Sustainable economic development model for agricultural holdings based on effective corporate governance

Modelo de desarrollo económico sostenible para las explotaciones agrícolas basado en un gobierno corporativo efectivo

Viktoriya V. Prokhorova*

Kuban State Technological University - Russia vi pi@mail.ru

Alexandr V. Gladilin**

North Caucasian Federal University-Russia gladilin_aleks@mail.ru

Inna G. Ivanova**

Kuban State Agrarian University named after I.T. Trubilin - Russia inna_ivanova_2010@mail.ru

Maria S. Klimenkova**

Moscow Technological University - Russia klimenkova_m_s@mail.ru

Nadezhda L. Malashenko****

Kuban State Technological University - Russia malashenko534@mail.ru

ABSTRACT

During the last years of the post-crisis period, numerous barriers that have hindered the effective functioning of crisis integrated structures in the agro-industrial complex were especially hard. This situation forces top managers to apply the strategy of their division into highly specialized firms immediately after the consolidation of assets. The result of this situation is that the Russian agro-industrial complex loses the possibility of large-scale involvement of the scientific, technical and organizational potential of integrated structures, which, in theory, should act as the leaders in the modernization processes of the national agrarian economy. The next global economic crisis, weighed down by the sanctions of the United States, the EU and several other countries, exacerbated the problems of technological modernization temporary boundaries for agro-industrial complex, which at that time became a strategically important economy sector due to a significant decline of GDP in 2014-2015 and worsened the socio-economic situation of the Russian Federation in the international division of labor. All previous years, the approaches to the development of integrated structures were not of a systemic nature, were not always an effective result of random searches and the development of tools to increase their macroeconomic performance. This situation could not but veil the importance of large integrated formations in the implementation of agricultural sector modernization goals in the national economy.

Keywords: world economic crisis, production decline, agriculture, large integrated clusters, agricultural holdings

RESUMEN

Durante los últimos años del período posterior a la crisis, numerosas barreras que han obstaculizado el funcionamiento efectivo de las estructuras integradas de crisis en el complejo agroindustrial fueron especialmente difíciles. Esta situación obliga a los altos directivos a aplicar la estrategia de su división en empresas altamente especializadas inmediatamente después de la consolidación de los activos. El resultado de esta situación es que el complejo agroindustrial ruso pierde la posibilidad de una participación a gran escala del potencial científico, técnico y organizativo de las estructuras integradas, que, en teoría, deben actuar como líderes en los procesos de modernización de la economía agraria nacional. La siguiente crisis económica mundial, agobiada por las sanciones de Estados Unidos, la UE y varios otros países, exacerbó los problemas de modernización tecnológica de los límites temporales del complejo agroindustrial, que en ese momento se convirtió en un sector económico estratégicamente importante debido a un disminución significativa del PIB en 2014-2015 y empeoró la situación socioeconómica de la Federación de Rusia en la división internacional del trabajo. Todos los años anteriores, los enfoques para el desarrollo de estructuras integradas no fueron de naturaleza sistémica, no siempre fueron un resultado efectivo de búsquedas aleatorias y el desarrollo de herramientas para aumentar su desempeño macroeconómico. Esta situación no podía sino la importancia de las grandes formaciones integradas en la implementación de los objetivos de modernización del sector agrícola en la economía nacional.

Palabras clave: crisis económica mundial, disminución de la producción, agricultura, grandes grupos integrados, explotaciones agrícolas.

Recibido: 02/07/2019 Aceptado: 28/09/2019

 $^{{}^*} Doctor\ of\ Economic\ Science, professor,\ Kuban\ State\ Technological\ University,\ Russia$

 $^{{\}tt **Ph.D.}\ (Economic\ Sciences), associate\ professor, Kuban\ State\ Agrarian\ University\ named\ after\ I.T.\ Trubilin,\ Russian\ Named\ Name$

 $^{{\}color{blue}^{***}} (Economic Sciences), associate professor, Moscow Technological University (MIREA), Russia$

^{****} Ph.D. (Technical Sciences), associate professor, Kuban State Technological University, Russia

INTRODUCTION

The problems of achieving the sustainability of the economic development of agricultural holdings are especially relevant for the domestic agricultural economy, because the formation and integration of corporate structures takes place in a difficult period. The integrated interaction of agricultural holdings allows them to provide more stable development in comparison with separately functioning enterprises. In modern realities, the agro-industrial complex of the Russian Federation has great economic potential, the management of which is extremely complicated by the highest degree of dependence on the geopolitical situation.

The economic sustainability of large agricultural holdings is quite strongly influenced by many factors, including the aggravation of the geopolitical situation, sanction barriers, price volatility, excessive tax burden, insufficient level of investment flow...

In conditions of economic instability and increasing competition, one of the key points of sustainable economic development provision for agricultural holdings is the creation of an appropriate corporate governance system. And this is natural, for nowadays corporate governance acts as the primary factor of building up the competitive advantages and sustainable economic development of Russian agricultural holdings, and engaging the country socio-economic potential.

The use of the corporate governance strategy allows not only to determine the financial results of agricultural holding activities, but also to build effective management decisions, etc. as the basis for final financial indicator improvement (Misakov et al, 2018; Misakov et al, 2019).

The analysis of the problems agricultural holding creation and development through the use of a modern corporate governance system shows the relevance of the research topic on the development of tools and the formation of organizational and economic conditions that allow to develop an optimal model of corporate relation management in order to ensure economic sustainability and balanced development of Russian agricultural holdings.

STUDY METHODOLOGY

The theoretical and methodological basis of the study was the conceptual provisions of competitive development theory by Russian and foreign scientists, a number of the latest theoretical and applied research on the problems of corporate governance efficiency in the framework of integrated entities - agricultural holdings.

In the process of determination, analysis and diagnosis of the factors that have a multidirectional effect on the growth of agricultural holding competitiveness, they used the methods of comparison, expert assessment, classification, and modeling.

The empirical base of this scientific article was the statistical materials of the Federal State Statistics Service of the Russian Federation, as well as the data of agribusiness statistics on the production and financial activities of agricultural holdings in the North Caucasus.

STUDY RESULTS

The sustainability of agricultural production structure development is characterized in addition to a high level of capitalization and profit, by the compliance with social and corporate responsibility to the state, society, and shareholders.

For more than a quarter of a century, Russian agricultural holdings have been using a corporate governance system.

The analysis of the specialized literature suggests that there is still no unified definition of "corporate governance" term. The generalization of various theoretical approaches to the concept of "corporate governance" allows us to consider it as a system for agricultural holding management, in order to ensure sustainable economic development of enterprises observing the interests of stakeholders through the development and implementation of effective management decisions implemented in the dynamic growth of operational, financial and economic, social, environmental and other indicators of the agricultural holding activity (Analysis and forecast of financial market development in Russia, 2003; Radygin et al, 2009).

Three corporate governance models are used in world practice: Anglo-American, Japanese and German. In principle, they differ only by the composition of participants in the corporate governance process. Russia is characterized by its own special model of corporate governance, as a whole, combining the characteristic features of the abovementioned models. As a rule, agricultural holdings use three-level management structure (board, board of directors, general meeting of shareholders).

Among the main problem areas of corporate governance in Russian agricultural holdings are the low level of freely circulating shares, the low amount of paid dividends, the lack of diversification in sources of profit, etc. Economic uncertainty and the difficult geopolitical environment hinder the processes of external borrowing and investment attraction. In these conditions, it is necessary to develop an effective corporate governance model promptly that would allow to obtain added value not only to some large shareholders, but to all ones. In our work, the conceptual basis for studying the effectiveness of integrated structure development, we have used the main provisions of the new institutional theory. Such an approach, for example, unlike the neoclassical theory of firms, allows us to consider the competitive environment in the form of a set of contracts, which gives great opportunities for new effective approach development to establish the patterns of various types and forms of integration.

The mechanisms for the formation of integrated corporate structures are the merger, acquisition and restructuring of the

business.

In developed countries, any transaction conducted through a tender offer (purchase and sale) is called a "takeover". To participate in the stock market, you must submit a certain number of shares of a particular company with prices and its validity period. Acquisition is a type of tender offer, usually put forward by a stand-alone corporation for a controlling stake of ordinary voting shares of another company. These takeovers are both friendly and hostile (North, 1993).

In our work, we will consider the processes of mergers and acquisitions in a broad interpretation and will position them in the form of vertical integration within the format of new relationships between legal entities and other enterprises that go beyond market transactions. The analysis of special literature allows us to summarize many existing areas of merger and acquisition theory development and highlight the most popular of them:

- The approaches of neoclassical theory, linking integration processes with emerging opportunities for the growth of allocative efficiency and creation the barriers to entry on the path of potential competitors;
- Institutional analysis approaches which allow to consider the creation of corporate structures in the context of transaction cost reduction;
- The approaches of the theory of dynamic comparative advantages, which allow to consider economic integration in the context of its possible adaptation to the stages of the life cycle of products and technologies;
- The approaches to the theory of corporate finance, which allow to analyze the impact of vertical integration on the efficiency of financial flows and the market value of an enterprise (Radygin et al, 2009).

Under the conditions of Russian reality, during the analysis of vertical integration impact on economic efficiency, the first two approaches are the most adapted.

Even more than half a century ago, the supporters of the neoclassical theory justified that the use of vertical integration gives the advantage of profit increase by "double premium" problem solution.

Indeed, in parallel with the seller total profit increase, consumer win increase, which (in the traditions of the Chicago school) allow us to substantiate the approach to vertical integration.

The use of various forms of combining the stages of the technological chain allows for the growth of profits of the vertical pyramid of sellers.

There are many approaches at which, in accordance with the classical theory, the negative effects of vertical integration are studied, including vertical contracts, on the dynamics of economic efficiency, usually due to existing barriers to entry. At the same time, this approach is somewhat limited, because it does not pose and does not consider the problem of authority delegation, believing that the participants in this process have access to the same information.

However, this limitation can be overcome by the theory of information asymmetry.

In institutional theory, transaction costs are considered as one of the key factors of integrated corporation development. At the same time, the minimization of transactional and transformational costs of the neoclassical type acts as a guideline for the substantiated scale of economic integration.

As can be seen from the abovementioned, the theory of transaction costs regarding the problems of transition economy admits an excessively free interpretation of specific assets, because for some reason there are no specific financial assets among them. And this despite the fact that in the business relations of banks and firms, bank loans granted are transformed into idiosyncratic or specific assets. As a rule, they are not mobile, for example, low liquidity of overdue debts, etc., which limits the possibilities of transaction cost theory during the study of interaction factors between bank and industry capital.

When they analyze the activities of a corporation based on the principles that are different from those legally enshrined in property rights, the problem of the national economy industrial complex disorganization is especially acute. Disorganization occurs during the breakdown of established economic ties in the terms of imperfect market coordination mechanisms. There is some archaization of interaction forms and methods between business entities - it comes to in-kind settlements.

A separate topic is the use of the theory of agent relations between managers and employees during the analysis of integration in agro-industrial organizations. Involvement of bank representatives in the capital of the borrower is the factor of potential credit risk and the specificity of financial asset reduction (Guriev & Sonin, 2003; Misakov et al, 2017; Klochko et al, 2018).

Banks have a new quality - now they act both as a shareholder and as a creditor, which introduces an additional nuance in the relationship between a contractor and a guarantor. This is a very important circumstance, as it can be seen from Russian practice that shareholders quite often inflict a lot of damage on their own companies. This situation forces agro-industrialists to develop special partnerships with banks so that a corresponding decrease of transaction costs and the costs of borrowed capital will increase the losses from the transfer of controlling functions over financial flows to bankers.

RELIGACION. VOL 4 N° 20, Octubre 2019, pp. 154-158

All this forces us to seek actively some effective solutions in the distribution of property rights, taking into account the possible significant impacts of insiders.

As can be seen from the foregoing, the factor of property mergers and acquisitions is essential in transactional theory. The presence of a new quality - common ownership - is one of the guaranteed forms of contract execution.

Integrated corporate structures can be seen as a holistic system, any of which characterizes both internal relationships and contractual relations of partners in terms of increasing competition (Ugurchiev et al, 2018; Prokhorova et al, 2016; Kolomyts et al, 2019).

A conceptual approach to the problems of effective corporate governance development is based on modeling the sustainable economic development of an agricultural holding.

To study the level of corporate governance impact effectiveness on the sustainability of an agricultural holding development, we proposed an economic and mathematical model of linear regression using the least squares method with correction of observation heterogeneity.

As an object of research, we took a typical South Russian agricultural holding Niva. The sample size is 2013-2018. We used a number of quantitative indicators as dependent variables:

- The multiplier P/E, where

P is the market capitalization of a company; E is the net profit of the company.

ROAE - return on equity.

Tables 1 and 2 show the initial data for an economic-mathematical model development.

All this allowed us to analyze the effectiveness of the corporate management of the Niva agricultural holding.

Table 1. Initial data for economic-mathematical model development of P/E multiplier linear regression dependence on the coefficient of corporate governance efficiency

Period	1	Corporate Governance Efficiency Ratio
2013	7,2	99
2014	5,26	102
2015	6,18	97
2016	6,84	92
2017	7,15	95
2018	6,11	94

Table 2. Initial data for economic-static model development of of corporate governance efficiency

linear regression dependence on the coefficient

Period		Corporate Governance Efficiency Ratio
2013	18	99
2014	18	102
2015	21	94
2016	19	95
2017	16	97
2018	15	83

The growth of P/E multiplier suggests that the increase of corporate governance efficiency leads investors to positive evaluation of the Niva agricultural holding operational effectiveness. This also indicates the correlation of the P/E multiplier with the corporate governance efficiency coefficient.

When they compile an economic-mathematical model of linear regression of P/E multiplier dependence on the corporate governance efficiency coefficient, the condition for correction was established.

Such calculations allow us to establish the correlation between the financial indicators of sustainable development of the agricultural holding and the corporate governance performance indicator, which objectively confirms the need to improve the quality of corporate management in order to increase the sustainability of the agricultural holding development.

RELIGACION. VOL 4 N° 20, Octubre 2019, pp.

CONCLUSIONS AND OFFERS:

All business structures have their own "special" self-organization mechanism, operating in accordance with institutional agreements, that is, with a specific set of specific rules. One of the signs of perfect institutional orderliness is the presence of trust among all contract transaction partners (Moshkovich, 2002).

In accordance with the new institutional theory, in the process of economic development, the optimal ownership structure is changing, but there is no way to formulate and establish property rights in a perfect way. This is associated with significant transaction costs necessary to ensure and protect the individual rights of owners.

Thus, a sustainable model of corporate governance is very important as a specific institutional agreement.

Firstly, the development of a national model of this type of governance cannot be considered in isolation from current globalization changes, from internationalization and competition, the formation of new industries, etc.

Secondly, this is associated with the need to receive a standard set of formal market institutions that can provide not only economic, but also political support.

Thirdly, with the transplantation (import) of political and economic institutions (WTO, EBR, EU rules, etc.) of European and other corporate governance models that increase the transparency of companies, step up the fight against corruption, the introduction of coercive (legislatively introduced) norms takes place.

Conflict of interest:

The authors confirm the absence of a conflict of interest.

ACKNOWLEDGEMENTS

The study was carried out with the financial support of the Russian Federal Property Fund and the Krasnodar Territory as the part of the scientific project No. 19-410-230041.

BIBLIOGRAPHIC REFERENCES

Analysis and forecast of financial market development in Russia. (2003). TACIS.

Guriev S., & Sonin K. (2003). Wealth and growth. Expert, 24, 40-47.

- Klochko N. Elena, Igor Ya. Bogdanov., Iskandar S. Kobersy., Maria S. Klimenkova., & Viktoria Yu. Litvinova. (2018). Research of organizational and economic resources participants, cooperation of clusters in a certain territory // ESPACIOS. Sociacion de Profesionales y Tecnicos del CONICIT, 39 (31), 7.
- Kolomyts O.N., Prokhorova V.V., Ivanova I.G. (2019). Advantages and prospects of creating regional high-tech agrarian clusters. Indo American Journal of Pharmaceutical Sciences, 6(3), 6881-6885.
- Misakov V.S., Khamzatov V.A., Temrokova A.Kh., Misakov A.V., & Dikareva I.A. (2018). Strategic management of innovative agro-industrial projects. Amazonia Investiga, 7(14), 16-23.
- Misakov V.S., Misakov A.V., Tsurova L.A., Adzhieva A.Yu., & Eskiev M.A. (2017). Ways of improving the economic mechanism for the social development of rural settlements of mountainous areas. International Journal of Advanced Biotechnology and Research, 8(4), 964-972.
- Misakov V.S., Tsurova L.A., Yandarbieva L.A., Thamadokova I.Kh., Goigova M.G. (2019). Certifikation of regional economic complex as a highly effective tool for analysis and diagnostics of its development. Amazonia Investiga, 8(20), 451-458.
- Moshkovich B. (2002). Phantom transparency or manageable business value. Company management, 12, 69-72.
- North D. (1993). Institutions and Credibic commitment. Journal of Institutional and Theoretical Economics, 149(1),
- Prokhorova V.V., Molchan A.S., Zakharova E.N., & Gladilin A.V. (2016). Agro-town development as a technology of life support and socio-economic policy of the country. International Review of Management and Marketing, 6(6), 191-196.
- Radygin A., Ektov R. et al. (2009). Internal mechanisms of corporate governance: some applied problems. M.: IET, 187 p.
- Ugurchiev O.B., Dovtaev S.A.Sh., Misakov V.S., Misakov A.V., Temmoeva Z.I., & Gyatov A.V. (2018). Transition mechanism development to the sustainable balanced development of depressive territories. The Turkish Online Journal of Design Art and Communication, 8, 248-253.