The leasing mechanism for updating the material and technical base of construction organizations based on state regulation

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Abstract. This article examines leasing relations in the Russian construction industry. Leasing is a less costly form of effective equipment of construction companies. The article studies legislative and regulatory acts reflecting the government's desire to develop leasing relations in Russia. A comparative analysis of leasing and credit relations is based on the following indicators: loan term, payment schedule, bond, depreciation, accelerated depreciation rate, property tax, VAT, insurance. The article proposes a mechanism for updating the material and technical base of construction organizations, taking into account state regulation of the process of restoring and leasing equipment. It is recommended to create a repair and maintenance base for construction equipment. An example of purchasing a bulldozer used in most construction organizations is provided. The use of this mechanism is widely used in foreign countries. In the Russian Federation, centralized restoration of equipment and its resale to construction companies is not used. Therefore, the mechanism proposed will make it possible to eliminate the lack of production capacity and increase the level of equipment of construction companies.

The existing domestic practice, scientific research and foreign experience confirm that leasing relations in the construction industry are a less costly form of effective provision of construction organizations with construction equipment [1].

The official desire of the government to develop leasing relations is reflected in legislative and regulatory acts: the Decree of the President of the Russian Federation "On the Development of Financial Leasing in Investment Activities" (1994), "Temporary Regulation on Leasing", the Resolution of the Government of the Russian Federation "On the Development of Leasing in Investment Activities", the Federal Program for the Development of Leasing in the Russian Federation for 1996-2000, etc. On October 29, 1998, the President of the Russian Federation signed the Federal Law "On Leasing" (No. 164-FZ), and in 2002 the Law "On Financial Leasing (Leasing)" was adopted [4].

Leasing relations are often compared to the loan ones, and many researchers believe that it will be much more profitable to purchase assets using borrowed resources. Let us compare the main indicators of leasing and loans (Table 1) [2].
The main advantages of leasing are tax benefits. Under the lease agreement, accelerated depreciation of the equipment entails a reduction in the property tax. In accordance with the Leasing Law, the acceleration factor can be 3. Under the loan agreement, the depreciation does not affect the cost [3].

Table 1. Comparison of leasing and loan relations.

| Indicator                        | Leasing                                      | Loan                                      |
|----------------------------------|----------------------------------------------|-------------------------------------------|
| Term                             | Up to 10 years                               | Up to five years                          |
| Payment schedule                 | Annuity / Differentiated / Seasonal          | Annuity / Differentiated                  |
| Provision                        | 0-30% advance payment                        | Liquid property with a cost of 1.5-2 times higher than the loan amount |
| Accelerated depreciation rate    | Up to 3 %                                    | No                                        |
| Property tax calculation         | Paid by the lessor while the property is on its balance sheet | Paid in a standard way, as the client owns the property |
| VAT                              | Reimbursed from the budget from the total amount of the lease agreement | Reimbursed from the budget from the value of the property |
| Balance holder                   | On lessor’s balance sheet until the lessee pays the debt | On client’s balance sheet                 |
| Payments                         | May be included in lease payments            | At own expense                            |
|                                  | Lease payments in full                       | Loan interest and depreciation             |

With an increased urgency in the acquisition of property, leasing relations are registered faster than the loan ones [2]. This is due to the fact that the requirements of leasing companies are characterized by greater loyalty to customers and leasing relations have a simplified procedure for processing documents [5].

Leasing relations can last for a longer period, which can reduce the burden of payments, the equipment is used by the lessee, which makes it possible to profit from its use without paying property taxes.

The right to property is limited under both agreements. In loan relations, the agreement includes bond obligations, and upon registration of a lease, the asset is owned by the lessor until the end of the contract between the parties [6]. Therefore, the rights to dispose the object are limited.

Based on the above factors, we can conclude that leasing is more profitable and less costly than loan [10].

The leasing can attract additional investments to the construction sector, improve technical and economic parameters of new construction equipment and ensure equal distribution of the economic effect between manufacturers, leasing companies and consumers - construction companies [4].
However, the existing mechanism of state construction leasing requires revision and serious improvements, since problems associated with its implementation minimize the effectiveness of this type of operations [9].

The need for the market of restored equipment is obvious. This does not require large expenditures, but provides a significant economic effect due to the replenishment of the fleet of machines, improvement of the level of their readiness and an increase in the volume of mechanized works.

Renovated equipment is not offered to construction companies, although there are prerequisites for the development of the secondary market: the repair and maintenance base, specialists, development of leasing as a form of payment, and the existing system of contractual relations, etc. The repair fund for construction equipment is relatively cheap, while the demand for equipment is huge.

In modern conditions, effective construction is impossible without a high level of mechanization, i.e., without construction equipment. Considering that the fleet of construction machines is worn out and the annual disposal of equipment exceeds its receipt, leasing relations based on state regulation measures can solve this problem. All participants in the state financial leasing - manufacturers, the lessor and the state - benefit from the use of leasing operations [7].

In the Russian Federation, the restored equipment is not offered to construction manufacturers, despite the fact that the repair fund of the restored equipment is relatively cheap. Based on this, we offer a mechanism for updating the material and technical base of construction organizations, taking into account state regulation of the process of restoring and leasing the equipment (Fig. 1).

It is necessary to create a repair and maintenance base on the basis of Irkutsk construction companies. The restored equipment can be offered to construction organizations as an alternative to the new one.

It is also proposed to create a machine and transport station, where the restored equipment would be leased for the required production period under a lease agreement on various terms, thereby bringing profit to construction companies, covering costs of restoring and maintaining this equipment and reducing downtime [12].

The construction company cooperates with the state construction leasing company. Thus, it participates in the state program for the development of the construction industry.

For the repair and restoration of equipment, spare parts are needed. It is proposed to conclude contracts with manufacturers that will supply spare parts paid using subsidies for technical and technological re-equipment, thereby channeling funds for their intended purpose.

Construction companies can repair the equipment at the expense of the new or already restored equipment. Construction companies could use repair and maintain services provided by the repair and maintenance base. As part of the mechanism (Figure 1) for updating the material and technical base of construction organizations taking into account state regulation of the process of restoring and leasing equipment, a repair and maintenance base can be created on the basis of construction companies.
This example shows purchase calculations for the Shantui SD 16 universal bulldozer, which is used by most construction companies. The cost of this new bulldozer is 1,200 thousand rubles; the restored bulldozer costs 590 thousand rubles, which is 610 thousand rubles less. The company could purchase two restored bulldozers, which will have a positive effect on its equipment and production capacity [11].
The state regulation of the material and technical base of construction organizations will make it possible to replenish the equipment, use investments effectively, increase the volume of mechanized construction works, production volumes, which will strengthen the economic condition of construction organizations [1].

By purchasing restored equipment, organizations are able to purchase two units of equipment, which will affect the level of their equipment and productive capacity.

The mechanism is widely used abroad. In Russia, the centralized restoration of equipment and its resale to construction organizations are not applied. In our opinion, this method of modernizing and equipping organizations will make it possible to eliminate the shortage of construction equipment and improve the level of equipment in the construction industry [8].

The state regulation measures as part of this mechanism involve allocation of subsidies for technical and technological modernization of construction organizations and purchase of spare parts.

**Figure 2.** Example of purchasing a new or restored Shantui SD 16 bulldozer.

Organizations are handing over equipment, Bulldozer Shantui SD 16 2013 onwards, The estimated cost is 400 thousand rubles, Diagnostics of the necessary work and spare parts for restoration, Recovery costs 190 thousand rubles, incl. Spare parts - 100 thousand rubles, Payment for the repair work performed - 50 thousand rubles, Unforeseen expenses 10% of the estimated cost, 40 thousand rubles.

New

Manufacturing plant

Shantui SD 16 bulldozer, 2018 onwards

Assessed value 1 200 thousand rubles.

Total: 1 200 thousand rubles.

Refurbished

Acquisition of Shantui SD 16 Bulldozer

Total: 590 thousand rubles.
Due to the allocated funds, the equipment will be restored, and the level of equipment of construction organizations will be improved.

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