

# Lending system for agricultural enterprises: prospects for development and transformation

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**Abstract.** The article examines the current situation of using lending, leasing and factoring instruments for agricultural producers in modern Russia. The authors note that the current lending and leasing system requires transformation to take into account the conditions for the activities of agricultural enterprises, taking into account seasonality and the delayed effect of obtaining results. A transformation system for leasing is also proposed to make the instrument more flexible through the introduction of commercial instruments and the abandonment of exclusively government regulation of the activity in question. The authors note the effectiveness of the transformation of the proposed methods of lending, leasing and factoring by increasing demand and reducing the risk of repayment for both enterprises and participants in the banking sector.

## 1 Introduction

The analysis of the measures taken by the Russian banking system to support agricultural producers showed slight but steady annual increases in credit investments in agricultural enterprises. However, according to current data, the percentage of overdue debt for agricultural companies in the aggregate is 31.6%, although 5 years ago it was 27.3%. A study of the Russian banking system shows that the factor in the occurrence of problem loans is 70% dependent on bank employees. To develop the process of lending to agricultural enterprises, it is necessary to effectively assess growing risks in order to minimize them [1].

For example, PJSC Sberbank of Russia offers a form of procedure for short-term bank lending and provision of loan repayment. The created form provides for the need for a rather demanding formalization of the lending business and the ability to have a personal approach to the client. Agricultural enterprises may not repay the loan due to several possible violations:

- loyalty to the borrower;
- insufficiently qualitative study of the borrower's economic condition;
- lack of loan provision, etc.

## 2 Materials and methods

In the lending procedure, one of the most significant stages is drawing up a forecast of credit

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risk, since it plays an important role in loan repayment. For a loan issued, it is necessary to constantly monitor credit risk in order to prevent it from becoming a problem loan. Based on the analysis, we can conclude that this type of control is currently carried out only formally.

To expand the financial needs of agricultural enterprises, participants in the banking sector need to develop services such as leasing, mortgage lending, bill of exchange and factoring operations.

### 3 Study and results

To improve and expand leasing, first of all, the bank needs to make the most extensive use of leasing equipment through local administrations; it is necessary to reduce the number of intermediaries in leasing transactions [2].

To date, 2 schemes for financing and implementing agro-industrial leasing have been formed in Russia: 1) preferential leasing with government financing through OJSC Rosagroleasing; 2) leasing companies and banks offer commercial leasing (Table 1).

**Table 1.** Proposed change to the leasing financing scheme in the agro-industrial complex

Financing scheme	Sources of financing	Financing, %: state/ commercial	Interest rate on loans, %	Average percentage increase in property prices (excluding additional expenses), %
<b>Current leasing financing schemes in the agro-industrial complex</b>				
State leasing (OJSC Rosagroleasing and OJSC Rosselkhozbank)	State funds	100 / –	5–7	5–6
Commercial leasing (private companies and banks)	Bank loans	– / 100	18–20	15–20
<b>Proposed financing scheme for leasing in the agro-industrial complex</b>				
Hybrid leasing (mixed financing)	State funds and bank loans	50 / 50	10–12	10–12

Financing leasing at the expense of government and commercial resources (own funds) is typical for modern conditions; their simultaneous participation will make it possible to form a competitive sphere and guarantee an increase in the size of concluded agreements. Therefore, a change in the financing scheme for agro-industrial leasing has been proposed, associated with the transition to a mixed scheme for attracting economic resources (Table 1). It is impossible to refuse state aid in this sector in favor of industry-wide specificity of agricultural production.

Thanks to the transition to mixed financing, the cost of commercial leasing will decrease by 1.5-2 times, while the quality of customer service will improve due to competition among leasing companies. There is a need for the state to develop a development strategy at the regional and federal levels for the activities of leasing operators.

Changing the organizational structure and financing mechanism will make it possible, within the framework of the general concept of agro-industrial leasing, to combine to the

maximum the advantages of the country's interest and commercial structures in financing reproductive movements in agricultural production. In the project of working with clients, minimizing today's losses and using economic resources, commercial structures will constantly exceed municipal ones. For this reason, it is rational for the state not to formulate all procedures in the person of OJSC Rosagroleasing at the level of state regulation, but to transfer this type of activity to already functioning commercial structures selected in the competition criteria. This approach will make it possible to obtain results in the form of increased demand for leasing subsidies. Such an increase can be quite significant and serve as a reason for increasing the portion of purchases of key types of agricultural machinery on a leasing basis in the total number of acquisitions to 50% in comparison with the same annual average value of 18.82% [1].

Leasing in the agricultural sector is a financial instrument that, as a way of investing fixed assets, in contrast to credit and rent, allows you to solve a number of problems: acquisition and financing of an asset; the possibility of using leased property if there is 7–30% of the asset value; the possibility of returning property at a low profitability of the project, without significant losses; the opportunity to conclude a leasing agreement for a period of 5 to 12 years [3].

Accounts receivable and payable from agricultural enterprises continue to increase. In accordance with this, the banking system can be offered to use bank bills as an independent means of payment to normalize settlements. Also, bills of exchange can be used through offset to complete settlements. The use of bills will eliminate the risks associated with payments made in the banking system [4].

Factoring can also be used as a tool to reduce accounts receivable for agricultural enterprises. Factoring schemes are currently being implemented insufficiently by participants in the banking services market, since this is associated with difficulties arising in risk management; also, factoring is a rather labor-intensive process and there are no technologies for its application in practice. The elements of the factoring procedure are:

- Manufacturer of agricultural products.
- Factoring company (Bank).
- Buyer.

The first stage of the transaction sequence is the conclusion of a factoring agreement.

The second stage is the delivery of goods to the buyer in circumstances of deferred payment.

The third stage is the assignment of the right of claim between the product manufacturer and the bank.

The fourth stage is the bank's payment to the product manufacturer in the amount of 80% of the amount.

The fifth stage is the consumer's payment for the product delivered to the bank.

The sixth stage is the bank's payment to the product manufacturer in the amount of 20% minus the commission [5].

These economic services are primarily of interest to enterprises that are at the stage of their growth, but do not have the necessary property or the necessary financial support through the use of traditional methods. Through the use of factoring, in the future, difficulties in financing agro-industrial enterprises will be resolved, and the system of functioning of the agro-industrial complex, as an important sector of the state economy, will be improved.

In order to find a solution to the problems associated with the low availability of credit resources for agricultural companies, and issues related to the achievement of economic stability by enterprises, the concept of lending and the system of state lending assistance should be improved.

The implementation of improving the credit policy of banking organizations in relation to agricultural enterprises will require constant feedback from the subjects, taking into

account each other’s interests, the formation of a unified strategy and approach both in general to lending and in relation to the assessment of borrowers, the conditions for providing long-term loans, etc. Therefore, in order to more effectively resolve the issues noted as areas for the development of agricultural lending, it is necessary to develop a program at the state level in the form of an organizational and economic model for building relationships in the area under consideration [6].

Sectoral and intra-industry characteristic features of the agricultural economy, which have a great influence on the lending system, must be provided for by banks when determining their lending obligations. The model for implementing the lending concept can be shown by the following mechanism.

The implementation of the lending concept, taking into account the industry and intra-industry distinctive features of agricultural enterprises, can help eliminate the significant disadvantage of the functioning concept of lending and subsidies, as a result of which government assistance measures to increase the availability of credit resources for agricultural companies do not bring the desired result. This imperfection includes the lack of differentiation of the circumstances of providing credit resources to agricultural companies.

As part of the modification of lending, taking into account the industry and intra-industry characteristics of borrowers, it is necessary to increase the effectiveness of the use of money allocated from the budget for the development of agriculture, as well as reduce the costs of agricultural companies for servicing loans. These activities will be carried out by transferring rights to receive subsidies from agricultural companies to commercial banks. The latter, in turn, will provide borrowers with preferential short-term and investment loans with a loan rate reduced by the discount rate of the Central Bank of the Russian Federation. An agricultural producer will acquire the right to pay the principal debt and a share of interest on loans, which will enable him, in the best case, not to divert the resources used, which are so necessary for the performance of the company, and in the worst case, not to involve additional short-term loans in order to eliminate the cash gap [7].

To compare certain distinctive features of the functioning concept of lending and subsidizing with the proposed concept, let us analyze Table 2.

**Table 2.** Comparative characteristics of the current and proposed credit and subsidy systems

Features	Current credit and subsidy system	Proposed credit and subsidy system
Interest of banks in preferential lending to agriculture	Not available	Available (due to the fact that banks are recipients of budget funds)
Multi-level concept of control over banks lending to agricultural production	Not available	Available (local and regional)
Influence from the state on commercial banks lending to agriculture	Indirect influence (legislative level)	Direct influence (transformation of the lending process and the mechanism of subsidizing lending)
The effectiveness of government policies focused on increasing the availability of credit resources	Low efficiency	High efficiency (taking into account industry and intra-industry characteristics of borrowers)
General technology for assessing the creditworthiness of agricultural borrowers	Not available (banks assess the reliability of borrowers using various methods)	Available

The impact of costs associated with servicing loans on the economic stability of agricultural producers	Significant impact	Minor impact (due to low losses associated with servicing the loan, and the possibility of deferment from payment of the principal debt and part of the interest on loans)
Direct regulation by the state of the interest rate according to loans issued by banks	Not available	Available (formation of upper limits of interest rates established as part of the modification)

## 4 Discussion

The conditions for lending to agricultural companies, taking into account intra-industry conditions related to the size of agricultural companies and the degree of their economic stability, developed as part of the proposed modification, demonstrates that depending on the size of the organization and the level of its economic stability, lending requirements also change, which has a positive effect on availability of credit resources for agricultural organizations [8]. As part of the modification, agricultural organizations are differentiated by size and type of economic stability:

1. To enterprises with normal economic stability, loans will be issued practically on the same terms as under the current lending system. Organizations experiencing a lack of general sources for the formation of reserves and expenses, as well as liquid assets, will become more likely to attract borrowed resources at a lower interest rate, for a longer period and with the possibility of deferring the payment of principal and interest.

2. The implementation of this modification in the lending and subsidy system will increase the effectiveness of government policy pursued within the framework of state lending support, thus significantly increasing the availability of credit resources for agricultural companies and increasing their economic stability by attracting borrowed capital on preferential terms.

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