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MANAGEMENT OF FOOD IMPORT SUBSTITUTION IN RUSSIA

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Abstract

The article discusses the need to manage food import substitution (Management of Food Import Substitution, MFIS) to increase the stability of economic growth and food import substitution (Potential of Food Import Substitution, PFIS), using a structural-functional approach that allows you to systematize the integration process of regional agricultural producers and focused development of their structural components and significant relationships. The study presents the reasons for the low level of Russian import substitution of food products, as a result of the underdevelopment of MFIS and weak PFIS. To eliminate these shortcomings, we formulated sufficient requirements for increasing PFIS and MFIS methodology, focused on food self-sufficiency, optimal symbiosis of agricultural producers' capabilities and food needs of the population, closed cycle production, specific foods of different regional agglomerations and their manifestation forms. The study proposed a PFIS assessment methodology that takes into account regional aspects of the reproduction process in terms of total food production costs, implementation of distribution and exchange functions, and meeting the maximum possible level of the population's food needs. As a result of the assessment, regions with consistently high PFIS and the reasons for its decline were identified. To eliminate the causes of PFIS reduction, was proposed a set of measures, laid out in accordance with the established principles in the "management case" of the MFIS. For the effective implementation of the MFIS management case, a tier taxonomy is allocated that optimally distributes management functions at all levels of government.

Keywords: Import substitution, case, potential, food, agricultural producer, management.

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1. Introduction

In the context of changes in world economic relations and in the structure of Russia's foreign trade balance, government bodies are increasingly using the Management of Food Import Substitution (MFIS). To increase the stability of economic growth, a potential for food import substitution (PFIS) is being assessed in the framework of MFIS. The systemic assessment of PFIS will identify problems and structural anomalies, the elimination of which, through MFIS, will contribute to economic growth.

Economic growth is a national idea, closed state goal, which is achieved by increasing gross domestic product, raising the standard of living of the population, increasing real wages and incomes, and implementing a program to combat poverty and environmental pollution.

Numerous studies of scientists point out the need for systemic changes in the process of functioning and development of economic activity through MFIS (Beestermoller, Disdier, & Fontagne, 2018; Olper, Pacca, & Curzi, 2014; Lopez, Pagoulatos, & Gonzalez, 2006). The requirements of market conditions for increasing PFIS necessitate a deep study of the MFIS methodology, as an objective requirement for the reproduction process, which forms the toolkit for identifying and using the potential of economic growth.

2. Problem Statement

The relevance of the problem is determined by the objective need of MFIS in Russia (Glinskiy, Serga, Alekseev, Samotoy, & Simonova, 2018). In order to qualitatively display the results of the problem investigated, the following tasks were set: to identify sufficient requirements for increasing the PFIS; disclose the MFIS methodology; justify the need for MFIS; suggest a PFIS assessment methodology; identify the MFIS management case. The increase of PFIS in Russia should be carried out on the basis of the structural-functional approach implemented in MFIS. This will allow to systematize the integration process of regional agricultural producers and targeted development of their structural components and significant interrelations.

3. Research Questions

In the early 90s of the twentieth century, import-substituting activities in Russia were conducted on a small scale, and in certain periods were almost absent. The reasons for the low level of food import substitution were: inflation, poor financing, high bank lending rates, customers' insolvency and a wide range of economic risks. Import-substituting activities with respect to food products is the process of creating and consuming products in the country, which is able to fully meet the physiological needs of the population and exclude the import of analog products (Ginn, & Pourroy, 2018; Thorbecke, 2016). It is characterized by the quality of MFIS, which shows the effectiveness of investments in the development of the self-sufficiency of the national economy and the increase in PFIS, ensuring the change of equipment and technology in agricultural production by more productive, environmentally friendly, resource-saving alternatives.

PFIS is the result of MFIS - the organization and development of a separate region consisting of interconnected structural structures of different localization which, consolidating into a single oriented aggregate, ensure complete satisfaction of the population’s food needs. In order to optimally organize the process of raising PFIS, it is necessary to identify regional factors contributing to the satisfaction of the

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population's need for food. When choosing a criterion for evaluating regional factors, the indicator of the exclusive value of a territory, which reflects the food component, is the most appropriate (Villoria, 2018).

A set of measures for the implementation of import-substituting activities form the basis of the MFIS. The structural-functional approach implemented in the MFIS focuses on meeting the sufficient requirements for increasing the PFIS:

- to use the resource and raw material potential in the consumer sectors of the economy effectively, ensure full employment, optimally link intellectual and capital resources in the regional reproduction process, maintain rationality in the distribution and food consumption;
- to incorporate economic, social, institutional, national, cultural and other factors to stimulate the activities of agricultural producers optimally;
- to eliminate adherence to national traditions leading to the spread of ethnic corruption;
- to ensure the growth of income, savings, investment and productivity, while maintaining the natural rate of unemployment.

The MFIS methodology manifests itself in two forms:

1) regulations and standards in which the content and sequence of activities of agricultural producers (normative) are recorded (Rachel Shen, 2016);
2) descriptions of the actually achieved level (descriptive).

At the present level of development of scientific knowledge, the essence of MFIS is correctly viewed as the activity of agricultural producers aimed to achieve maximum efficiency in the use of PFIS (Kasahara & Lapham, 2013; Ceglowski, 1991). The maximum possible activity of agricultural producers is achieved under the condition of full employment of the population and an effective reproduction process.

The MFIS methodology is focused on the effective organization of processes and actions leading to the formation and improvement of mutually beneficial endogenous and exogenous relationships, relationships between agricultural producers, as well as their internal orderliness.

4. Purpose of the Study

The purpose of the study is to justify the need of the MFIS' use in Russia. MFIS is considered as a "response" to the market conditions of existence of the Russian regions, generated by the need for a purposeful process of ensuring the competitiveness and efficiency of agricultural producers. The demanded component of the economy is formed and proved, providing an expanded reproduction of goods and factors of production to increase the level of satisfaction of the population with primary goods.

MFIS should be focused on food self-sufficiency, optimal symbiosis of agricultural producers' capabilities and food needs of the population, a closed reproduction cycle, food specifics of regional agglomerations and the forms of their manifestation.

The main tasks that are solved by MFIS are: we made a list of activities implemented through industry and regional PFIS enhancement programs; coordinated PFIS promotion programs as a unified

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MFIS system; develops the necessary regulatory framework for the development of agricultural producers for a specific time period; the development of food markets is projected; coordinated actions of federal, regional and municipal government bodies to stimulate agricultural producers.

5. Research Methods

The PFIS assessment methodology is based on the classical laws of economic theory — it determines the amount and types of regional resources necessary for the optimal functioning of agricultural producers. The volume and types of resources are determined by the regional aspect of the reproduction process in relation to the total costs of food production, the implementation of distribution and exchange functions, and the satisfaction of the maximum possible level of the population's food needs. PFIS assessment is carried out according to the formula

$$PFIS = \frac{I_{\text{Gross Regional Product}}}{I_{\text{Production of Agricultural Products}}} \cdot \frac{I_{\text{Gross Regional Product}}}{I_{\text{Consumer Prices of Food Products}}} \cdot \frac{I_{\text{Gross Regional Product}}}{I_{\text{Prices of Agricultural Producers}}},$$

$I_{\text{Gross Regional Product}}$ – volume index of gross regional product, $I_{\text{Production of Agricultural Products}}$ – agricultural production indices, $I_{\text{Consumer Prices of Food Products}}$ – consumer price indices for food products, $I_{\text{Prices of Agricultural Producers}}$ – producer price indices of agricultural products and the purchase of goods and services by agricultural organizations.

6. Findings

According to the results of the PFIS assessment:

- The Volga Federal District, the Republic of Bashkortostan, the Orenburg, Saratov and Ulyanovsk regions have consistently high PFIS values. The leaders have seen a significant decrease in PFIS in 2011, due to the effects of the dry season. Not everyone was able to fully restore their PFIS - the Tula region, the Republic of Mordovia and Tatarstan, the Samara and Jewish Autonomous Region;
- during periods of the dry season, the effective increase in the marginal food product decreases with an increase in the volume of resources used. Natural and climatic conditions are the main factors of agricultural production, determining PFIS. This is due to the low level of development of agricultural producers - the lack of a modern system of soil reclamation, high-quality seed materials, productive agricultural animals and skilled personnel.

This is due to the low level of development of agricultural producers - the lack of a modern system of soil reclamation, high-quality seed materials, productive agricultural animals and skilled personnel. Under the influence of natural and climatic conditions, the boundaries of production possibilities change within the framework of the previously established limits for the effective use of production factors. The dry season should be perceived as a negative factor reducing the effective growth of the marginal product

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even in conditions of stable economic growth, which ultimately leads to a fall in the overall increase in the marginal product with an increase in the amount of resources used.

To increase PFIS, it is necessary: to strengthen the process of inter-regional integration; optimize the system of preferential taxation in relation to the subjects of agricultural activity; create a legal framework for inter-regional competition and increasing the cost of technological innovation; to organize the free movement of food products throughout the territory of the interregional space; create conditions for economic and economic activities of households. These tasks are embedded in the MFIS management case.

The MFIS management case is based on a following set of principles:

- the choice of priorities from the point of the final socio-economic results, the interests of all forms of business and property;
- achieving the effect of the interaction of all elements of the economic system and obtaining a positive synergistic effect;
- obtaining a multiplicative effect, which causes the multiplication of the effect in dynamics, due to the inclusion in the sphere of production of an increasing number of industries.

To implement the MFIS management case, it is necessary to distinguish the leveled taxonomy:

- 1st level - maximization of the presentation of the conjugate indicators, reflecting the degree of application of innovative technologies and the volume of food production;
- 2d - assessment of the effectiveness of the commercialization of innovative technologies and the implementation of innovative agricultural products in the context of interregional convergence of average per capita incomes, ensuring minimum standards of social and social needs;
- 3d is a target orientation of the PFIS policy of raising in the direction with the goals of the national policy, such as growth, efficiency, equality, stability, quality of life.

The system representation of the PFIS enhancement process allows us to connect different levels of economic subsystems into a single, hierarchical control system and determine priorities at the level of strategic management of the process, at its very first stages. The vector of the PFIS enhancement process, which determines the range of strategic priorities, should be an effective food policy aimed at achieving macroeconomic and political stability, export orientation, effective development and use of agricultural resources. The choice of measures to be directed is determined by the general country economy politics, the specifics of economic growth models and the interrelated general principles of agricultural policy.

To optimize the MFIS process, it is necessary to optimally distribute the functions of management at all levels of government, not only in tactical but also in strategic terms. The goal of the state is not the direct organization of the process of import substitution. The state should create conditions for the free activity of agricultural producers in the structure of the market mechanism - the “invisible hand” of the market should be complemented by the “visible hand” of the state. The state is involved in a market economy in order to support the process of import substitution of food products in the context of economic

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stability, macroeconomic equilibrium, smoothing cyclical downturns and booms in economic development, efficient activity of agricultural producers and competition among them.

The MFIS government management case must be oriented on (Haggblade, Me-Nsope, & Staatz, 2017; Azzam & Belaid Rettab, 2012):

- providing conditions for increasing PFIS and a decent standard of living for the population of the country. In the medium term - to achieve the pre-crisis standard of living and consumption standards, and in the long term - to bring the level and quality of life of the population closer to the standards of highly developed countries;
- building a Russian society with modern characteristics of the quality of life and the environment based on the formation of a new technological mode of food production and a multi-structured, socially oriented market economy;
- pursuing a focused structural, investment and science and technology policy, stimulating the business activity of the food sector of the economy, solving social problems of economic reform.

The state MFIS should be considered as a management activity aimed at achieving the goal in an unstable, competitive market environment, including an analysis of the state of the country's food market, tactical and strategic planning, as well as a methodology to formulate PFIS improvement policies (Kashoma, Komba, Abiad, & Kassem, 2018; Tuano, & Sescon, 2017; Zach, Doyle, Bier, & Czuprynski, 2012).

7. Conclusion

The MFIS process is closely related to the increase in PFIS and is the basis for ensuring the stability of the reproduction process in the food sector of the economy. The main task of MFIS is to optimally group the factors of supply and demand for food of a certain region, stimulating the development of agricultural producers.

Along with the increase in the level of import-substituting activity of agricultural producers, it is necessary to optimize the process of food production and distribution. Efficient distribution production will allow the reorientation of agricultural producers to the use of high-performance facilities with high-impact marginal product. The process of increasing PFIS should be viewed as measures to implement a set of regulations through the development and a set of management decisions in the form of a mutually agreed set of programs (management case) for the development of agricultural producers, in accordance with federal and regional interests involving the use of necessary resources, with certain measures and established deadlines.

References

Azzam, A.M., Rettab, B. (2012). A welfare measure of consumer vulnerability to rising prices of food imports in the UAE. *Food Policy, 37* (5), 554–560.

Beestermoller, M., Disdier, A.-C., Fontagne, L. (2018). Impact of European food safety border inspections on agri-food exports: Evidence from Chinese firms. *China Economic Review, 48*, 66–82.

Ceglowski, J. (1991). Intertemporal substitution in import demand. *Journal of International Money and Finance*, *10,* (1), 118–130.

Ginn, W., Pourroy, M. (2018). Optimal monetary policy in the presence of food price subsidies. *Economic Modelling*. Retrived from: https://doi.org/10.1016/j.econmod.2018.06.012.

Glinskiy, V., Serga, L., Alekseev, M., Samotoy, N., Simonova, E. (2018). The Development of the Food Industry as a Condition for Improving Russia's National Security. *Procedia Manufacturing, 21*, 838–845.

Haggblade, S., Me-Nsope, N.M., Staatz, J.M. (2017). Food security implications of staple food substitution in Sahelian West Africa. *Food Policy*, *71*. 27–38.

Kasahara, H., Lapham, B. (2013). Productivity and the decision to import and export: Theory and evidence. *Journal of International Economics*, *89(*2), 297–316.

Kashoma, I.P., Komba, E.V.G., Abiad, M.G., Kassem, I.I. (2018). Food Safety Regulations and Enforcement in Tanzania. *Reference Module in Food Science*. https://doi.org/10.1016/B978-0-08-100596-5.22480-3.

Lopez, R.A., Pagoulatos, E., Gonzalez, M.A. (2006). Home bias and U.S. imports of processed food products. *The North American Journal of Economics and Finance*, *vol. 17,* iss. 3, 363–373.

Olper, A., Pacca, L., Curzi, D. (2014). Trade, import competition and productivity growth in the food industry. *Food Policy*, *49,* (1), 71–83.

Shen, R. (2016). Taiwan Food Regulation and Enforcement. *Reference Module in Food Science*. Retrived from: https://doi.org/10.1016/B978-0-08-100596-5.21095-0.

Thorbecke, W. (2016). Understanding Chinese consumption goods imports. *Journal of Policy Modeling*. *38,* (1), 96–102.

Tuano, P., Sescon, J. (2017). Food Policy in the Philippines. *Reference Module in Food Science*. Retrived from: https://doi.org/10.1016/B978-0-08-100596-5.21378-4.

Villoria, N.B. (2018). The Food Trade System: Structural Features and Policy Foundations. *Reference Module in Food Science*. Retrived from: https://doi.org/10.1016/B978-0-08-100596-5.21965-3.

Zach, L., Doyle, M.E., Bier, V., Czuprynski, C. (2012). Systems and governance in food import safety: A U.S. perspective. *Food Control*, *27,* (1), 153–162.