An algorithm of state regulation of leasing relations in the construction industry

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Abstract. The article examines the nature and need for the state regulation of leasing relations in the construction industry. The construction activities are regulated by the federal construction industry development program. A set of tools for state regulation of Russian construction organizations is described. These are tools of direct and indirect regulation. Through these tools, the government regulates reproduction processes in the construction industry in order to boost the long-term construction industry development. The state regulation tools reveal possibilities of state regulation and solve problems of direct provision of construction companies with equipment. The article offers an algorithm for developing leasing relations in the construction industry by the methods of state regulation. The algorithm is aimed at developing the material and technical base of construction companies. Efficiency indicators for the use of fixed assets in construction companies are analyzed.

1. Introduction
Currently, there is a steady decrease in the volume of construction equipment purchased by construction companies.

The lack of new equipment increases the load on the existing one, which leads to its greater wear. The main reason for the reduced fleet of construction equipment is the lack of financial resources for purchasing new equipment and repairing the existing one.

Studies of the nature and need for state regulation in the construction industry confirm that the negative aspects are predetermined by the underestimation of significance of government intervention in these economic activities. The construction activities are regulated by the federal construction industry development program [3].

Through the investment measures, the government regulates reproduction processes in the construction industry in order to boost long-term construction activities through a set of direct and indirect regulation tools (Fig. 1).
Figure 1. A set of regulation tools in the Russian construction industry.

To provide construction organizations with equipment, state regulation tools can be applied. They allow for the compensation for construction equipment costs and loan interest and property insurance payments. These tools reveal possibilities of state regulation and solve the above mentioned problems through direct impact.

Based on foreign experience, we can conclude that leasing is one of the most effective financial instruments that provide a real opportunity for construction companies to renew their fixed assets, increase competitiveness, and reduce tax and operating costs [2].

The main task of leasing-based support measures in the construction industry is to create economic conditions, a legal framework, which contributes to the effective service of construction companies and stimulates both the means of production and construction activities.

The development of leasing activities in Russia can update fixed assets of construction organizations and support domestic manufacturers of construction equipment, since under favorable conditions and federal investment, the demand of enterprises for construction equipment will grow [14].

Figure 2 shows an algorithm for the development of leasing relations in the construction industries on the basis of state regulation.

This algorithm can be implemented in three stages, aimed at developing the material and technical base of construction organizations.

Stage 1: Selection of a type of leasing by the degree of recoupment.

Stage 2: Analysis of the method of updating fixed assets and their effective use by calculating the coefficients of renewal of fixed assets and capital productivity.

It is necessary to determine whether the fixed assets renewal rate has increased or decreased.
When the renewal factor is reduced, the leasing company and the construction organization submit an application to the Ministry of Construction and Housing and Utilities of the Russian Federation that makes a final decision on the possibility of applying the reduction coefficient [1].

The Ministry concludes an agreement with a leasing company and allocates subsidies to cover the costs of equipment and its transfer to the construction organization [5].

With an increase in the renewal rate, it is necessary to calculate the effectiveness of application of the equipment using the capital productivity indicator.

It is necessary to compare the return on assets ratio for the analyzed period in relation to the previous year:
- with an increase in the return on assets ratio, the enterprise leases the equipment under standard conditions;
- with a decrease in the return on assets ratio, the lessee leases the equipment under more loyal conditions:
  1. Acquisition of the domestic equipment without a down payment, but with a bond of the fixed assets owned by the lessee. This condition can facilitate the acquisition of fixed assets even by those organizations that cannot make a prepayment;
  2. Acquisition of any domestic equipment with a 5% prepayment, but without bond, with a possibility of deferring the lease payment for six months.

Stage 3: The construction organization acquires new or restored equipment.

Thus, the Ministry of Construction and Housing and Utilities of the Russian Federation has the right to reduce the coefficient of lease payment when purchasing construction equipment. This will allow the state to regulate and influence the development of leasing in the construction industry.

The algorithm is aimed at providing organizations with new fixed assets. If a construction organization needs fixed assets for production, it can lease the required equipment using the state support [4].

Thus, the algorithm makes it possible to develop leasing activities in the construction industry, attract potential consumers and raise interest in this type of modernization.

The algorithm is applicable only to construction organizations.

Table 1 resents indicators of the level of efficiency of fixed assets in construction organizations (Table 1).

| Indicators            | LLC «Abris» | LLC «Sanvent +» | LLC "Pars" |
|-----------------------|-------------|-----------------|------------|
| 2018 year             |             |                 |            |
| Renewal rate          | 0.12        | 0.12            | 0.07       |
| Return on assets      | 1.23        | 1.62            | 0.98       |
| 2019 year             |             |                 |            |
| Renewal rate          | 0.13        | 0.11            | 0.10       |
| Return on assets      | 1.25        | 1.55            | 0.97       |

In Sanvent +, there has been a decline in the renewal rate and the return on assets rate. When leasing construction equipment, the company can reduce lease payments.
Figure 2. An algorithm for the development of leasing relations in the construction industry on the basis of state regulation.
In Pars, the fixed assets have been updated, but in 2019 the capital productivity ratio decreased, which will allow the company to purchase construction equipment under more favorable terms, due to which the burden on the financial condition can be reduced.

Abris is a more financially stable organization due to an increase in the renewal rate and the return on assets ratio. This company can purchase construction equipment on lease under standard terms or at its own expense.

The following conclusions can be drawn. State regulation of leasing relations in the construction industry is a complex problem which requires justification of capital investments using a system of modern economic, statistical and mathematical methods and formation of incentives that ensure the coordination of economic interests of equipment manufacturers, federal and local governments, and intermediary structures implementing investment programs based on a comprehensive analysis of the effectiveness of leasing [6].

An analysis of the level of provision with equipment and development of leasing relations in the Russian construction industry indicates a steady trend towards a reduction in the volume of purchase of construction equipment. This trend is typical of Russia and its regions. The lack of the required equipment increases the load on the existing one, which leads to its wear. The main reason for the reduction in the fleet of construction equipment is the lack of financial resources required to purchase new equipment and repair the existing one [13].

A state regulation-based algorithm for the development of leasing relations in the construction industry has been developed. It involves three stages aimed at developing the material and technical base of construction organizations that need new fixed assets and are unable to update them without state support. If a construction organization needs new fixed assets, it can lease the required equipment using the state support measures. Thus, the algorithm makes it possible to develop leasing activities in the construction industry, attract potential consumers and raise interest in this type of modernization.

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