



# Possibilities and Threats of Starting the Mechanism of Import Substitution in the AIC in the Context of Provision of Food Security

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**Abstract.** The purpose of the article is to study the contradiction of the mechanism of import substitution in the context of provision of food security and to develop recommendations for overcoming it in modern Russia. The authors use the method of SWOT analysis, which allows evaluating advantages and drawbacks of the mechanism of import substitution, as well as opportunities and threats, in the context of provision of national food security. The authors use the method of correlation and regression analysis to evaluate the results of application of import substitution in the modern Russia’s AIC from the point of view of provision of national food security. The key conclusion of this research consists in the fact that the mechanism of import substitution provides wide possibilities for supporting domestic production of the AIC products and brings threats related to limitation of market self-management, which requires flexible application of this mechanism. In modern Russia, the threats of import substitution have not yet emerged, but it is not very effective either. Low innovational activity in the long-term may become a reason for reduction of competitiveness of domestic companies of the AIC. Thus, import will be a serious threat for the Russia’s AIC. In order to prevent this scenario, we recommend using innovational policy with the policy of import substitution in the AIC. This will allow preserving and multiplying the effect that has been achieved due to successful policy of import substitution in Russia.

**Keywords:** Mechanism of import substitution · Agro-industrial complex  
Food security

## 1 Introduction

Application of the mechanism of import substitution is a mandatory measure for provision of national food security. At that, confidence in high effectiveness of this mechanism is so strong that it is not put in doubt. Over the recent years, large

experience of implementation of the mechanism of import substitution in the AIC was accumulated – it showed that it allows achieving food security not in all cases.

Thus, for example, the strategy of import substitution, together with development of export, is successfully implemented in the countries of East Asia, while the attempts of development of the AIC only on the basis of import substitution are not successful in the countries of Latin America. As any measures of protection of domestic production, import substitution belongs to the policy of protectionism, which takes the economic systems into the past, hindering them obtaining advantages from globalization and participating in the international division of labor.

At the same time, the problem of provision of national food security is very topical in many modern countries, including Russia. The age of stability and economic integration was replaced by disintegration processes that divide the participants of the global economic system and make them develop independent production of the AIC products, regardless of possession of absolute or relative competitive advantages.

The authors offer the hypothesis that the mechanism of import substitution provides wide possibilities for supporting domestic production of the AIC products and brings threats related to limitation of market self-management, which requires flexible application of this mechanism. The purpose of the article is to study contradictions of the mechanism of import substitution in the context of provision of food security and to develop recommendations for overcoming it in modern Russia.

## 2 Materials and Method

For verification of the offered hypothesis, the authors use the method of SWOT analysis, which allows assessing strengths and weaknesses of the mechanism of import substitution, as well as provided possibilities and threats in the context of provision of national food security. For evaluation of the results of application of the mechanism of import substitution in the modern Russia's AIC from the point of view of provision of national food security, we use the method of regression and correlation analysis. The initial statistical information is given in Table 1.

**Table 1.** Dynamics of indicators for evaluating the results of application of the mechanism of import substitution in the modern Russia's AIC in 2011–2016

Indicators	2011	2012	2013	2014	2015	2016
Share of domestic production of meat (except poultry), %	42	46	49	57	66	76
Share of domestic production of poultry, %	81	87	87	88	91	96
Share of innovations-active companies, %	9.5	9.6	9.3	9	10.3	10.2
Share of private investments	99.1	98.6	99.2	99.3	99.7	99.7
Share of subsidies to companies, RUB billion	52.8	53.5	54.9	56.1	57.2	58.8

Source: compiled by the authors on the basis of: (Federal State Statistics Service, 2017), (Ministry of Agriculture of the RF 2017).

For determination of consequences of implementing the policy of import substitution in the Russia's AIC, it is necessary to determine connection between various indicators of activities of the AIC companies ( $y_{1-6}$ ) and the volume of subsidies to companies of the AIC ( $x$ ). The large this connection, the more favorable influence of the policy of import substitution on development of the AIC.

### 3 Discussion

The principle of work of the mechanism of import substitution in the AIC in the context of provision of food security is studied and described in the works (Bogoviz and Mezhev 2015; Popkova et al. 2016; Sadovnikova et al. 2013; Popova et al. 2015; Bogoviz et al. 2017; Sandu et al. 2017; Przhedetskaya and Akopova 2015). This allows determining the high level of elaboration of the problem of this research. However, the focus on the possibilities of application of this mechanism without consideration of potential threats is a gap in the system of modern scientific knowledge, which is to be filled by this article.

### 4 Results

Based on studying the experience of the countries of the world in application of the mechanism of import substitution in the AIC and own logical comparisons of causal connections of development of this process, the authors conducted SWOT analysis, the results of which are given in Table 2.

**Table 2.** Results of SWOT analysis of application of the mechanism of import substitution in the AIC in the context of provision of national food security

<p><u>(S) Strengths of the mechanism of import substitution:</u></p> <ul style="list-style-type: none"> <li>- quick effect, which allows developing domestic production of deficit products of the AIC, which has been previously imported</li> </ul>	<p><u>(W) Weaknesses of the mechanism of import substitution:</u></p> <ul style="list-style-type: none"> <li>- limitation of market self-management;</li> <li>- necessity for large state investments</li> </ul>
<p><u>(O) Opportunities of application of the mechanism of import substitution for provision of national food security:</u></p> <ul style="list-style-type: none"> <li>- reduction of the share of import of the AIC products;</li> <li>- quick modernization of the AIC;</li> <li>- development of entrepreneurship in the segments of the AIC in which it is required for provision of food security</li> </ul>	<p><u>(T) Threats of application of the mechanism of import substitution for provision of national food security:</u></p> <ul style="list-style-type: none"> <li>- deficit of the federal budget, which does not allow for long realization of the policy of import substitution;</li> <li>- reduction of the volume of private investments into development of the AIC;</li> <li>- reduction of innovational activity of the AIC companies</li> </ul>

Source: compiled by the authors.

As is seen from Table 1, the key advantage of the mechanism of import substitution is quick effect, which allows developing domestic manufacture of deficit products of the AIC that was previously imported. Drawbacks of the mechanism of import substitution include limitation of market self-management and the need for large state investments.

Possibilities of application of the mechanism of import substitution for provision of national food security are related to reduction of the share of import of the AIC products, quick modernization of the AIC, and development of entrepreneurship in the segments of the AIC in which it is necessary for provision of food security.

Threats of application of the mechanism of import substitution for provision of national food security include deficit of the federal budget, which does not allow for long implementation of the policy of import substitution, reduction of the volume of private investments into development of the AIC, and reduction of innovational activity of the AIC companies.

The results of the regression and correlation analysis of the influence of the policy of import substitution on the Russia's AIC are given in Table 1.

As is seen from Table 3, in modern Russia the threats of import substitution have not yet been realized. However, it is not yet effective either. Thus, subsidizing has led to large growth of production of meat and poultry (+5.64% and +2.05%, accordingly, with increase of the volume of subsidies by RUB 1 billion) with acceptable level of correlation (77% and 88%, accordingly).

**Table 3.** Results of analysis of the influence of the policy of import substitution on the Russia's AIC

Indicators of AIC	Indicators of correlation/regression	
	Change with increase of the volume of subsidies by RUB 1 million	Strength of connection
Share of domestic production of meat (except for poultry), %	+5.64%	77%
Share of domestic production of poultry, %	+2.05%	88%
Share of innovations-active companies, %	+0.12%	31%
Share of private investments	+0.15%	73%

Source: compiled by the authors.

At the same time, the level of domestic production in these segments of the AIC constitutes 76% and 96%, accordingly. This shows the lack of necessity for fighting the import. In the segment of oil and wheat flour, Russia's provision with own production reaches 99%. That is, in the strategically important segments of the AIC, import is not a problem.

At that, due to absence of necessary geographical conditions in other segments of the AIC, especially production of exotic products, subsidizing will not allow reaching a significant effect, so it is not effective at all. The volume of private investments into

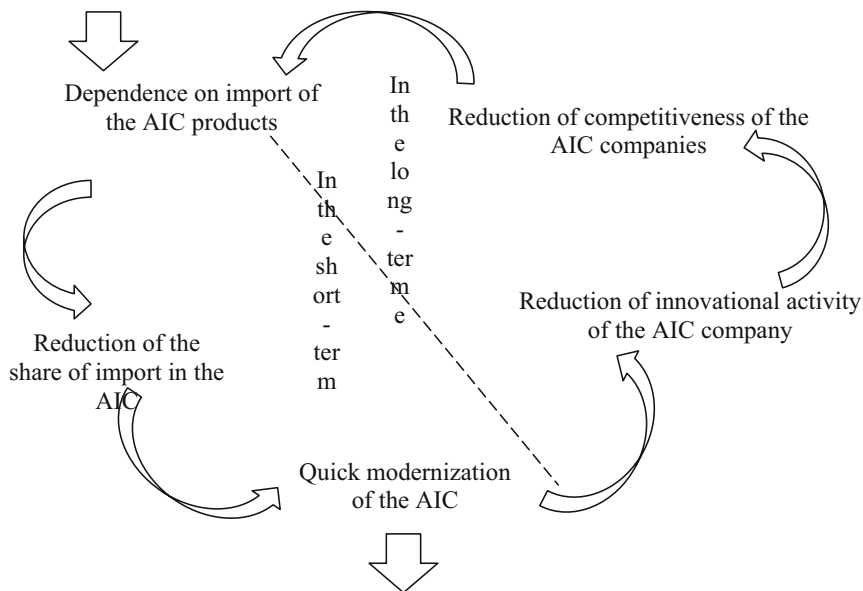
development of the AIC companies is not influenced by the policy of import substitution. Despite the acceptable level of correlation (73%), growth of the volume of private investments constitutes 0.15%.

In view of the fact that in 2016 their share in the structure of investments constitutes 99.7, it is impossible to expect their large growth in percentage terms. This shows absence of private business's habit for state support. At that, a negative aspect of the policy of import substitution in the Russia's AIC is low innovational activity of entrepreneurship.

The share of innovations-active companies constituted 10.2% in 2016. It does not correlate with the state-provided subsidies and does not change with time. Such innovational activity in the long-term may become a reason for reduction of competitiveness of the domestic companies of the AIC. Then, import will be a serious threat for Russia.

For prevention of this scenario, we recommend supplementing the policy of import substitution in the AIC by innovational policy. This allows preventing the reverse cycle and return to dependence on import of the AIC products, the existing demand for which will not be satisfied by domestic companies. Innovations will allow preserving and multiplying the effect achieved due to successful policy of import substitution in Russia. The logic and the process of overcoming the contradiction of the mechanism of import substitution in the context of provision of food security in modern Russia is shown in Fig. 1.

Provision of subsidies to companies of the AIC  
within the policy of import substitution



**Fig. 1.** Overcoming the contradiction of the mechanism of import substitution in the context of provision of food security in modern Russia Source: compiled by the authors.

Development of the innovational policy in AIC is not a part of this work, being an independent study. It should be noted that the tools of subsidizing should not be used for stimulating the growth of innovational activity of the AIC companies, as well as similar financial tools for stimulating innovational activity of the AIC companies – e.g., tax subsidies.

Instead, we recommend concentrating on non-financial tools of stimulation of innovational activity of the AIC companies, aimed at stimulation of their own innovational initiatives and creation of common favorable conditions for that. It is recommended to strengthen the institutional system and develop close cooperation between state and business for exchange of information, which allows correcting the policy in the sphere of innovations management in the Russia's AIC.

## 5 Conclusions

Thus, contradiction of the mechanism of import substitution in the AIC in the context of provision of food security is manifested in the fact that application of this mechanism in the short term allows overcoming dependence on import and developing domestic manufacture of deficit products of the AIC. In case of long application of the policy of import substitution, domestic companies get used to state-provided subsidies, and lack of foreign competition leads to elimination of natural market stimuli for manifestation of innovational and investment activity.

In modern Russia, the policy of import substitution has been used for several years and has not yet led to serious negative consequences, ensuring profits related to provision of national food security. Nevertheless, for preventing the threats of the policy of import substitution, which are manifested in the long-term, the authors recommend performing a transition to the policy of innovations management in the AIC, which is a logical continuation of the policy of import substitution.

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