






Import Substitution in the Agro-Industrial Complex in the Interests of Provision of Food Security: Option or Necessity?

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Abstract. The purpose of the research is to determine the value and specifics of the need for provision of national food security in modern Russia, to evaluate the level of necessity for using import substitution in the agro-industrial complex for solving this problem, and to search for the alternative means that allows developing the agro-industrial complex without the critical load on the federal budget. The authors offer the methodological approach to determining the level of national food security and determine the expedience of application of import substitution in the modern Russia’s agro-industrial complex. It is proved that import substitution in the agro-industrial complex in the interests of provision of food security in modern Russia is a voluntary choice of the Russian government, not the objective necessity. This choice contradicts the existing situation in the agro-industrial complex and, instead of stimulating the development of the Russian entrepreneurship in the agro-industrial complex, it leads to increase of its dependence on the state financial support and the atrophy of the capability for independent development. Clustering of agro-industrial complex is much more effective for provision of the national food security in modern Russia, as an alternative to import substitution. For its practical application, the authors offer a cluster model of development of the Russian agro-industrial complex for the purpose of provision of food security.

Keywords: Import substitution · Clustering
Companies of agro-industrial complex · National food security
Russia

1 Introduction

In the crisis conditions, when dependence on import of strategic goods is unacceptable, the problem of the national economic security grows. An important role in solving it belongs to provision of the national food security, by eliminating the dependence on import of products of the agro-industrial complex. The main method of protecting the national interests in the food sphere is import substitution in the agro-industrial complex.

According to the existing scientific ideas and the international experience in provision of food security, the Russian government announced the necessity for import substitution in the agro-industrial complex and started to implement measures for stimulating this process. Due to specifics of the Russian economic system, related to domination of financial barriers on the path of development of entrepreneurship in the agro-industrial complex, these measures are brought down to provision of subsidies, which supposes large load on the federal budget.

Due to the long crisis, the budget resources are limited, and realization of measures for stimulating import substitution in the agro-industrial complex makes the Russian government reduce other expenditures – in particular, for socially important programs. In this article, the authors offer a hypothesis that these measures are not necessary, and provision of national food security of Russia does not require emphasis on import substitution and large expenditures of the federal budget.

The purpose of the research is to determine the value and specifics of the needs for provision of the national food security in modern Russia, to evaluate the level of necessity for using import substitution in the agro-industrial complex for solving this problem, and to search for an alternative means that allows developing the agro-industrial complex without the critical load on the federal budget.

2 Materials and Method

From the methodological point of view, this study offers the following approach to determining the level of the national food security:

$$NFS_t = (Vaic_t/Caic_t) * [(Vaic_t/Caic_t)/(Vaic_{t-5}/Caic_{t-5})] \quad (1)$$

where

NFS – indicator of the level of national food security;

Vaic – volume of national production of products of the agro-industrial complex

Caic – volume of consumption of the product of the agro-industrial complex;

T – time period (calendar year)

As is seen from Formula (1), the offered methodological approach is based on determining the current share of domestic production in the structure of consumption of the products of the agro-industrial complex and finding its products with its growth for the last five years. Both the static situation in the agro-industrial complex and the

dynamics of its change are taken into account. The indicators Vaic and Caic are measured in the monetary items, and the indicator NFS – in the points, the tenths of 1. For the purpose of treatment of its values, we developed a special scale (Table 1).

Table 1. The scale for treatment of the value of the indicator of the level of national food security

Intervals of values of the indicator NFS and their economic sense			
$0.60 \geq \text{NFS}$	$0.60 < \text{NFS} \leq 0.75$	$0.75 < \text{NFS} < 0.90$	$\text{NFS} \geq 0.90$
National food security under threat	Low level of national food security	Acceptable level of national food security	High level of national food security

Источник: составлено автором.

As is seen from Table 1, we distinguished four intervals of values of the indicator NFS. If its value is below or equals 0.60, this shows that national food security is under a threat. Import substitution is critically necessary in this case. If the value of this indicator is in the interval 0.60–0.75, it reflects the low level of national food security. The need for import substitution is rather strong.

If the value of the indicator NFS is in the interval 0.75–0.90, it shows the acceptable level of the national food security. The need for import substitution is preserved in this case, but it is at a low level. If this indicator takes the value that equals or exceeds 0.90, the level of national food security is high. Import substitution is not necessary.

3 Discussion

The theoretical and methodological issues of provision of national food security are studied in the works of such authors as (Bogoviz and Mezhov 2015), (Popkova et al. 2016), (Sadovnikova et al. 2013), and (Popova et al. 2015). The necessity for import substitution in the agro-industrial complex for provision of food security of modern Russia has been emphasized in the works of such authors as (Bogoviz et al. 2017), (Sandu et al. 2017), (Przhedetskaya and Akopova 2015), and (Gulyayeva et al. 2016). The theoretical problems of import substitution are viewed in the works (Osipov 2016), (Kosov et al. 2016), and (Gnezdova et al. 2016).

The performed overview of the modern scientific literature on the studied problem showed insufficient elaboration of the alternative tools of import substitution for provision of national food security and determination of the conditions at which import substitution or alternative tools are expedient to use.

4 Results

According to the official statistical information of the Federal State Statistics Service of the RF, the volume of consumption of the products of the agro-industrial complex in Russia in 2016 constituted RUB 7,451 billion, and the volume of the Russian production of the products of the agro-industrial complex constituted RUB 5,861 billion. In 2012, the values of these indicators constituted RUB 6,152 billion and RUB 3,602, respectively (Federal State Statistics Service 2016). Bases on these data, let us perform evaluation of national food security in 2016 with the help of the developed methodological approach:

$$\begin{aligned} \text{NFS}_{\text{Rus}(2016)} &= (5,861/7,451) * ((5,861/7,451)/(3,602/6,152)) \\ &= 0.79 * (0.79/0.59) = 0.79 * 1.34 = 1.06. \end{aligned}$$

The received value of the indicator NFS in 2016 exceeded 0.9, which showed high level of national food security and the lack of necessity for import substitution. Thus, the share of national production of the agro-industrial complex products constitutes 79% - i.e., the share of import is minimal. At that, there has been growth of the share of the domestic production of the agro-industrial complex by 34% over the recent five years, which shows that import of the agro-industrial complex products is not a problem in modern Russia.

In this case, in the interests of provision of national food security, we recommend to leave the policy of import substitution, which supposes the active role of the state, related to supporting the domestic the agro-industrial complex manufacturers, and to realize the policy of clustering, which gives the state the secondary role of a passive observer and referee which creates and supports favorable conditions for independent development of domestic entrepreneurship in the agro-industrial complex.

That is, from the marketing point of view, it is expedient to implement the transition from the struggle for leadership, which is characterized by high resource intensity, to the strategy of keeping the leadership positions that have already been conquered by the Russian companies in the agro-industrial complex. This could be done with the help of clustering that allows strengthening the market positions of the Russian enterprises in the agro-industrial complex and providing them with the possibilities of further growth and development.

The policy of clustering supposes stimulation of “healthy” competition in the market, and thus it differs from the policy of import substitution, oriented at fighting competition. At that, during clustering state regulation of the agro-industrial complex gives way to market self-regulation.

For activation of cluster processes in the Russian agro-industrial complex, we recommend the state to establish formation of clusters at the federal level as a top-priority direction of development of the agro-industrial complex and support realization of cluster initiatives in the agro-industrial complex with legal and consultation support. After the formation of clusters in the agro-industrial complex, the state should use the following tools for their regulation:

- anti-monopoly policy: supporting highly-competitive environment that stimulates unification of the agro-industrial complex companies into clusters;
- tax policy: provision of tax preferences to members of clusters in the agro-industrial complex – e.g., subsidies for added value tax. Within the cluster, such measure will be effective, as the companies will be integrated horizontally and vertically in the cluster, and the liabilities for payment of this tax will not be shifted to other participants of the added value chain;
- credit & investment policy: providing cluster members in the agro-industrial complex with the access to subsidized credit resources and provision of tax preferences to external (as to the cluster) investors into development of cluster companies.

The offered cluster model of development of the Russian agro-industrial complex in the interests of provision of food security is shown in Fig. 1.

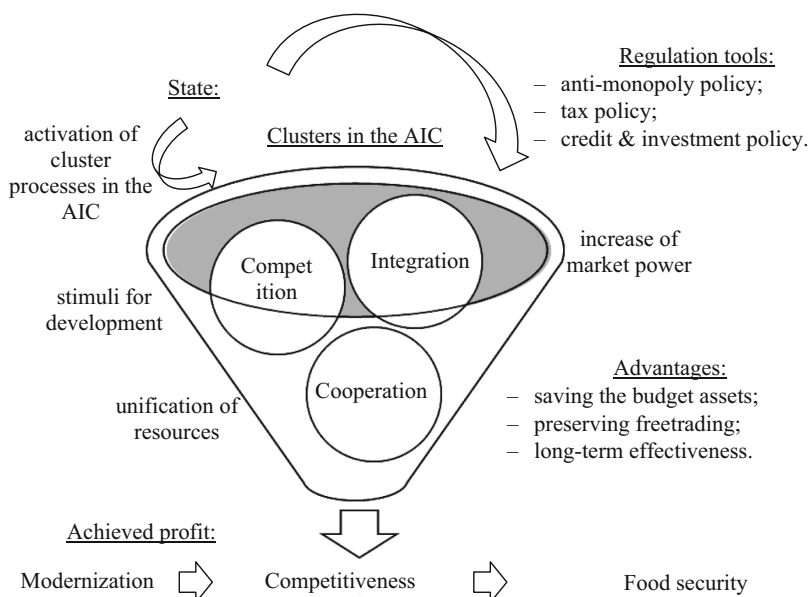


Fig. 1. Cluster model of development of the Russian the agro-industrial complex in the interests of provision of food security Source: compiled by the authors.

As is seen from Fig. 1, three forces are at work at the agricultural company: competition, which creates stimuli for their development, integration, which ensures the increase of their market power, and cooperation, which allows unifying their resources and realizing the potential for development. As a result, the modernization of the agricultural companies, their high competitiveness, and provision of the Russian food security are achieved.

An advantage of cluster policy, as compared to the policy of import substitution, is saving of budget assets, which is achieved by shifting the load for development of the

national entrepreneurship in the agricultural sphere from the state to private business. Another advantage of clustering is preservation of freetrading, as clustering is a part of its concept, and import substitution is related to the opposite policy of protectionism. This allows Russia to correspond to the requirements of integration associations – such as the WTO.

Another advantage of clustering of the agro-industrial complex is the long-term effectiveness. If the subsidies, provided to the agricultural companies within the policy of import substitution are of short-term, cluster processes allow supporting high competitiveness of the agricultural companies in the long-term.

5 Conclusions

Thus, it was proved that import substitution in the agro-industrial complex in the interests of provision of food security in modern Russia is a voluntary choice of the Russian government, not the objective necessity. This choice is not substantiated and contradicts the existing situation in the agricultural complex; instead of stimulating the development of the Russian entrepreneurship in the agricultural complex, it leads to increase of its dependence on the state financial support and the atrophy of capability for independent development.

Clustering in the agro-industrial complex is much more effective as to provision of national food security in modern Russia – instead of the import substitution. During further scientific research, it is recommended to focus on the internal processes that take place in the agro-industrial cluster, as in this article attention is paid to the processes related to activation and regulation of clustering in the agro-industrial complex.

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