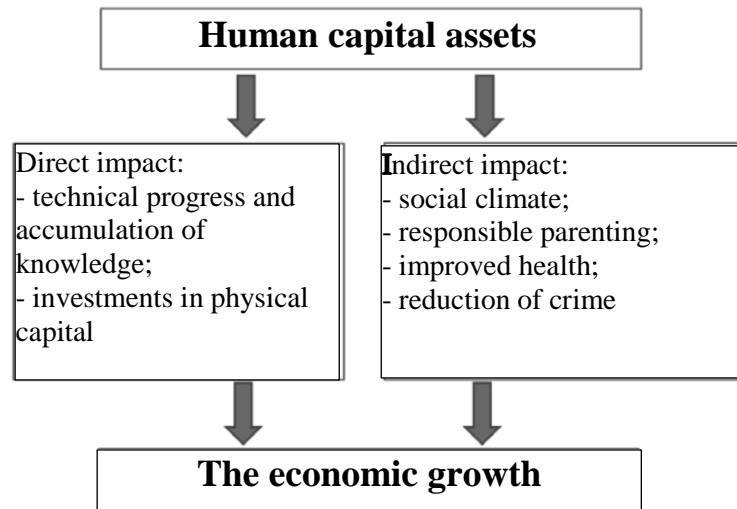


Figure 1. Channels of human capital assets influence onto the economic growth

In the classical sense, human capital assets was defined as a set of investments in the “education and professional skills” of a person, which increase his/her ability to work. From the standpoint of today, the above definition corresponds rather to individual human capital assets. However, as social development progressed, this category gradually developed, becoming more complex, it consistently included not only investments that directly affect a person’s ability to work (education and health), but also investments that directly affect productivity of labor, including comfort and safety of residence. The dwelling of a person (its presence or absence, the comfort of its environment) determines the possibility of preserving and maintaining not only the physiological and psychological functions of a person, but also his/her basic needs: viability, efficiency, ability to adapt - which directly affects the formation and development of his/her personal human capital assets. Consequently, the degree of provision of quality dwelling for the population, as one of the basic factors, will significantly influence the system for ensuring the quality of life of the population, which includes the formation, development and reproduction of capital directly [1]. Moreover, in the context of the housing policy, the quality of dwelling and the living environment should be assessed depending on the following indicators:

- criminal safety of the living environment;
- the impact of living conditions onto the physical and mental health of the population;
- the impact of housing policy onto the social climate;
- levels of childbirth and demographic effects.

The listed criteria for evaluating housing policy according to the scheme (Fig. 1) correspond to the list of factors indirectly affecting economic growth. Thus, it is fair to conclude *that housing policy is one of the factors of economic growth through the quality of human capital assets*. Accordingly, the realization of basic construction materials in the form of the most massive series of residential buildings as an element of housing policy has an impact on the innovative component of social and economic growth.

CONCLUSION

The influence of massive residential construction onto the quality of human capital assets through the state housing policy has been revealed. In turn, the quality of human capital assets has an indirect significant effect on economic growth, which in sum indicates the influence of the nature of residential construction on the development of the economy. The effective functioning of human capital assets requires a competitive quality of life based on safety, ecology and adequate living conditions. Decreasing of the birth rates, emigration, increased crime, etc. partially are a misunderstanding of what is the comfortable and affordable dwelling. At the same time, the main construction materials - steel and concrete - make up a significant part of the costs during construction, what requires their most rational use, taking into account the impossibility of their re-use.

Improving the quality of human capital assets is primarily determined by improving the quality of life, the most important component of which is the level of comfort in living conditions. Taking into account the direct link between human capital assets and the quality of dwelling and the living environment, it is advisable to consider the costs of residential construction as an investment into improving of the quality of human capital assets, which is actually an investment into an innovative economy. Thus, the effectiveness of investment into economic growth may depend on the state housing policy, which largely determines the convenience, comfort and safety of the population. It is not the amount of investment into residential construction of fundamental importance, but the type and form of its realization through the execution of massive residential construction and the living environment in it.

Housing policy should not be based solely on quantitative indicators (for example, in square meters of housing space per person), which, apart from the qualitative components, in no way to indicate the real quality of life of citizens. In the conditions of the innovative development of the economy, the housing policy is one of the tools, a formalized solution algorithm, which ensures the solution of tasks to improve the quality of human capital assets. Massive series of constructed residential buildings should create conditions for safe and comfortable living, provide opportunities for the harmonious development of the personality of citizens, contribute to the consolidation of the traditional values of society, and in particular the family, respectively, create prerequisites for improving the quality of human capital assets and, consequently, lead to an increase in innovation component of the national economy.

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