Export Potential as the Competitiveness Indicator of the Agri-Food Complex

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Abstract

The paper deals with some theoretical approaches to determining the essence of the export potential, the features of its formation and development in the agri-food complex, the impact on the growth of competitiveness. This made it possible to clarify the definition of the export potential of the agri-food complex as an aggregate of competitive advantages. The specifics of the development of the export potential in the context of globalization and the development of international integration are revealed. The dynamics and structure of exports of food products and agricultural raw materials are analyzed; the physical capacity of the domestic markets of basic food products, the dynamics, and trends of its change are estimated. Excessive growth in the volume of production of agricultural products can lead to oversaturation of the domestic market, a decrease in the profitability of domestic producers, worsening the financial situation in the industry. Russia has a significant potential for integration into the world agri-food system. However, the main share of the export of the agri-food complex is made up of agricultural raw materials, primarily grains and oilseeds, which has an adverse effect on the structure of the complex and the rate of its development. The diversification of exports, the growth of exports of products with high added value will contribute to the sustainable development of agriculture and food industries. The development of the export potential of the Russian agri-food complex should be based not only on the active use of national competitive advantages but also on the formation of competitive relations that arise in the sphere of the economy. The diversification of exports, the growth of exports of products with high added value will contribute to the sustainable development of agriculture and food industries. The development of the export potential of the Russian agri-food complex needs to be justified in the context of food security policy, which implies resolving the contradiction between national interests related to the saturation of domestic markets, and attitudes toward growing competitiveness in the world food markets, as well as the development and realization of the export potential.

Keywords: Agri-Food Complex, Export Potential, Globalization, Competitiveness, Competitive Advantages;

1. Introduction

The current stage in the development of the world economic system is characterized by the aggravation of international competition, which led to an increase in the dynamism and changes in the correlation of conditions and factors of the functioning of national markets, and macroeconomic instability. In a market economy, one of the key categories that most effectively characterizes the effectiveness of the functioning of the market is competitiveness. Competitiveness is a complex multi-level concept, the analysis and evaluation of which should be linked to a specific competitive field (the area of competition) and its level. All the variety of competitive relations that arise in the sphere of the economy are divided into three levels: microlevel – specific types of products, manufactures, enterprises; mesolevel – branches, corporate associations of enterprises and firms of conglomerate type; macrolevel – national economic complexes. The micro- and mesolevel of the competitive field can have both a national and an international scale. At each level of competitiveness, their specific tasks are solved and their demands on the subject are made. The globalization of economic processes transforms the problem of competitiveness both at the macrolevel and at the meso- and microlevels. The world economy gradually turns into a geo-economic space in which the state borders become more transparent, and national-state interests are blurred by the interests of transnational firms. The competitiveness of the country is connected with the competitiveness of national companies both in the domestic and foreign markets. However, the country cannot lead in all spheres of production at the same time. It is competitive in those industries or segments where the combination of competitive advantages is most favorable. It should also be noted that "... countries do not succeed in individual industries but in groups of industries connected by vertical and horizontal links. The economy of the country is a set of such groups. Their composition and sources of competitive advantage (or reasons for its absence) reflect the level of development of the national economy" [1, p. 94]. In conditions of strengthening the influence of external factors, the competitiveness of multisectoral complexes, including the agri-food one, can be estimated using the following indicators and their combinations: labor productivity; specific pay for labor; capital intensity; science intensity and the technical level of products; a set of knowledge and scientific reserves necessary for the independent development of products and their reproduction; the volume of technological reserves for the implementation of scientific and design development; the degree of export orientation or import dependence of the industry; the degree of conformity of the level of development of the industry to the overall level of devel-
The paper is devoted to some peculiarities of the formation and export potential will contribute to its stable and sustainable growth. The purpose of the work is to study the interrelation between competitiveness and export activities of the agri-food complex of Russia, identify the main trends and priority points of export growth, and increase the export potential of the complex based on the formation of competitive advantages. During the research, monographic, abstract-logical and economic-statistical methods were used. Based on the principles of classical economic theory, institutional theory, the theory of comparative advantages of international trade, the theory of competition, the concept of the export potential of the agri-food complex is clarified; the features of its formation taking into account the object of research are revealed. Based on economic and statistical methods, the estimation of trends and prospects for the growth of the export potential of the Russian agri-food complex and the capacity of the main food markets in Russia is given. In addition to some specific methods, the following scientific approaches to the analysis of the problem were used: dialectics, abstraction, deduction, induction, analysis, and synthesis.

3. Results

The formation and development of the export potential of Russia’s agri-food complex are aimed at increasing the competitiveness of the complex in the context of expanding and deepening engagement with the global economy. The export potential of the agri-food complex is a combination of competitive advantages, including natural and climatic conditions, resource security, high technological and technical level, structural balance, etc., which form the opportunity to produce goods and services that are competitive in world markets and export them under certain conditions (ensuring the country’s food security, lack of commodity and monetary deficit, etc.). The export potential is based on production, personnel, innovation, financial and other potentials and contributes to their effective use due to the resulting synergetic effect.

When estimating and forecasting the export potential of the agri-food complex and its implementation, it is necessary to take into account the features of the research object. The agri-food complex is a complicated socio-ecological and economic system; the country’s food security, social stability of the society, sustainable development of rural areas depends on its functioning. This forms a number of restrictions for the realization of the export potential in the world food market. First, the diversity of products, their quality characteristics, production technologies; all this implies a high differentiation of markets, their characteristics, and market conditions. Secondly, the development of the agri-food complex is closely interrelated with the security of the country, first of all, the food industry. Therefore, the export of food and agricultural products should be linked with the saturation of the domestic market, an increase in the standard of living of the population.

The processes of globalization have intensified the competitive struggle in the world food markets. The result of the increased competition was the volatility of the world food markets, their instability and unpredictability. In these conditions, there is a need in the system of state regulation to shift priorities to support the export of food and agricultural products by developing methods for promoting exports, financing activities to enter foreign markets. It is necessary to develop measures for structural policies aimed at adapting Russian producers to the changes taking place in the world agri-food system. The expansion and deepening of global value chains are very active. The creation of global value chains allows many countries to improve the economic situation within the country. The most effective are those countries that form the modern business environment, the investment climate, and the corresponding infrastructure. Qualitatively, a new stage in the development of Russia’s agri-food complex should be characterized not just by the growth of export operations, but also by reaching a higher level of production cooperation and integration with the formation of national intersectoral segments of global reproductive systems. The processes of globalization and integration form the advantages resulting from the deepening of specialization, the rapid spread of scientific, technical, economic knowledge, management experience, the expansion of innovation investment, the internationalization of financial and information markets, the reduction of transaction costs, structural changes in the economy.

Russia has a significant potential for integration into the world agri-food system. Integration processes can be connected, first, with the inclusion of domestic producers in the global agri-food chains, and secondly, with the growth of the level and structure of exports. Against the backdrop of a decline in the gross domestic product and stagnation in industrial production, the agri-food sector retains a positive development trend. The volume of production in agriculture in 2016 increased by 63.9% compared with 2000, in the food industry – by 93.1% (Figure 1).
However, a significant differentiation of production indices persists over the years, which is primarily due to the high dependence of agricultural production on weather and climate factors, low innovation and investment potential. The implementation of the target parameters of the state agrarian policy aimed at increasing agricultural production made it possible to solve the problem of food security of the country in basic foodstuffs in a relatively short period of time. The working conditions of agricultural producers were also affected by a decrease in the level of competition from foreign manufacturers as a result of Russia's counter-sanctions, the growth of the capacity of agri-food markets for domestic producers, and a relative reduction in production costs due to the devaluation of the national currency.

The opportunities for further development of the sectors of the Russian agri-food complex, as noted by Russian scientists, will be determined by reaching high levels of meeting the food requirements in their physical terms, bringing the domestic agri-food markets closer to the limits of their capacity [11]. Continued growth in production in such promising sectors as pig breeding, poultry industry, production of oil crop and sugar can lead to the oversaturation of the domestic market, a decrease in the profitability of domestic producers. This requires, as many experts note, the development of a balanced policy aimed at developing the export potential, increasing the export of products with high added value, deepening the level of processing of agricultural products, expanding sales markets. The study of separate markets of basic food products in Russia confirms these conclusions (Table 1). The estimation of the physical capacity of the Russian domestic market was carried out taking into account the achievement of rational consumption norms and was calculated as the difference between the rational and actual volume of consumption of the population. Since 2010, there has been an overproduction in the markets of potatoes, vegetable oil, and eggs. The capacity of the markets for meat and meat products, fruits, vegetables and cucurbits crop decreases. The potential capacity of the meat products has decreased in 2016 compared to 2010 by 48.6%. The tendency to decrease the capacity of domestic markets is mainly due to the growth in supply.

### Table 1: Trend of the capacity of the markets for basic food products of the Russian Federation

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<tbody>
<tr>
<td>Milk and dairy products, million tons</td>
<td>11.14</td>
<td>11.29</td>
<td>10.88</td>
<td>11.05</td>
<td>11.83</td>
<td>12.58</td>
<td>13.07</td>
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<tr>
<td>Meat and meat products, thousand tons</td>
<td>1,428.5</td>
<td>1,143.68</td>
<td>716</td>
<td>574.04</td>
<td>584.36</td>
<td>878.34</td>
<td>734.02</td>
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<tr>
<td>Potatoes, thousand tons</td>
<td>-1,999.9</td>
<td>-2,859.2</td>
<td>-3,007.2</td>
<td>-3,013.7</td>
<td>-3,067.9</td>
<td>-3,220.6</td>
<td>-3,376.5</td>
</tr>
<tr>
<td>Vegetables and cucurbits crop, thousand tons</td>
<td>5,571.2</td>
<td>4,860.6</td>
<td>4,439.2</td>
<td>4,448.8</td>
<td>4,236.6</td>
<td>4,245.3</td>
<td>4,110.5</td>
</tr>
<tr>
<td>Fruit, thousand tons</td>
<td>5,999.7</td>
<td>5,718.4</td>
<td>5,584.8</td>
<td>5,166.4</td>
<td>5,259.2</td>
<td>5,709.2</td>
<td>5,578.6</td>
</tr>
<tr>
<td>Vegetable oil, thousand tons</td>
<td>-199.9</td>
<td>-214.4</td>
<td>-243.4</td>
<td>-243.9</td>
<td>-262.9</td>
<td>-234.2</td>
<td>-249.6</td>
</tr>
<tr>
<td>Eggs, thousand pieces</td>
<td>-1,285.7</td>
<td>-1,572.6</td>
<td>-2,291.2</td>
<td>-2,191.6</td>
<td>-1,314.8</td>
<td>-1,317.5</td>
<td>-1,908.5</td>
</tr>
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Among the studied markets, there was an increase from 11.14 million tons in 2010 to 13.07 million tons in 2016 in the market for dairy products. Despite the growth in milk production more than twofold in 2016 compared to 2010, consumption amounts to 72.6% of the rational norm, which keeps the market capacity at a high level. The main factors limiting the growth of consumer demand in the dairy market are the decrease in the purchasing power of the population's income and the level of real disposable wages. Since 2013, there has been an increase in consumer prices for dairy products, which also leads to a drop in demand in the dairy market. This is especially reflected in the mid-price and high-price segments of the market.

Currently, there is a shift in priority from import substitution to export development, the formation of an export promotion system and financing activities to enter foreign markets. Russia is stepping up its participation in international trade in agri-food products. From 2000 to 2016, the volume of exports increased by 2.8 times (including food products and agricultural raw materials – by 10.5 times) (Figure 2). The geographical spread of exports has increased significantly. The export of food and agricultural products to the CIS countries has increased 5.7-fold for the period under study and 14.6-fold for the countries of the far abroad.

However, the volume and structure of foreign trade in agri-food products indicate that the export potential of the domestic agri-food complex has not yet been fulfilled. Despite the high growth rates, the share of food products and agricultural raw materials in total exports in 2016 was only 6.0%, including 1.5% in the CIS countries, and 4.5% in the far-abroad countries. Deliveries of the products of the agri-food complex abroad were hampered by the absence of an effective state policy of stimulating exports. High transportation costs, shortage of port capacities, underdeveloped production and trade infrastructure hamper the active development of exports of agri-food products.

To estimate the prospects for the development of exports of food commodities and agricultural raw materials, a polynomial trend line was formed (taking into account the approximation), which shows a steady upward trend. The level of reliability of the model is quite high (the coefficient of determination R² = 0.9438). If the existing conditions are maintained in foreign and domestic markets, the continuing growth in the volume of exports of food products and agricultural raw materials is possible.

The traditional goods of Russian exports in the world food markets are grain, vegetable oil, fresh fish, that is, goods with low added value. The growth of grain exports from 2010 to 2016 increased in physical terms by 2.4 times, vegetable oil – by 3 times, fresh fish – by 1.1 times. The growth of non-primary exports was insignificant, and there is a decrease in exports of some products. In the period under review, there is a significant decline in prices for agricultural products and foodstuffs in the world food markets. Prices for wheat decreased from 2014 to 2016 from 242.5 dollars per ton to 143.2 dollars per ton, that is, by 40.9%, for beef – by 20.5%, for butter – by 7.8% [12, p. 607]. In these conditions, with the growth of the physical volume of exports of the Russian Fed-
eration, there is a decrease in export earnings from the export of agri-food products.

With high price volatility in the world food markets, there is a need to diversify exports, which involves expanding the range of goods that have competitive advantages, increasing the competitiveness of the exported goods. This will require investments in the modernization of production capacities, implementation of modern technologies. State support for expanding export opportunities is an important condition for the growing commercial presence of national business in the world market. To implement the export potential, state support is needed for a system of measures, including reducing barriers, resolving issues of product certification and veterinary control, marketing support for exporters and financial support for export operations.

Qualitatively, a new stage in the development of the export potential of Russia's agri-food complex should be characterized not just by the growth of export operations, but also by reaching a higher level of production cooperation with the formation of national intersectoral segments of global reproductive systems. However, as some economists note, "participation of national producers in global value chains does not guarantee a technologically "qualitative" industrial development of the country." [13-14].

Currently, the export segment operates mainly under the influence of exogenous factors of the world market and is weakly connected with the domestic market of the country. Russian food producers are already built into world economic ties and global chains of creating value added but are located mainly at the lower levels (raw materials production). The prevailing types of competitive advantages are still their price types. When domestic producers enter the global chains, it is necessary to take into account the export potential of agriculture, in particular, the great opportunities for the production of environmentally friendly products.

Prospects of integration of the Russian agri-food complex into the world food economy are reflected in different ways in various branches of agricultural production. The least competitive are intensive industries, especially livestock due to their backward technology, high costs, and low productivity. The cost of feed for a production unit in Russia significantly exceeds the level of developed countries. The inorganic branches of plant growing stand in a better position. This is primarily grain farms, especially wheat production and sunflower growing. Integration into world economic relations is impossible without the formation of a single market space within the country, the creation of a system of measures that hinders the establishment of interregional trade barriers. The strategy for the development of the agri-food complex of Russia means participation in the world division of labor in agri-food production, while respecting national interests [15].

4. Discussion

Classical theory, the main provisions of which were developed by such outstanding economists as Smith, Ricardo, Say, Mill, Marshall, Pigou and others, considers the content and development of foreign economic relations and export capacity in the framework of models of absolute and comparative advantages. In his work "An Inquiry into the Nature and Causes of the Wealth of Nations", Smith says: "If any foreign country can supply us with some commodity at a cheaper price than we are able to produce it, it is much better to buy it for some part of the product of our own industrial work, applied in the area in which we possess some advantage" [4, pp. 30-31]. The essence of the theory of absolute advantages lies in the fact that countries export goods that they produce with the least cost, and import goods that are produced by other countries with lower costs. The specialization of the country (region) in the international division of labor is influenced by the absolute advantages that it possesses in the production process in comparison with other countries (regions). Export stimulates the development of labor productivity by expanding the market beyond national borders and ensures the sale of surplus products that cannot be sold in the domestic market.

The essence of the theory of comparative advantages was revealed by Ricardo in his work "On the Principles of Political Economy and Taxation" [16]. He proved that interstate specialization and foreign economic relations are beneficial if the country exports goods for which it has comparative advantages, that is, it produces goods with relatively lower costs compared to other countries.

"Under the system of complete freedom of trade, each country spends its capital and labor on such industries that give it the greatest benefit" [16, pp. 75-76].

At present, in the economic theory, the issues of expanding world economic ties and increasing the competitiveness of national economies are closely interrelated with the problems of formation and development of competitive advantages. In the theory of competitive advantages developed by the American economist Porter, the main idea is about the interconnection of four groups of factors (or determinants) that form a competitive environment for the functioning of firms in the country. Competitive advantages should be constantly maintained, preserved, built up and formed.

"There are striking differences among separate countries in terms of competitiveness; no country can be competitive in all or even in most sectors of the economy. Ultimately, countries achieve success in particular sectors of the economy because the environment that has developed within them is the most future-oriented and dynamic" [17].

In the institutional theory with such representatives as Veblen, Commons, and others, the concept "institution" is introduced as a set of norms and rules of behavior that define economic relations; the importance of institutions for the functioning of the economy, their role and evolution are studied. Neoinstitutionalists, including Coase, Stiglitz, Postner, expanded the interpretation of the category "institution" studying formal and informal rules of conduct that establish the relationship between economic agents and organizations.

"The main role that institutions play in society is to reduce uncertainty by establishing a stable (albeit not necessarily effective) structure of interaction among people" [18, p. 21]. Export opportunities of the country and their implementation in the world market are investigated in institutional economics in terms of the effectiveness of functioning of the institutions, institutional environment and institutional structure of the economy formed in the country. The state is the most important system-forming institution that influences the transformation in the economy and the effectiveness of its functioning. It can both promote the creation of effective market institutions and create an institutional structure that does not allow the advantages of a competitive order to manifest themselves due to monopoly power and other factors leading to an increase in transaction costs. The provision of food security of the country, the search for new sources of economic growth, the formation of competitive advantages of the agri-food complex of Russia is associated with the strengthening of external and internal challenges. The objective tendency of the modern development of national economies is to change the correlation between internal and external factors, deepen their interdependence and interconnection, and increase the influence of external factors. The processes of globalization lead to a deepening of the involvement of economies and their individual sectors in the world economy system, targeting external markets for the sale of products. An increase in the share of exports remains an important factor in the strengthening and development of national economies.

Production factors, on the basis of which countries have achieved advantages in the world market, become increasingly diverse, dynamic, and mobile. Capital is invested and moved to other countries, labor migrates to countries with the highest pay and most favorable working conditions, scientific and technological achievements are exported and imported. Preservation of the leading role and growth of competitiveness of states are now closely related to their ability to produce and redistribute not only goods...
but financial, investment, innovation-technological, intellectual and other “surplus” as well [19-21]. The deepening of the international division of labor leads to the expansion of the reproduction process beyond national borders. The internationalization of production dictates the need for the creation of appropriate organizational forms, norms, and rules that allow one to overcome the limitations of national economies. This can lead to contradictions related to the economic security of countries, including food security. The identified problems require a new approach to the study of export potential, its essence, structure, relations with other socio-economic categories and terms, their systematization and comparisons.

5. Conclusion

Based on foregoing, it can be concluded that import substitution is one of the main objectives of the state agricultural policy. The study of the agri-food complex as a multifunctional system providing multiplicative effects allowed presenting the export potential of the complex as a set of competitive advantages. This made it possible to identify the specifics of the formation and realization of the export potential of the agri-food complex, its impact on the growth of competitiveness of the main branches of the complex, and to justify the priorities of its development. The formation of the export potential is an integral part of the strategy to increase the competitiveness of the national agri-food complex. Currently, the export segment of the Russian agri-food complex operates mainly under the influence of exogenous factors of the world market and is weakly connected with the domestic market of the country. The export of food and agricultural products should be linked with the saturation of the domestic market, an increase in the standard of living of the population. An estimation of the physical capacity of the markets for basic food products made it possible to conclude that certain internal agri-food markets are approaching their capacity limits, which requires shifting the priority of the agri-food complex development from import substitution to export development. The authors have proved that Russia has a good potential for multi-vector integration into the world agri-food system. Expansion of export opportunities is an important condition for Russia’s full-scale active integration in participation processes. Qualitatively, a new stage in the development should be characterized not just by the growth of export operations, but also by reaching a higher level of production cooperation with the formation of national intersectoral segments of global reproductive systems. Russian food producers are already built into world economic ties and global chains of creating value added but are located mainly at the lower levels of raw materials production. The prevailing types of competitive advantages are still their price types.

The processes of globalization and the deepening of the international division of labor contribute to the growth of Russian exports. In these conditions, the effectiveness of implementing an export-oriented strategy for the development of Russia’s agri-food industry depends on the implementation of resource-saving and progressive technologies, orientation on intensive development methods, investment support for advanced industries, equalization of disproportions in the development of industries, strengthening competitive advantages and building up the export potential of the complex on this basis.

References