Features of state financial regulation of investment activities of agro-industrial enterprises

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Abstract. The article describes the features of state financial regulation of investment activities of agro-industrial enterprises. The study reflects the key measures provided by the state to stimulate investment in agriculture. The instruments of financial regulation, such as tax incentives, subsidy and credit programs aimed at ensuring the sustainable development of the agricultural sector, are considered. The study also covers the effective use of financial resources, ensuring the availability of capital and supporting innovative projects in the rural economy. As a result of the work, key aspects of the successful state impact on investment processes in the agro-industrial complex are identified, a model of the agro-enterprise ecosystem is proposed, and recommendations on monitoring the financial stability of agro-industrial enterprises are provided.

1 Introduction

At the present stage of economic development of our country, the priority place in terms of demand and importance is given to the agricultural sector. This is due to the necessary permanent provision of food stability for the population of the state, as well as security, which will contribute to the effective functioning of the national economy. Nevertheless, despite the above, agricultural enterprises face various difficulties affecting investment activity. In other words, there is a need to finance investment projects to eliminate the limitation in achieving high financial results. Therefore, state financial regulation of investment activities of agricultural enterprises is advisable in compliance with such principles as [1]:

- taking measures to reduce potential investment risks to encourage direct investment;
- reducing the level of interest rates until the effectiveness of investments in the real sector of the economy is achieved;
- modernization of tax policy;
- competitive basis for the use of budgetary resources;
- orientation of the state's budget policy towards achieving the strategic goals of agricultural enterprises.

In addition to the lack of investment in the agro-industrial sector, the efficiency of rural enterprises is highly dependent on negative factors such as:

- imperfection of the institutional framework [2];

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− financial instability of an economic entity;
− unreliability of the established requirements for the sale of agricultural products [3];
− incompetence of the staff.

Accordingly, improving the process of state financial regulation of investment activities of agro-industrial enterprises to increase the competitiveness of the agro-industrial complex, its modernization, the introduction of advanced digital technologies and other innovations, while eliminating these factors and solving socio-economic problems, is a key task of the state. That is, state regulation represents the totality of all legislative measures and control methods that are the basis of both state bodies and public organizations [11]. Therefore, under the state regulation of the economy, it is advisable to consider the impact of the entire set of authorities aimed at "streamlining relations in the market economy and entrepreneurship" [12].

2 Analysis of the directions of state financial regulation of the agro-industrial complex

The modern orientation of the Russian economy development indicates the need to improve the tools of state regulation of investment activities, ensuring the renewal of the material and technical base, the growth of production volumes, maintaining the financial stability of the agricultural enterprise, identifying and improving the competitive advantages of various branches of the agro–industrial complex.

The following aspects should be noted as key areas of state financial regulation of investment activities of agro-industrial enterprises (Figure 1).

![Diagram](https://doi.org/10.1051/bioconf/202410825002)

**Fig. 1.** Key areas of state financial regulation of the agro-industrial complex.

These directions provide the activities of farmers with a timely response to market signaling of the need to increase the volume of production of agricultural products, which in the future may have a positive impact on investment activities. A detailed analysis of the marked directions may indicate the following:

1) Significant directions for improving the instruments of state regulation of investment activities of agricultural enterprises through the development and implementation of innovative tools to attract investment in the improvement of agricultural enterprises. In a practical broad sense, innovations are understood as the use of new plant varieties, animal breeds, the introduction of improved technologies for processing agricultural products, and the final result of innovative activity is formed through the implementation of a developed and implemented new product or technological process used during the production and
processing of agricultural products, which, definitely, should lead to a positive economic effect. In confirmation of the above, we note that newly built, reconstructed and modernized farms on the territory of the Russian Federation partially contributed to the increase in milk production from 2020 to 2022 (Table 1) [14].

Table 1. Increase in milk production at newly built, reconstructed and modernized farms in the Russian Federation*.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of objects</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>New objects in use</td>
<td>105</td>
<td>131</td>
<td>145</td>
</tr>
<tr>
<td>Commissioning of reconstructed and modernized facilities</td>
<td>67</td>
<td>41</td>
<td>58</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>172</td>
<td>172</td>
<td>203</td>
</tr>
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</table>

Milk production, th.t.

<table>
<thead>
<tr>
<th>Indicators</th>
<th>2020</th>
<th>2021</th>
<th>2022</th>
</tr>
</thead>
<tbody>
<tr>
<td>Volume of milk production due to the new facilities introduced</td>
<td>319</td>
<td>407.5</td>
<td>463</td>
</tr>
<tr>
<td>Milk production volume due to reconstruction and modernization</td>
<td>41.3</td>
<td>38.9</td>
<td>27.4</td>
</tr>
<tr>
<td><strong>Total volume</strong></td>
<td>360.3</td>
<td>446.4</td>
<td>490.4</td>
</tr>
</tbody>
</table>

*compiled by the authors according to [14]

Thus, it follows from the presented analysis that the number of new, reconstructed and modernized facilities commissioned in 2022 exceeded the level of the same in 2021. Milk production volumes obtained through the commissioning of new facilities, reconstruction and modernization of existing facilities increased by 44 thousand tons in the reporting year and amounted to 490.4 thousand tons in 2022, this dynamics is reflected in Figure 2.

Fig. 2. Dynamics of the number of new, modernized and reconstructed facilities and milk production volumes.

2) Stimulating investment activity in the agro-industrial complex is the next direction of state financial regulation of enterprises of the agro-industrial complex. According to the authors, this lever is key, since it identifies and eliminates the inefficient use of funds. Since subsidies are received by enterprises that are both financially stable and economically unstable, it is important to manage and monitor that problematic business entities effectively manage the funds received, and not direct them solely to closing obligations and cash gaps. That is, federal budget funds should be used to reimburse part of the cost of paying interest
on loans received by agricultural producers to acquire ownership of land plots for the development of rural production and for the development of their activities [4].

According to the Federal project "Stimulation of investment activity in the agro-industrial complex" dated 01.01.2022, subsidies from the federal budget were provided to the subjects of the Russian Federation to compensate for part of the interest rate on investment loans issued for the development of agricultural territories. The main support measures include:

— reimbursement of part of the interest rate on investment loans;
— reimbursement of part of the direct costs of agricultural enterprises for the creation and (or) modernization of agricultural facilities;
— support for preferential lending to agricultural enterprises;

These measures within the framework of the implementation of the federal project for 2022 ensured the achievement of results [14-16]:

— attraction of credit funds for the effective development of agricultural enterprises in the amount of 1493.8 billion rubles;
— preferential short-term loans in the agro-industrial complex in the amount of 680.8 billion rubles were issued;
— 154 agricultural facilities have been built and modernized;
— 6.6 thousand loan agreements in the amount of 363,937.9 million rubles were concluded on preferential investment loans (Table 2).

Table 2. Information on the granted preferential investment loans in the context of directions [compiled by the authors of 14].

<table>
<thead>
<tr>
<th>Direction</th>
<th>Number of loan agreements</th>
<th>Amount of loan agreements, million rubles</th>
<th>Actually provided credit funds, million rubles</th>
</tr>
</thead>
<tbody>
<tr>
<td>Crop production</td>
<td>233</td>
<td>66,435.30</td>
<td>29,457.90</td>
</tr>
<tr>
<td>Animal husbandry</td>
<td>142</td>
<td>34,063.30</td>
<td>9313.5</td>
</tr>
<tr>
<td>Processing of crop and livestock products</td>
<td>198</td>
<td>39,516.70</td>
<td>20,031.10</td>
</tr>
<tr>
<td>Dairy cattle breeding</td>
<td>437</td>
<td>95,401.40</td>
<td>22,633.90</td>
</tr>
<tr>
<td>Beef cattle breeding</td>
<td>46</td>
<td>3102.7</td>
<td>300.20</td>
</tr>
<tr>
<td>Purchase of equipment</td>
<td>5517</td>
<td>122,412.50</td>
<td>79,143.30</td>
</tr>
<tr>
<td>Purchase of railway equipment and rolling stock, including freight wagons</td>
<td>5</td>
<td>3006</td>
<td>1259.4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>6,578.00</strong></td>
<td><strong>363,937.90</strong></td>
<td><strong>162,139.30</strong></td>
</tr>
</tbody>
</table>

3) Infrastructural development implies attracting investments in the construction and modernization of agricultural infrastructure, such as roads, storage and irrigation systems, water supply to maintain the efficiency of transportation and storage of agricultural products, energy infrastructure, information technology. These aspects will increase the competitiveness of agricultural enterprises and the sustainable development of the entire sector.

4) Subsidies and grants enable agricultural enterprises to receive financial support in the form of grants, concessional loans to stimulate production and increase its efficiency [5, 6].
3 Financial regulation instruments

The directions of state regulation considered in a broad cross-section allowed the authors to formulate a scheme of instruments for financial regulation of agro-industrial production by the state.

The following components are presented in more detail: tax incentives, loans granted, government grants, the introduction of state guarantees in the investment activities of enterprises, as well as the use of investment funds. This choice is due to the fact that they combine market self-regulation with state regulators, which provides the best economic effect [13] (Table 3).

Table 3. The scheme of instruments of state financial regulation of agro-industrial production [compiled by the author 13,6,7].

<table>
<thead>
<tr>
<th>Tool</th>
<th>Landmark of use</th>
<th>Economic effect</th>
<th>Disadvantage</th>
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<tbody>
<tr>
<td>1) Tax benefits</td>
<td>- construction of production facilities; - modernization of production; - purchase of equipment; - investment in R&amp;D.</td>
<td>- allows investors to reduce financial risks in the implementation of investment projects; - increase the attractiveness of the region; - social effect (creation of new jobs).</td>
<td>With a high level of corruption, this leads to the appearance of unscrupulous investors who do not bring real investments into the industry.</td>
</tr>
<tr>
<td>2) Loans</td>
<td>- purchase of agricultural machinery; - construction of production facilities; - modernization of production; - infrastructure development.</td>
<td>- allow to close the need for financing; - provide stability on a long-term basis; - contribute to the development of business in the industry; - create competitiveness; - maintain production efficiency.</td>
<td>- complexity and cost of the procedure; - high interest rates; - financial risks.</td>
</tr>
<tr>
<td>3) State guarantee</td>
<td>They are provided for various types of activities related to the agro-industrial complex.</td>
<td>ensure the development and efficiency of activities.</td>
<td>- complex and financially costly process that can alert the investor; - issued under strict compliance with specific conditions.</td>
</tr>
<tr>
<td>4) Government Grants</td>
<td>- allocated for conducting scientific research; - creation of new production facilities; - modernization of production.</td>
<td>- social effect: creation of new jobs; - development of socially significant projects; - development of innovations; - growth of competitiveness.</td>
<td>- issued under strict compliance with specific conditions.</td>
</tr>
</tbody>
</table>
5) Investment funds
They are provided for various types of activities related to the agro-industrial complex. Investment funds are useful because they have access to large amounts of capital and participate in the implementation of projects at earlier stages.

complex financial process, fraught with great risks.

<table>
<thead>
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<th>4 Conclusions and Recommendations</th>
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Accordingly, the state financial regulation of the investment activities of enterprises of the agro-industrial complex plays a key role in ensuring the sustainable development of agriculture and maintaining financial stability. As recommendations for monitoring the financial stability of agro-industrial enterprises, adapting the concept of corporate policy to the tasks of evaluating the effectiveness of their financing sources, the authors propose the following proposals:

— internal monitoring of the financial condition of agricultural enterprises;
— accounting for the implementation and application of the policy of formation of financing sources as financing sources of the resource base;
— tracking the level of accounts receivable and payable at an agricultural enterprise;
— monitoring and timely sale of illiquid assets in an agricultural enterprise;
— use of an advance payment system for the sale of agricultural products;
— introduction of digital tools.

At the same time, the use of advanced digital tools in modeling business processes of agricultural enterprises and evaluating ongoing projects helps to determine the optimal strategy for its development and ensure timely response in making management decisions [8, 9]. Based on the above, we will propose a model of the agro-enterprise ecosystem, which is a certain space of interconnected blocks and elements that provide new management tools based on digital technologies [10] (Figure 3).
Thus, the specifics of the industry in question, the requirements for long-term investments and the need to support agricultural enterprises necessitate the active participation of the state. Effective financial regulation includes measures to stimulate investment, ensure the availability of financial resources, as well as control their effective use. Tax incentives, subsidy and credit programs aimed at increasing the competitiveness of the agricultural sector and ensuring food security of the country are important elements of regulation. Regulation of investment processes should be systemic in nature and reflect the real economic situation, eliminating disagreements among participants in the reproductive process. At the same time, the use of advanced digital tools in modeling business processes of agricultural enterprises and evaluating ongoing projects helps to determine the optimal strategy for its development and ensure timely response in making management decisions. Digital transformation is a modern phase of innovative development, which ensures an accelerated business development process.

**Acknowledgments**

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