Construction complex as a driver of the Russian economy

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Abstract. The article deals with perspectives of the construction industry that is a driver of the Russian economy. An analysis of general trends in the development of the Russian construction sector, modern approaches to its structure represented by construction clusters is carried out. The economic development of Russia should be based on the internal sources that act as drivers of economic growth. A number of industries have the highest growth potential. One of them is the construction industry which has a high multiplier effect. The construction industry development contributes to the infrastructural development of regions and improves the living standards. At the same time, this sector is still experiencing a number of problems due to the inefficient structure and low innovation activity and competitiveness. In order to eliminate the negative trends in the construction sector and move to a new level of development, new structural forms are required. In recent decades, foreign construction clusters have shown their high efficiency. Highly efficient construction clusters go beyond the adjacent territories and countries of origin, contributing to the competitiveness of both construction companies and the national economy in the global market.

The construction industry is one of the basic economic sectors that includes a set of companies and organizations that build and commission various facilities for various purposes.

The main factors that determine the economic growth in construction are resources, technologies, macroeconomic factors and investment activities.

During the 2014-2016 crisis, the economic growth rate in the construction industry was only 4%. However, in recent years, this negative trend has been overcome. In 2019, the growth rate was 4.2% [2].

An analysis of the current state of the Russian construction sector has revealed the following problems:
- low investment activity;
- limited volumes of capital investment in new facilities;
- obsolete fixed assets and material and technical resources;
- inflationary processes that increase the construction cost and decrease labor productivity.

The modern strategy for the development of the construction industry is aimed at boosting its competitiveness on the basis of modernization that can improve quality indicators and structural characteristics. Scientific, technical and innovative activities that affect the consumer characteristics of buildings and structures, their reliability, safety, functional comfort and operational efficiency are an important component. This involves the implementation of the following tasks:
- implementation of modern technologies that ensure the rational use of resources;
- use of new materials and products;
improvement of the efficiency of the construction industry through the new planning and management systems;
development of local and global databases providing scientific, technical and economic information at the regional, national and international levels;
cooperation with foreign countries, technological exchange;
implementation of the import substitution policy in the production of building materials aimed at reducing the construction cost.

As for the innovative component of development of the Russian construction industry, it lacks machines focused on meeting needs of the construction sector. It is necessary to implement the import substitution policy and themachine base. At the same time, foreign technological experience should be studied to adapt foreign achievements to the national conditions.

Despite the existing problems, the construction industry is considered to be a new driver of the Russian economy. The average annual growth will be 4 - 5% [3]. However, the data presented in Table 1 indicate that during the last five years, the share of the construction sector in Russia's GDP has been declining. At the same time, there is an increase in the share of the production and extraction sectors that are traditional for the Russian economy. The forecast seems to be pessimistic.

| Table 1. The share of construction in Russia's GDP in 2015-2019 [4]. |
|-----------------|---------|---------|---------|---------|---------|
| GDP in market prices (billion rubles) | 2015 | 2016 | 2017 | 2018 | 2019 |
| Construction sector (billion rubles) | 83 087.4 | 85 616.1 | 91 843.2 | 104 629.6 | 110 046.1 |
| Share in GDP (%) | 4 722.3 | 4 899.6 | 4 998.3 | 5 341.0 | 5 564.6 |
| Production (billionrubles) | 5.68 | 5.72 | 5.44 | 5.1 | 5.06 |
| Share in GDP (%) | 10 288.7 | 10 017.3 | 11 308.4 | 13 631.8 | 14 407.0 |
| Share in GDP (%) | 7 275.8 | 7 423.1 | 9 028.5 | 12 408.6 | 12 389.0 |
| Share in GDP (%) | 8.76 | 8.67 | 9.83 | 11.86 | 11.29 |

Having a significant multiplicative effect, the construction sector acts as a driver of development of the related economic sectors [3]. In particular, one job in the construction sector creates five-seven jobs in the related sectors. Each ruble invested in construction increases the total income of the national economic system by four rubles [1].

The modern construction sector consists of a number of independent companies with specific features and lacks a single control center. It is subdivided into interrelated operations performed by various structures. The heterogeneity of the construction sector and the lack of a unified management system hinder its development. The problem can be solved by creating construction clusters.

An economic cluster is a group of interconnected organizations located on a certain territory, mutually complementing each other and enhancing the competitive advantages of constituent companies and the cluster as a whole.

A cluster is a structure that meets current needs of a company. Its peculiarity is due to a set of interconnected corporations. It is a closed community where the strategy of each company is inseparable from the strategies of other companies.

M. Porter is one of the founders of the cluster approach. He identifies the following components of the cluster approach called a rhombus of competitiveness [5]:

1. Federal and regional policies aimed at developing production factors and attracting long-term investments.
2. Demand for a product or service in the domestic market.
3. Related and supporting industries.

4. A stable strategy and a structure contributing to the intra-regional competition.

The federal policy should be aimed at the formation of horizontal ties. The vertical ties that imply the direct management of the cluster at all stages of the value chain formation are created by cluster participants. There are two cluster management options:

- delegation of management functions of the company to the leader who unites activities of other companies;
- creation of a cluster board that is composed of equivalent companies.

The construction cluster is a territorially localized set of construction companies, credit, research and educational organizations, and market infrastructure enterprises that interact while creating industrial and non-industrial facilities.

The advantages of the cluster approach are as follows [1]:

- effective relations between construction companies, research and educational centers, and government structures (the science - business - powerhelix [6]);
- favorable conditions for the development of market infrastructures;
- efficient use of resources;
- efficient interaction of the science - business chain that forms the cluster's innovative orientation and boosts the competitiveness of products;
- several options boost the competitiveness of companies of the cluster;
- opportunities for expanding the cluster both within and beyond the national economy.

The stages of cluster formation are as follows:

1. Justification of the cluster policy and determination of the degree of participation of public authorities.
2. Determination of growth points and development of inter-company interaction schemes.
3. Development of strategic development plans.
4. Implementation of the strategy, determination of the degree of goal achievement.

In the current conditions, the cluster formation policy is a long-term social and economic development strategy.

In the Soviet period, territorial production complexes (TPCs) were distant analogues of the clusters as elements of the planned economy with the dominant sectoral management principle. The TPC was composed of interconnected companies whose location on a certain territory brought an additional economic effect due to the use of common infrastructure and economic resources. Unlike TPCs, clusters can be effective only when constituent companies unite in order to improve efficiency and competitiveness. When forming clusters, it is necessary to use the Soviet experience of TPCs, including the TPC infrastructure elements.

A number of Russian regions use a cluster approach while creating construction clusters (e.g., the Republic of Tatarstan, Sverdlovsk region, Primorye). An increase in the level of housing affordability is a social effect of construction clusters. Banks as elements of the construction cluster make it possible to increase this indicator by providing the population with affordable mortgage loans.

Construction clusters increase the efficiency of production and market processes, redistribute risks and contribute to the flexible policy aimed at changing the market environment. In developed countries, this unification of efforts has been successful. Finland, Belgium, and the Netherlands are leaders in the creation of construction clusters [7].

As world experience shows, one of the most effective cluster policies is a public-private partnership which involves local authorities, commercial partners and institutional private investors that participate on the basis of strategic interaction agreements. The role of the federal and regional authorities is determined by the general project support, which does not require significant financial investments and refund guarantees. An even distribution of risks between all cluster members can be an effective incentive for the development of innovation-oriented cluster structures.
The concept of public-private partnership appeared in the United States to refer to the joint public and private funding of educational programs and funding of public facilities. In the 1960s, it referred to joint public-private enterprises engaged in urban modernization and restructuring.

In Russia, the public-private partnership was enshrined in Federal Law N224-FZ “On Public-Private Partnership, Municipal-Private Partnership in the Russian Federation and Amendments to Certain Legislative acts of the Russian Federation” of 13.07.2015.

Despite the obvious advantages, in Russia, the development of construction clusters is constrained by the following factors:

– misunderstanding of the nature of clusters;
– the lack of institutions capable of developing scientifically grounded cooperation schemes;
– complex mechanisms for funding cluster initiatives;
– unwillingness of companies to cooperate, preference for corporate structures (e.g., holdings);
– disregard of obvious advantages of cluster economic activities.

At the same time, it is the cluster approach that makes it possible to create a single technological chain, thereby increasing the efficiency of the entire construction sector and making it a leader of the Russian economy.

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