



# Capacity Management of Vertically Integrated Development of Intersectoral Co-Operation

Alexander Mokrushin, Viktoriya Prokhorova, Viacheslav Aluyan, Sofia Savvidi

**Abstract:** *In the conditions of a prolonged financial and economic crisis, limited volumes and forms of state support for agricultural production, maintaining structural imbalance and inequality of intersectoral exchange, the development of vertical integration processes is a priority in improving the competitiveness of the Russian agro-industrial complex. Vertically integrated corporations (VIC) have the potential to ensure the proportional development of the areas of territorial agribusiness, innovative modernization of production assets of agricultural producers, agro-processing structures.*

*The article reveals the transformational potential of vertically integrated corporations (VIC) in improving intersectoral interaction in the agri-food complex (AIC) of Russia. Specific features of the development of integration processes in the agricultural sector of modern Russia are disclosed. The corporate mechanisms for the creation and functioning of vertically integrated structures in the territorial agricultural sector are systematized. The functional content and potential of the VIC in the structural modernization of the agro-industrial complex of Russia, in the development of the inter-branch exchange management system in the agro-industrial complex are disclosed.*

**Keywords:** *corporations, intersectoral, interaction, transformation, modernization.*

## I. INTRODUCTION

In the conditions of a prolonged financial and economic crisis, limited volumes and forms of state support for agricultural production, maintaining structural imbalance and inequality of intersectoral exchange, the development of vertical integration processes is a priority in improving the competitiveness of the Russian agro-industrial complex. Vertically integrated corporations (VIC) have the potential to ensure the proportional development of the areas of territorial

agribusiness, innovative modernization of production assets of agricultural producers, agro-processing structures. The creation and development of the VIC contributes to the transformation of interindustry interaction in the agro-industrial complex, ensuring the manageability of the cost proportions of interindustry exchange due to the possibilities of corporate budgeting, transfer pricing, and centralization of the functions of managing intra-economic transactions. These circumstances actualize the problem of assessing and realizing the potential of VIC in the development of intersectoral interaction in the Russian agro-industrial complex.

## II. MATERIALS AND METHODS

The instrumental-methodical apparatus of the study includes various cognitive tools of a system-functional approach to the analysis of the structural organization of the agro-industrial complex of Russia, the intersectoral interaction of agro-industrial complex entities of the meso-level. The study of the potential of the VIC in the development of intersectoral exchange in the agricultural sector is based on system-functional, institutional and integration approaches.

Conceptual, methodological aspects of the regulation of intersectoral interaction in the agro-industrial complex, the development of cooperation processes and agro-industrial integration are investigated in the scientific works of A. A. Anfinogentova [1], Leshcheva M.G. [2], Miloserdova V.V. [3], Ovchinnikova V.N. [4], Rodionova O.A. [5], Weaver A.V. [6], Ushacheva I.G. [7] et al.

Methodological problems of transformation of the organizational and economic interaction of agribusiness entities on the basis of vertical integration mechanisms, problems of managing integrated structures are disclosed in the scientific works of G. Baklachenko. [8], Zlobina E.F. [9], Mazloeva V.Z. [10], Starchenko V.M. [11], Turyansky A.V. [12], Yugay A.M. [13].

In determining the specific features of the development of integration processes in the agro-industrial complex of Russia, as well as the functional content of agro-industrial VIC, the methods of institutional and functional analysis were used; when revealing the transformational potential of the VIC in the development of intersectoral interaction in the agro-industrial complex, substantiating the principles for the development of integration interaction — methods of systemic and strategic analysis.

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\* Correspondence Author

**Alexander Mokrushin\***, Department of Economics and Management, Adygea State University, Maykop, Russia. Email: [mokrushin\\_alex@inbox.ru](mailto:mokrushin_alex@inbox.ru)

**Viktoriya Prokhorova**, Department of Industrial and Project Management, Kuban State Technological University, Krasnodar, Russia. Email: [vi\\_pi@mail.ru](mailto:vi_pi@mail.ru)

**Viacheslav Aluyan**, Department of Economics and Finance, Kuban State Technological University, Krasnodar, Russia. Email: [aluyan\\_slava@mail.ru](mailto:aluyan_slava@mail.ru)

**Sofia Savvidi**, Department of World Economy and Management, Kuban State University, Krasnodar, Russia. Email: [ssofiya@yandex.ru](mailto:ssofiya@yandex.ru)

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III. RESULTS AND DISCUSSIONS

A. Specific features of integration processes in the agricultural sector of modern Russia.

Studies of the transformation processes of agro-industrial structures since the 70s. XX century to our days have shown that it is vertical integration that plays a leading role in restoring resource potential, technological and economic balance of agriculture and processing industry [4, 5, 11]. The specifics of corporate formations in the agro-industrial complex of modern Russia is that, as a rule, they are created on the basis of the formation of a closed reproduction (production and value) cycle, with the participation of financial, supply and marketing, and logistics structures. The process of vertical integration in the agricultural sector of modern Russia has become more organized, which is facilitated by the implementation of targeted state support programs for agricultural producers, systematic work to attract large corporate investors.

The main specific features of integration processes in the agricultural sector of modern Russia are:

- expansion of the space of integration interaction of agribusiness participants;
- improving the technological basis and changing the composition of the subjects of integration;
- the formation of zones of active growth in the agricultural sector of the region based on the interaction of a set of integrated structures;
- increasing the requirements for the competitiveness of integrated structures, their products in the domestic and world markets;
- dynamic updating of organizational forms of integrated structures in the agro-industrial complex (from inter-farm contracts to agro-industrial clusters);
- lack of an effective system of state regulation of integration processes in the agro-industrial complex of the meso-level; lack of practice of effective integration interaction of agro-industrial corporations with small forms of agribusiness in many regions of the Russian Federation;
- preservation of inequivalence of intersectoral exchange between enterprises participating in VIC in the meso-level agribusiness;
- Creation and development of a new type of corporate structures in the agro-industrial complex of Russia (meta-corporations, small multidisciplinary corporations);
- the dominance of holding-type corporate structures among institutional and economic forms of entrepreneurship in the agricultural sector of Russia; the concentration of significant commodity and investment flows in agricultural holding holdings.

B. Corporate mechanisms for the creation and functioning of VICs in the agricultural sector of Russia.

The modern VIC is a complex, integrated subject of the economic process, having its own capital, needs for tangible and intangible resources, responsibility to its participants, a mechanism for adapting to changes in the market environment, and the ability to produce initiatives and innovations that fundamentally change the market [14].

The main constitutive features of the corporation as an

organizational form of the economic process are: consolidation and depersonalization of capital shares for all participants; limited liability of members of the corporation according to the results of its activities; collective enterprise embodied in a corporation as a special integrated entity; creation of a developed professional core, including managers and specialists (corporation technostructure); the opposite of real and fictitious capital [15].

VIC arises on the basis of natural market forces (forces of attraction and repulsion) - its participants create corporate capital, as it provides them with a significant reduction in risks, savings in transaction and transformation costs, as well as the opportunity to participate in large-scale projects that require significant investment.

The main methods and mechanisms for creating vertically integrated structures in the agricultural sector of Russia are presented see “Fig. 1”.

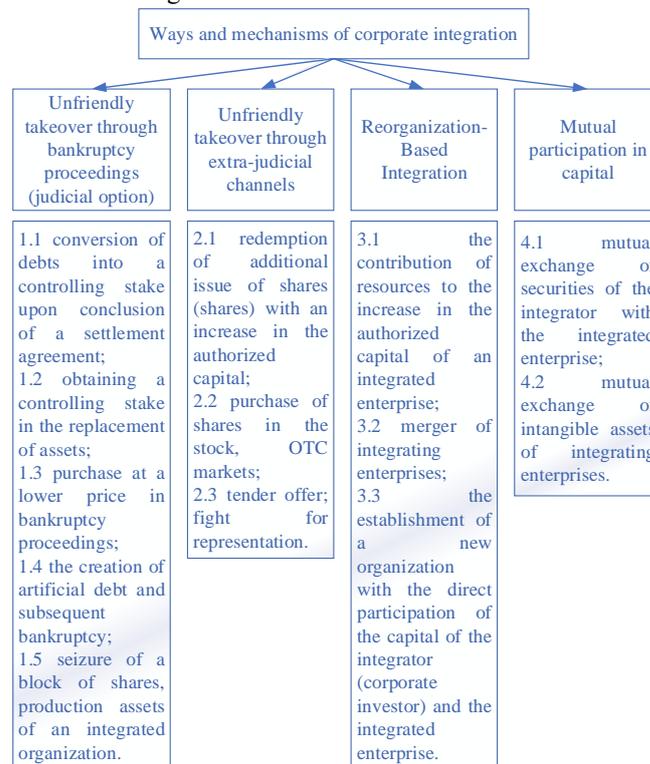


Fig. 1. Corporate mechanisms and tools for vertical integration in the Russia agricultural sector

The mechanisms for regulating internal corporate exchange-distribution relations in agricultural-industrial VICs can be combined into seven groups [16]:

- mechanisms for the distribution of corporate orders; the task of these mechanisms is to distribute the centralized orders received by the corporate center between the enterprises participating in the VIC;
- mechanisms for the distribution of corporate finance, including the distribution of centralized funds;
- transfer pricing mechanisms;
- mechanisms of internal corporate taxation;
- mechanisms for the formation of a corporate strategy, providing for the identification of priority areas and the development of a strategic development program for VIC;
- internal corporate insurance mechanisms (including through the creation of a VIC insurance



fund and the development of risk reduction programs financed by this fund);

- mechanisms of internal corporate exchange of resources, the task of which is to reduce the costs and risks of corporation enterprises through a mutually beneficial exchange of material and financial resources.

**C. The functional content of vertically integrated corporations in the agricultural sector of modern Russia.**

The determinants of the functional content of the VIC economic system are: the composition and structure of the corporation's capital; organizational form of the VIC, a way of interacting with the market, social environment; potential for further evolution of the VIC; institutional, technological organization of the VIC; controllability of the internal environment of the VIC. Based on a generalization of conceptual ideas reflected in modern economic literature [2, 5, 7, 9], the functions of agro-industrial VIC are disclosed:

- an investment function that ensures the attraction of investment resources of the VIC;

- the function of determining transfer prices governing the relations between participants in the value chain in the holding structure;

- the function of harmonizing the planning horizon, providing the needs of operational and strategic planning, as well as the needs of the movement of real and fictitious capital of the VIC;

- the function of protecting the VIC as a systemic subject of relations, focused on providing conditions for the development of the corporation, as well as its participation in interactions within the regional economic system;

- the function of protecting the ownership rights of shareholders and other entities of the internal (intra-corporate) environment, focused on creating the necessary conditions for the stability of the reproduction process and maintaining the regime for coordinating the interests of all subjects of the internal environment of the VIC;

- The function of market positioning, providing the corporation with the choice and strengthening of its own market position;

- a function of developing the process of vertical integration, ensuring accession to the holding of those previously independent commercial organizations that it needs;

- the function of subordination in relation to the vertical of power of the VIC, providing the needs of a holistic corporation management system;

- the function of coordinating the parameters of the corporate culture of VIC participants, which ensures the formation of a single communication and socio-cultural space in the internal environment of the corporation.

**D. The transformational potential of vertical integration in the development of intersectoral interaction of regional agribusiness entities.**

The development of corporate integration processes contributes to the structural reorganization of the Russian agro-industrial complex through the formation of internal corporate value chains, ensuring the balance of their structural

links, as well as innovative modernization through corporate investments. The competitive advantages of agro-industrial VICs are ensured through technical and technological savings (savings on production costs as a result of concentration of production), financial savings (including reduction in transaction costs), savings from combining interchangeable resources. At the same time, tax motives (reducing the tax burden due to the budgeting system), managerial motives (improving the quality of management, introduction of information technologies), as well as motives for diversification (using excess resources) should be attributed to the motives for creating a VIC.

The formation of the VIC in the territorial agro-industrial complex contributes to the stability of inter-farm relations, the manageability of inter-industry exchange, and also the activation of investment processes in the agro-industrial complex.

The main transformational manifestations of corporate integration in the agricultural sector of modern Russia are presented see Table 1.

**Table – 1: Transformation potential of mechanisms integration in intersectoral interaction in the agro-industrial complex development of Russia**

Development directions	Transformational effects of corporate integration
Cross-sectoral Transformation	- the formation of an intra-economic market, regulated through internal corporate transfer, clearing mutual settlements, mutual lending and subsidizing costs of VIC participants; - the growth of regulation of the proportions of inter-industry exchange in the agro-industrial complex; - the concentration of key resources in the promising areas of economic activity of integrated formation; - reduction of production, transaction costs of participants in agro-industrial integration.
Structural Reorganization of Intersectoral Relations	- enlargement of entrepreneurial structures, the formation of a complete production and technological cycle from the participants of the territorial agro-industrial complex; - modernization of the infrastructure of the agro-industrial complex, development of the institutional environment of intersectoral interaction in the agro-industrial complex of the meso-level; - ensuring the sustainability of inter-farm, inter-industry relations in the territorial agricultural sector; - monopolization of vertically integrated corporations of local agri-food (industry) markets.
Development of an intersectoral collaboration management system	- centralization of the management functions of intersectoral interaction of vertical integration participants; - regulation of interindustry exchange based on models, mechanisms of internal corporate settlements; - expanding the ability to regulate the proportions of inter-industry exchange in the territorial agricultural sector through public-private partnership mechanisms.

The transformation of property relations in agribusiness	<ul style="list-style-type: none"> <li>- concentration and redistribution of property in the agro-industrial complex;</li> <li>- specification of assets of participants in agro-industrial integration;</li> <li>- the formation of the holding interdependence of economic entities of the agro-industrial complex; equity market development at the meso level.</li> </ul>
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In the system of corporate integration, the intersectoral interaction of economic entities of the agro-industrial complex acquires an intraeconomic character, relying on a system of transfer pricing, internal budgeting and a clearing settlement system.

The basis of the regulation of intersectoral interaction of territorial agribusiness entities in the corporate integration system is the organizational and economic mechanism designed to ensure the equivalence of intra-economic relations, the coherence of the structural units (CE) of the association, their organizational orientation, strengthening the self-supporting interest of the CE in improving the efficiency of agricultural production.

The key principles of the development of the integration interaction of agribusiness entities of modern Russia are [17, 18]:

- development of the institutional and economic environment of intercompany integration interaction;
- Compliance with corporate strategies, business plans for the development of integrated units, their structural links to the development strategy of the territorial agro-industrial complex; strategic orientation of vertically integrated agro-industrial structures to ensure the competitiveness of the territorial agro-industrial complex, the global competitiveness of agri-food products;
- implementation of the investment potential of agro-industrial corporations localized in the economic space of the region, which provides for the conclusion of strategic contracts, the implementation of priority PPP projects for the VIC and the region;
- the concentration of key territorial resources on the development of the most effective vertically integrated structures, which provides for the development of a strategically oriented regional program for the development of integration in the agricultural sector;
- Creation of integrated structures with their own investment center, able to meet the needs of these structures in attracting investments based on the issue of securities, implementation of investment loans, as well as the need for internal settlements and loans.

#### IV. CONCLUSION

Corporate integration mechanisms are characterized by the powerful potential of the structural modernization of the territorial agro-industrial complex, overcoming the inequality of inter-industry exchange, the consolidation of resources and reducing the cost of transactions, as well as the innovative modernization of the production and technological base of the agro-industrial complex. The development of integration processes involves the expansion of institutional and economic forms of intercompany cooperation (from network, quasi-integration to corporate), the transformation of property relations, inter-industry exchange.

The following methods of reorganization of agribusiness enterprises based on corporate integration were most widely used: acquisition of the property complex of insolvent agricultural enterprises by corporate investors (through the bankruptcy procedure); consolidation of business structures through mergers and acquisitions (M&A); the formation of holding interdependence on the basis of corporate mechanisms for the consolidation of property.

Implementing its own product management mechanism, VIC forms an intra-corporate market, regulated through intra-corporate budgeting, transfer pricing, mutual lending to VIC structural units, and centralization of management functions for internal corporate resource circulation. The intra-economic mechanism for regulating intra-corporate mutual settlements, taking into account territorial-sectoral, market opportunities, as well as the resource potential of the integration participants, is the cornerstone of ensuring the effectiveness of intercompany, intersectoral cooperation within the framework of the VIC.

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### AUTHORS PROFILE



**Alexander Mokrushin**, Doctor of Economics, Professor. Scientific specialization - regional economy (industry breakdown), investment and financial management; competitiveness of the national economy.



**Viktoriya Prokhorova**, Doctor of Economics, Professor. Head of Department of Industry and Project Management. Scientific specialization - theory and practice of organizing and managing socio-economic systems.



**Viacheslav Aluyan**, Candidate of Economic Sciences, Associate professor. Scientific specialization - business valuation, corporate finance, investment attractiveness of a country (region, company).



**Sofia Savvidi**, Candidate of Economic Sciences, Associate professor. Scientific specialization - investment processes in economic systems, also explores the features of evaluating innovative business, venture projects and synergistic effects.