THE IMPACT OF INFRASTRUCTURE ON THE ECONOMY: THEORY AND PRACTICE

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Annotation. This article discusses the impact of infrastructure on the economy, both theoretically and practically, and makes recommendations in this regard**.**

Key words. Infrastructure, sector, quantity , quality, investment, income, capital factor,employment rate, small business, service agencies

It is necessary to conduct a structural analysis to assess the impact of infrastructure on the economy in the region and its development trends. This takes into account that infrastructure is an integral part of the economic system and the structure of the region. In this regard, we assess its impact on other sectors and sectors of the economy, its constituent elements. In other words, infrastructure is considered as a link that provides economic development and creates conditions. The influence of this structure as a factor in the development of the region is studied. In the process of analyzing its activity, we separately study the state of the territory and the composition of the branches.

When we study the infrastructure by region, we examine its level of availability, available quantity and quality of service. Herein, the types of infrastructure activities are assessed on the basis of per capita indicators. However, as a result of changes in their quantity and quality, the level of industrialization, concentration and product diversification of the economy, as well as the structure of industries are studied. It should be noted that the effectiveness of infrastructure depends on its geographical location, stability and compatibility with the world trade corridor.

When studying the structure of the infrastructure in the region, its structural conformation, appearance in terms of activities and their share in the total amount are assessed. The results of the analysis in this area are based on the degree of diversification of the economy.

Nevertheless, various methodological approaches have been developed by a number of authors in assessing infrastructure performance. In particular, the methodological approach developed by a group of authors provides an assessment based on regional aspects of infrastructure activities. This method also assesses the level of its development and the state of provision. On the basis of the conducted research, the level of infrastructure provision of the region and its rating in the regions are determined.

Also, the research conducted by A.V. Kozlova (А.В.Козлова) developed a method for determining the integral index of development of digital infrastructure in the region.

The author considers only one digital type of infrastructure in this way. However, other types can be evaluated based on this method.

Also, in the research of Yu.V. Kataeva (Ю.В.Катаева) special attention is paid to the assessment of transport infrastructure. Factor analysis was performed by the technique developed by the author.

In this method, the relevant coefficients are based on econometric studies. This process means that applying this method requires a lot of statistics and time.

Taking into account the approaches developed by the authors above, we will develop methodologies based on a number of authorial approaches based on the specifics of Khorezm.

Жумладан, биринчи навбатда инфратузилманинг иқтисодиётга таъсирини баҳолашда унинг таркибий тузилишини баҳолаш лозим. Бунинг учун қуйидаги тенгликни таклиф этамиз

In particular, when assessing the impact of infrastructure on the economy, it is necessary to assess its structural conformation. To do this, we propose the following equation

$$Inf_t^{i\ share} = \frac{Inf_t^i}{Inf_t^{total}} \quad (1)$$

$Inf_t^{i\ share}$ – i-the share of infrastructure in the total infrastructure available in the region. Inf_t^i - the number of i-infrastructure in the region;$Inf_t^{i\ total}$ - the total number of infrastructure facilities in the region.

Using this method, we perform a structural analysis of the infrastructure in the region. As a result, based on the results of structural analysis, the type of object that has a strong impact on the economy is determined.

However, based on the method above, the level of infrastructure availability and diversification status in the region is analyzed. An evaluation method should be developed to assess its impact or to identify the type of infrastructure that is strongly dependent on the development of the sector. In the development of this method, we take as a basis the relationship between changes in infrastructure and changes in the performance of enterprises' outcome indicators.

This approach assesses not only the quantitative change of infrastructure, but also its efficiency. That is, we will be able to assess the impact of infrastructure on outcome indicators.

$$Inf_t^{netw} = \frac{\Delta firm_t^{numb}}{\Delta Inf_t^{total}} \quad (2)$$

Inf_t^{netw}– the degree of impact of infrastructure on networks;$\Delta firm_t^{number}$–the performance of firms' outcome indicators' state of the change in the region

We can also assess changes in the social or economic criteria of the region as the outcome indicator as a result of this method. To do this, we change equation (2) as follows.

$$Inf_t^{effic} = \frac{\Delta nat_t}{\Delta Inf_t^{total}} \quad (3)$$

Inf_t^{effic}–the level and effectiveness of infrastructure in the region to ensure changes in socio-economic indicators; Δnat_t –the state of change in social or economic indicators in the region.

With an equality (3) one can analyze sustainability criteria such as the number of enterprises, the scale of investment, the level of employment as outcome indicators.

When assessing the condition of composition of existing infrastructure facilities in Khorezm region in 2010-2020, the highest share is occupied by banks. The next places were taken by accounting services, project service organizations and advertising service agencies.

Although the number of banks held high stakes during the survey period, there will be expected to be a decline in general. In particular, the share of banks in infrastructure decreased from 70.3% in 2010 to 37% in 2020. However, no change was observed in its quantitative indicators, that is, a sharp decline in the number of banks and their branches was not observed as above. The main reason for this is a sharp increase in the number of other infrastructure facilities.

High growth rates belonged to accounting service centers, project organizations, advertising and brokerage service agencies. We justify the increase in the number of accounting service organizations with the increase in the number of small businesses. In particular, the accounting of most business entities has a quarterly form. This will lead to an increase in demand for accounting services. That is, the costs incurred by applying to accounting service agencies will be lower than hiring an accountant. Hence, the change in the number of enterprises and organizations is leading to the expansion of this type of service. That is, during 2010-2020, the number of business entities increased by an average of 5.6 times.

Along with this, the share of project service agencies in the infrastructure facilities has also tripled during 2010-2020. This process is related to the construction-installation work carried out in the region. The increase in construction and installation work is increasing the demand for design work. The volume of investments in fixed assets is also growing. This has a positive effect on the volume of elements in its technological composition. In particular, the share of construction

and installation works in the technological structure of investments in fixed assets increased from 40% in 2010 to 51% by 2020, leading to a change in the number of project services agencies.

Another major reason for the change in the share of project services agency in the total infrastructure is the growing share of the non-governmental sector in the economy. In particular, in 2010 its share in gross regional product (GRP) was 70%, and by 2020 it exceeded 80%.

It is also important to assess the impact of changes in the level of employment and income growth in the study of infrastructure activities in the region. That is, we analyze the coefficient of employment rate of the infrastructure. The results show that this ratio increased from 3.33 in 2010 to 3.61 in 2020.

In Khorezm region, the multiplier effect, reflecting the connection of infrastructure with the labor market, in 2010-2020 was 3.5 (3.47) units. The multiplication coefficient related to the change in the number of enterprises and organizations averaged 61.1 in 2010-2020. However, this figure increased by 4.6 times. Thus, the quantitative impact of infrastructure on the economy reflects a high level of efficiency. Moreover, if we assess the effect of this impact on sectors of the economy, we find that infrastructure activities are having a strong impact on the small business sector. This is because the number of small businesses is growing year by year.

Hence, the impact of infrastructure on the economy reflects a strong dependence on the private sector over the public sector. We also found that the multiplier effect of infrastructure is high in the private sector. This requires the state to pay special attention to the development of infrastructure activities in the expansion of the non-governmental sector.

Infrastructure activity has a quantitative impact on the Khorezm economy. So, it is necessary to increase its efficiency in the region. This process is related to its factors. In the assessment of infrastructure factors, we separately study the funds directed to the sector. Along with this, we also study changes in the quantity and quality of employment in infrastructure facilities.

When we analyze the capital factor of infrastructure development, the volume of investments in the sector has been growing in recent years. In particular, during 2010-2020, this figure increased 17 times in current prices and 10 times in comparable prices. There have also been changes in the structure conformation. Especially, the volume of capital directed to the infrastructure sector accounts for one third of investments in fixed assets. However, when we analyze its composition, the main contribution falls on the social infrastructure, namely 17% of it is housing and communal services.

However, the funds allocated for production infrastructure are three times lower than for the social type. This requires special attention to the expansion of real infrastructure facilities. An effective mechanism to do this is to establish a public-private partnership production infrastructure. The experience of a number of foreign countries shows that public-private partnership is an effective way to develop the production infrastructure. The reasons for this are the short payback period of investments in social infrastructure in this area and the high level of profitability. Moreover, the level of income's, from production, funds redirected to the infrastructure sector, that is, the acceleration process intensity is calculated. Therefore, we need to increase the volume of investments in the development of infrastructure in Khorezm region and to increase its efficiency. In particular, it requires special attention to the real infrastructure. As a result, entrepreneurship will expand, the number of jobs will increase and the population's income will grow. As a result, the amount of funds allocated by the population for social infrastructure will increase. In general, the economic stability of the region and the growth of infrastructure efficiency will be ensured.

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