Artículo de investigación

Features and Consequences of Food Import Substitution in Russia

Особенности и последствия импортозамещения в России

Características y consecuencias de la sustitución de importaciones en Rusia

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Abstract

The article discusses the features of the import substitution policy and reveals both positive and negative effects on food self-sufficiency of the population of Russia in the sanctions period. The study identified the direct effect of economic sanctions and imposed embargoes (loss of income, rise in prices for food products, reduction in the food basket), as well as the attitude of the population to the policy of food import substitution. The results of the sociological survey in the form of a volunteer survey of the population on the example of a particular region by the method of handout questionnaire are presented. It is concluded that a reorientation to the consumption of domestic food items occurred in the region while reducing the consumption of certain food items.

Keywords: Agricultural sector, food, import substitution, social effect.

Аннотация

В статье рассматриваются особенности политики импортозамещения и выявляются как положительные, так и отрицательные последствия для продовольственной самообеспеченности населения России в период санкций. В исследовании было выявлено прямое влияние экономических санкций и введенных эмбарго (потеря доходов, рост цен на продукты питания, сокращение продовольственной корзины), а также отношение населения к политике импортозамещения продовольствия. Представлены результаты социологического опроса в виде волонтерского опроса населения на примере конкретного региона методом раздаточного анкетирования. Сделан вывод о том, что в регионе произошла переориентация на потребление внутренних продуктов питания при одновременном сокращении потребления определенных продуктов питания.

Ключевые слова: Аграрный сектор, продовольствие, импортозамещение, социальный эффект.

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Resumen

El artículo analiza las características de la política de sustitución de importaciones e identifica consecuencias positivas y negativas para la autosuficiencia alimentaria de la población Rusa durante el período de las sanciones. El estudio reveló el impacto directo de las sanciones económicas y los embargos (pérdida de ingresos, aumento de los precios de los alimentos, reducción de la canasta de alimentos), así como las actitudes públicas hacia la política de sustitución de importaciones de alimentos. Presenta los resultados de una encuesta sociológica en forma de una encuesta voluntaria a la población sobre el ejemplo de una región específica por el método de distribución de cuestionarios. Se concluye que la región se ha desplazado al consumo de alimentos domésticos al tiempo que reduce el consumo de ciertos alimentos.

Palabras clave: Sector agrícola, alimentación, sustitución de importaciones, efecto social.

Introduction

The debate on the effectiveness of the import substitution policy in Russia and its social effect has not subsided for the fifth year. There are diametrically opposed views on the results of import substitution in the economic literature. M. Ivatkina (2018) writes about the failure of the import substitution policy. Imports do exist in Russia but there is no substitution. The dependence of the Russian industry on foreign goods rose up to 93%.

Some opinions are radically different, especially if they concern import substitution in the food market of Russia (Ushachev, 2017; Golubev, 2016; Golovetsky, 2017; Kuznetsov, 2016). In addition, researchers differentiate the results of the import substitution process from the point of view of reduction of the market, production and resource import-dependence.

The aim of the study is to identify the features of the implementation of the import substitution process and investigation of changes in food self-sufficiency of the population of the country and the region in the sanctions period.

Research methods

Theoretical foundations and methodological framework of the study will include the works of Russian and foreign scientists [W. Baer (1972), H. B. Chenery (1979), H. J. Bruton (1998), H. Yilmazkuday (2009), N. A. Suchkova (2009)] and legal-regulatory documents (Doctrine of Food Security of the Russian Federation, 2010). Proposed research methods: economic-statistical, comutational-constructive method; method of comparative analysis and expert assessments. The method of analytical alignment with the assessment of the degree of variability of the actual value of the investigated index relative to the trend line was used to identify trends in the growth of gross agricultural output and the dynamics in the growth of food imports. In addition to specific methods, universal and general scientific approaches are used: dialectics, abstraction, deduction, induction, analysis and synthesis.

Results

Implementation of the import substitution process of agricultural products in Russia at the present stage has its own salient features. Thus, the following features of this process should be noted at the macroeconomic level:

1. **Positive dynamics in the growth of gross agricultural output, including crop products and animal products.**

The agricultural policy which was focused on import substitution since 2014 resulted in the increase in production despite the difficult socio-economic situation in the country. Agriculture remains one of the sectors that has been able to demonstrate positive growth over the past five years (Figure 1). The ban on the food imports from the countries that had supported sanctions against Russia combined with the increase in domestic production improved food security thereby reducing the dependence of the country's economy on external factors.

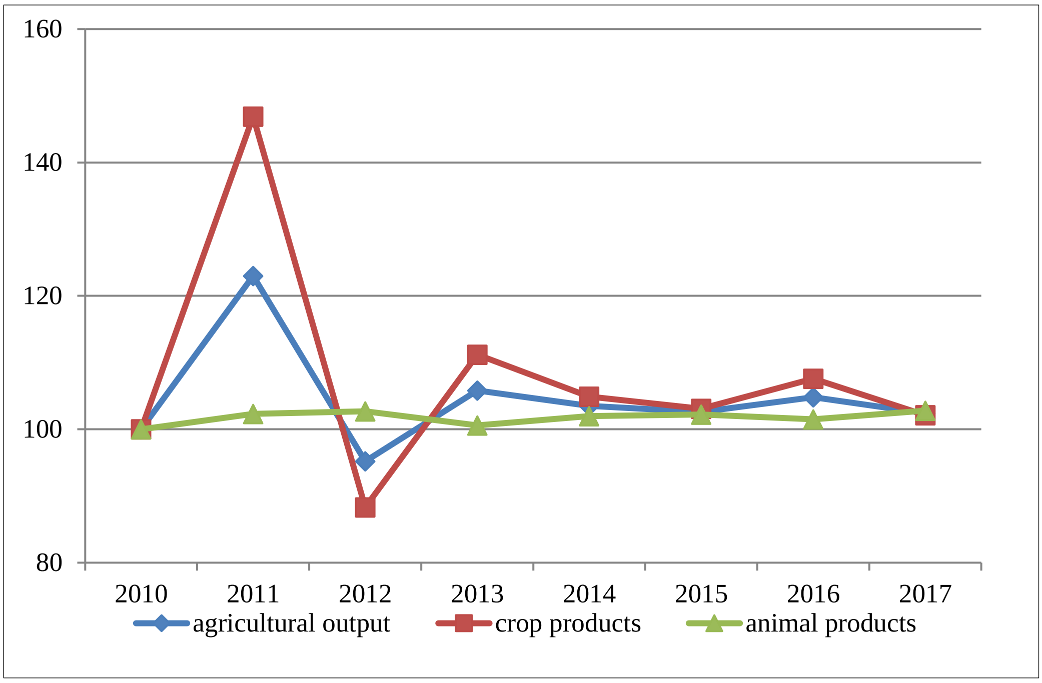

Figure 1–Indexes of agricultural output production (in comparable prices, as a percentage over the previous year)

One of the main trends in the development of import substitution process in Russia is a progressive growth in the production of domestic agricultural output due to the significant restriction of competition owing to the food embargo and the expansion of the amount and forms of state support for agriculture.

2. **The consistent nature of the increase in the cover of imports by exports.**

The method of analytical alignment was applied to study the nature of the dynamics of imports of food items and agricultural raw materials. Figure 2 shows the statistical characteristics of the model.

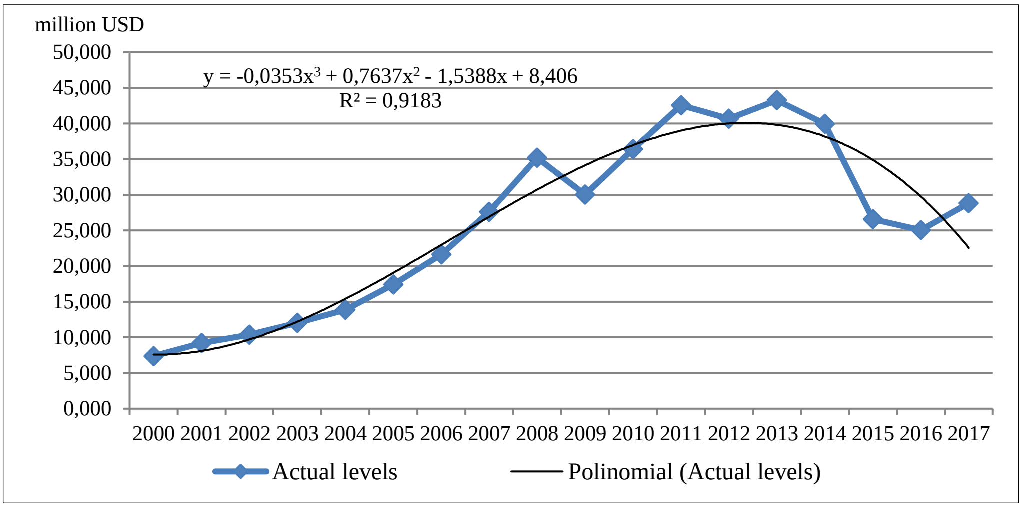

Figure 2 –Formalization of the dynamics of imports of food items and agricultural raw materials

Despite the fact that the reduction in imports was not consistent and in 2017 the total imports of food items and agricultural raw materials increased compared to 2016, the dynamics of cover of imports by exports remains positive (Figure 3).

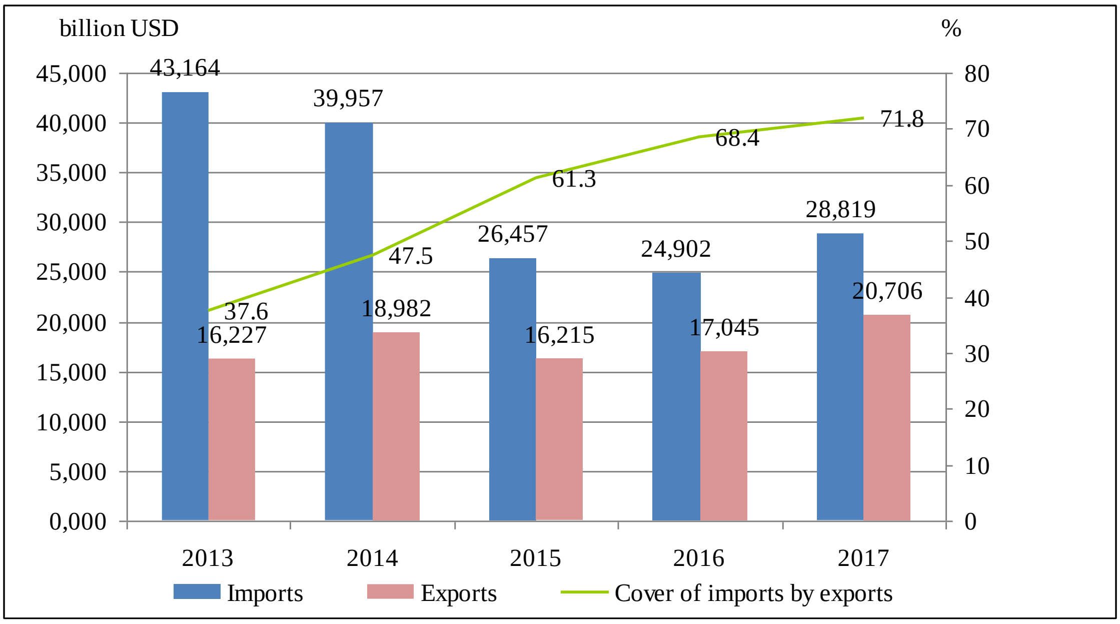

Figure 3 –Dynamics of indexes of foreign trade in food products

3. Contraction of the food market due to the forced diversification of foreign economic relations.

During the food embargo period, imports reduced both in kind and by value (Table 1). The supplies of fresh and frozen poultry meat, fresh and frozen fish, wheat and meslin, meat products and canned meat, raw sugar, white sugar (in kind) decreased to the utmost. The decrease in supply of certain food items that are not produced in Russia indicates a decrease in consumption due to the worsening of the financial reliability of the population and a decrease in effective demand. The reduction of real disposable income forces the population to forgo expensive food items that are not socially significant.

Table1– Dynamics of food imports in Russia

Food items	2014		2017		Deviation of 2017 from 2014			
	thousand tons	million USD	thousand tons	million USD	thousand tons	%	million USD	%
Meat, fresh and frozen	1 011.6	4 271.7	643.1	2 064.9	-368.5	-8.6	-2 206.8	-51.7
Poultry, fresh and frozen	452.5	798.3	227.4	359.9	-225.1	-28.2	-438.4	-54.9
Fish, fresh and frozen	649.2	1 946.4	428.8	1 139.7	-220.4	-11.3	-806.7	-41.4
Milk and concentrated cream	180.9	627.4	239.3	520.2	58.4	9.3	-107.2	-17.1
Butter	147.1	730.6	98.8	530.1	-48.3	-6.6	-200.5	-27.4
Citrus fruit	1 653.3	1 486.0	1 564.9	1 189.2	-88.4	-5.9	-296.8	-20.0
Coffee	154.5	571.6	189.6	639.0	35.1	6.1	67.4	11.8
Tea	172.5	645.5	168.8	525.0	-3.7	-0.6	-120.5	-18.7

Wheat and meslin	396.9	97.0	269.0	39.7	-127.9	-131.8	-57.3	-59.1
Barley	167.8	40.1	168.6	32.7	0.8	2.0	-7.4	-18.5
Corn	52.7	221.3	52.6	182.3	-0.1	-0.1	-39.0	-17.6
Oil	8.8	11.0	25.7	17.1	16.9	153.4	6.1	55.5
Meat products and canned meat	35.0	167.4	17.7	75.0	-17.3	-10.3	-92.4	-55.2
Raw sugar	666.2	280.1	14.4	9.3	-651.8	-232.7	-270.8	-96.7
White sugar	284.8	178.9	246.3	116.9	-38.5	-21.5	-62.0	-34.7
Cacao-bean	60.9	213.2	53.7	136.9	-7.2	-3.4	-76.3	-35.8
Cacao products	128.2	629.4	99.3	461.2	-28.9	-4.6	-168.2	-26.7

Resource: Federal Customs Service of Russian Federation. – Access mode: http://customs.ru/index.php?option=com_newsfts&view=category&id=52&Itemid=1978

4. Change of the regional structure and commodity composition of food imports.

The reduction in imports from the Western countries is accompanied by a change in the regional structure of imports of food items and agricultural raw materials. "Lost" volumes of food items from the Western countries were replenished by imports from other countries. Despite the fact that the European Union remained the main trading partner in 2015 with a share of 21.5% in the imports of food items and agricultural raw materials, there was a significant expansion of foreign economic relations with the countries of Latin America, Asia and Africa. Brazil is the second in the structure of imports (9.7%) and China is the third (5.8 %). However, the continuation of the sanctions regime did not have a major impact on the total value of food imports from the European Union which increased by more than 1 billion USD.

5. Uneven growth of domestic production and supply of some food items and unsatisfactory results of import substitution for other items.

As it was noted above, there was a significant decrease in the growth rate of food imports after the imposed food embargo. The increase in domestic production caused by restrictions in foreign trade and the expansion of state support measures because of the reduced supplies from abroad provided import substitution (Table 2).
It is possible to access the occurring processes as rather considerable. The best results of import substitution during the embargo period were achieved in such items as vegetables, potatoes, pork, poultry, eggs. The worst results of import substitution were obtained for such items as beef and milk.

Table 2 – Dynamics of import substitution of certain food items, thousand tons

Indexes	2013	2014	2015	2016
Potatoes				
Annual increase in production, thousand tons	651	1318	2144	-2538
Increase/decrease in imports per year, thousand tons	29	281	-117	-191
Import substitution, thousand tons	622	1037	2261	-2347

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Milk and dairy products				
Annual increase in production, thousand tons	-1227	262	6	-38
Increase/decrease in imports per year, thousand tons	929	-290	-1238	-373
Import substitution. тыс. т	-2156	552	1244	335
Beef, including by-products				
Annual increase in production, thousand tons	3	-5	14	101
Increase/decrease in imports per year, thousand tons	120	-58	-228	-82
Import substitution, thousand tons	124	53	241	182
Pork, including by-products				
Annual increase in production, thousand tons	321	1666	282	241
Increase/decrease in imports per year, thousand tons	-43	746	-359	-73
Import substitution, thousand tons	364	920	640	314
Poultry, including by-products				
Annual increase in production, thousand tons	205	452	362	159
Increase/decrease in imports per year, thousand tons	-25	-77	-206	-18
Import substitution, thousand tons	230	529	567	177
Vegetables and cucurbits crops				
Annual increase in production, thousand tons	30	776	892	264
Increase/decrease in imports per year, thousand tons	11	112	-293	-315
Import substitution, thousand tons	19	664	1185	579
Eggs and egg products				
Annual increase in production, thousand tons	-747	573	711	989
Increase/decrease in imports per year, thousand tons	-139	29	1	2
Import substitution, million eggs	-608	544	710	987

Thus, the policy of import substitution resulted in an increase in food production and, as a consequence, the degree of self-sufficiency of the population with domestic food in accordance with the Doctrine of Food Security (2010). At the national level not only sustainable production but also the possibility of selling products abroad for such items as grain and potatoes are observed. There is an active export policy and expansion of foreign markets for grain products.

Food import substitution has its own social effects. The most commonly found in the economic literature is the assessment of the positive effects of this process, namely, the growth in self-sufficiency, a reduction in the share of imports, an increase in economic activity, the growth in the output of the sector, the growth of employment. However, there are also negative effects. These include the rise in the cost of food due to the forced diversification of foreign economic relations; reduction of supply in the domestic food market; acceleration of food inflation at the initial stage of import substitution; increase in the cost of a minimum subsistence basket of food. In order to assess the social effects of food import substitution at the level of a particular region a voluntary survey of the population of the Saratov region was conducted by the handout questionnaire method. The sampling scope is 360 people.

The study revealed:

- Direct effects of economic sanctions and imposed embargo (loss of income, rise in prices for food products, reduction in the food basket) as it is shown in Figure 4.
- Attitude of the population to the policy of food import substitution shown in Figure 5.

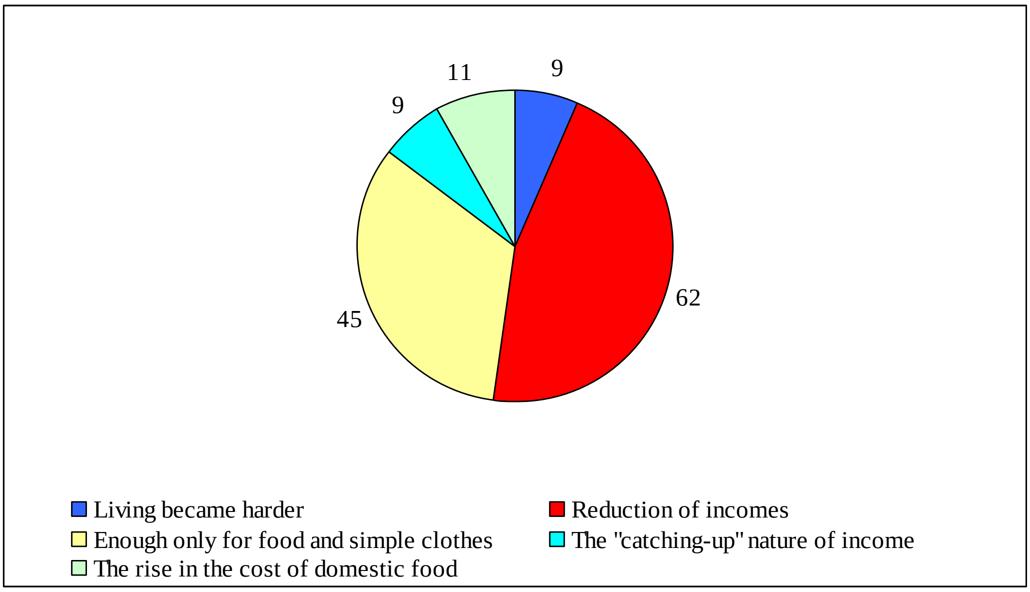

Figure 4 – Assessment of the effect of sanctions rollout and food embargo, % of the total number of respondents

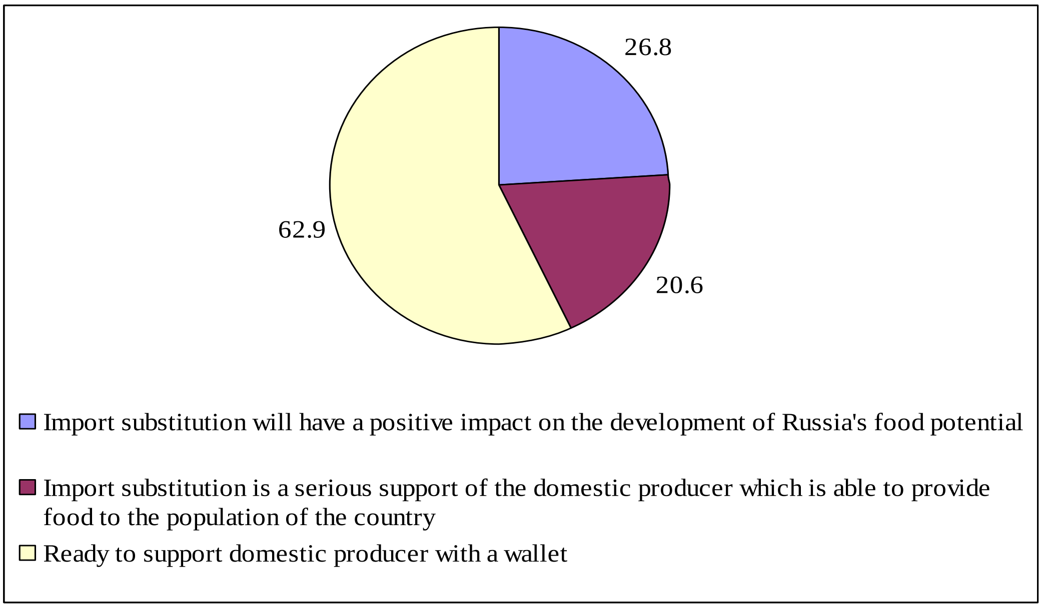

Figure 5 – Assessment of agro-food import substitution policy, % of the total number of respondents

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First, there has been a reorientation to the consumption of domestic items while reducing the consumption of certain food items (Table 3).

Table 3– Reduction in the consumption of certain food items

Food items	Purchased items, %		Reduced consumption, %
	Domestic	Imported	
Bread	100	0	3.3
Bird eggs	100	0	3.6
Milk	98.3	1.7	20.5
Flour	100	0	16.0
Meat	82.4	17.6	37.2
Poultry	95.0	5.0	13.0
Fermented dairy products	92.7	7.3	7.4
Cereals	100	0	5.2
Macaroni products	93.5	6.5	6.1
Vegetables	68.7	31.3	20.1
Fruits	36.1	63.9	24.2
Salt	100	0	0
Sugar	88.7	11.3	2.1
Butter	98.6	1.4	11.9
Meat products (sausage, frankfurters, etc)	90.6	9.4	23.7
Oil	100	0	0.6
Sweets and confectionary products	84.8	15.2	13.2
Juices, water, alcohol-free beverages	84.2	15.8	2.5
Cheese	89.2	10.8	19.3
Oil-containing products (margarine, spread, etc.)	100	0	7.6
Fish, fish products	72.7	27.3	14.9
Alcoholic beverages	86.7	13.3	6.9
Tea, coffee	14.6	85.4	11.2

Currently, the food basket of a resident of the Saratov region consists of food items of domestic production, with the exceptions of the items noted in Figure 6. Thus, 40.2% of respondents believe that imported food items are more expensive, but have not better quality than Russian analogs.

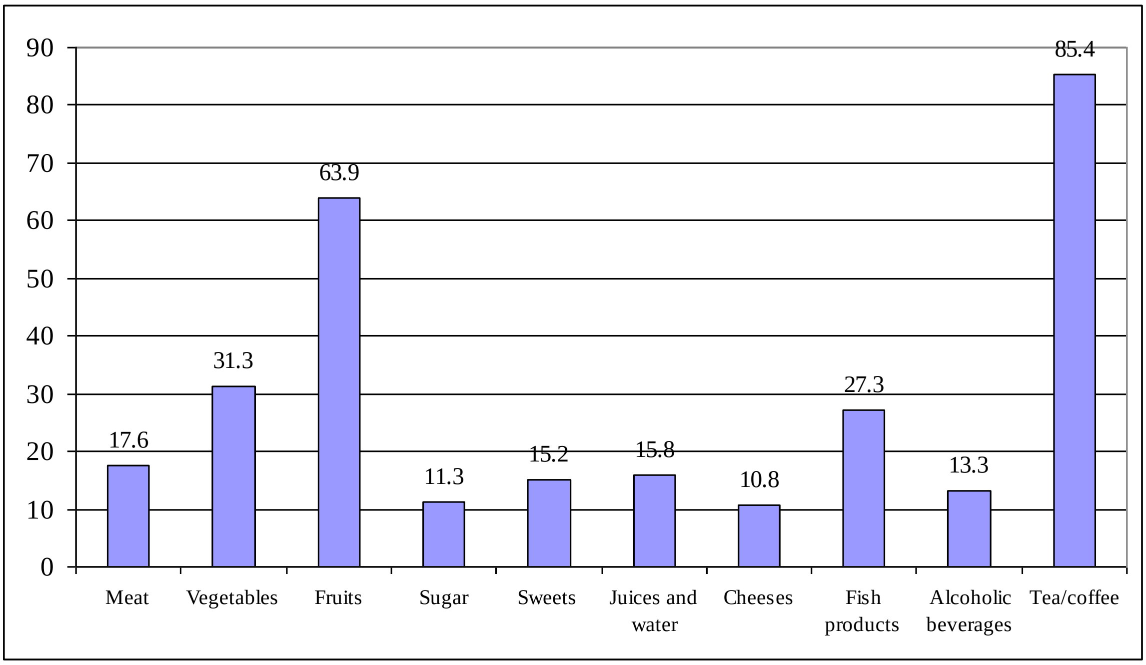

Figure 6– Imported food share in the food basket by certain items, %

Secondly, only 14.6% of respondents believe that the assortment of domestic food items has grown and they can be purchased in the same amounts and at the same prices. When choosing, the item price is crucial for the majority of the region residents (47.4% of the survey participants spoke in favor of this criterion), and for 22.1% the quality of the consumed items is more important. Hence, the choice of the majority of respondents in favor of domestic food items (74.9%) is quite understandable since 59.6% of respondents recognize imported food items as more expensive than domestic ones.

The vast majority of the Saratov region residents (87.2%) noted the domination of domestic food items on the shop shelves and in the food markets of the city and the region. At the same time, according to 78.3% of respondents, their share in relation to imported products remained unchanged after the sanctions rollout. Moreover, every fifth respondent is sure that the volume of domestic production has increased. Despite these restrictions and the difficult economic situation as a whole, the diet has not undergone significant changes for ¾ of the region residents. First of all, it concerns the quality of purchased items (only 12.7% of respondents confirmed that they reduced their requirements for food quality). However, every fifth respondent admitted that the diet of his/her family has narrowed after the sanctions rollout.

The food basket of the region resident consists mainly of items of domestic production with the exception of meat (the share of imported meat was 17.6%), vegetables (31.3%), fruit (63.9%), sugar (11.3%), sweets and confectionery products (15.2%), juices and water (15.8%), cheeses (10.8%), fish products (27.3%), alcohol beverages (13.3%) and tea/coffee (85.4%). At the same time, respondents believe that most of the imported analogs can be successfully replaced by the products of domestic producers (thus, 68.3% do not doubt that the Russian producer is able to provide all groups of food items in full).

When choosing, the item price is crucial for the majority of residents of the region (47.4% of the survey participants spoke in favor of this criterion), and for 22.1% the quality of the consumed food items is more important and for every fourth respondent is at the same extent. Hence, the choice of the majority of respondents in favor of domestic food items (74.9%) is quite understandable, since 59.6% of respondents (summing up two response lines) recognize imported food items as more expensive than domestic ones. Moreover, 40.2% believe that imported food items are more expensive, but have not better quality than Russian analogs. Additional reasons for choosing a domestic producer are "the desire to support the Russian producer" as well as the fact that domestic food items are "fresher", "more delicious", "more native", "more nutritious" and "more environmentally friendly". The prevailing opinion among those who make a choice in favor of foreign food items (14.9%) is that they have higher quality, often cheaper and "more diversified". A good correlation of this choice from gender, age of respondents and place of residence should also be noted. For example, residents of large cities by 2.7 times more often choose foreign food items. The same can be noted for men (they choose foreign food by 2.3 times more often) and two age categories – "18-30 years" and "31-40" years (by 1.7-1.9, respectively). "Tea", "cheese", "expensive alcohol", "cigarettes", "chewing gum", "diet food", "biologically active additives", "chocolate", "fast food" should be noted among the foreign food items mentioned by respondents and preferred to domestic ones.

Despite the choice in favor of domestic producer, many survey participants noted the rise in the prices of domestic food items so that they cannot buy them on the former scale (this position was noted by 28.8% of respondents). Amid the registered rise in the prices, every fourth respondent noted the "catching-up" nature of their income, because of this they are under necessity to reduce the volume of their consumer basket (at the same time, as it was noted earlier, trying not to save on the quality of the consumed items). Notably that 62.4% of the respondents confirmed a decrease in the level of their own income in the sanctions period and it points to significant changes in the structure of the overall consumption strategy of the region residents, which is undoubtedly of interest for further more detailed investigation of this aspect. In other words, the majority of the population tries not to save to the utmost acting against the established amounts of the family diet. However, almost one every third region resident is already under necessity to limit his/her consumption. Surely, this situation encourages searching for additional sources of income. It was found that a search for additional employment (77.2%) and private subsidiary farming (33%) are the most popular strategies to increase their own income. Traditionally, the age category "18-30 years" connects the growth of their financial situation with the potential move to a metropolis (72.3% of the response line).

More than half of the respondents own a garden plot or other subsidiary farm. 81.6% of respondents declared that production on the individual plot promotes a certain compensation of a low salary and 32.1% of respondents spoke about compensation of low pensions. The desire to produce "environmentally friendly products" was accentuated by 66.1% of respondents among the non-economic reasons. Only every third respondent engaged in subsidiary farming derives cash income from the sale of these products. The received money is spent on everyday necessities, mainly for payment of housing maintenance and utility services (47.2 %), buying clothes (38.6%). "Purchase of other food items" (34.2%) – takes the third place in the conditional rating of spending the earnings, and that shows a certain proportion of the region residents who is under necessity to limit their food budget. 79.7% of the Saratov region residents, to various extent, have credits or borrow money from friends. It is noteworthy that almost every fifth of them (17.4%) began to borrow money more often over the past four years and that reflects the increasing frequency of material problems.

Conclusions

The study of the features of the implementation of the import substitution policy in the agro-industrial sector of Russia clearly showed the positive results achieved within the process. This is reflected in the dynamics and growth rates of gross agricultural output and in the increase in exports of food items and agricultural raw materials. At the same time, analyzing the state of general socio-economic well-being of Russian citizens it should be noted that it is not supportive in the conditions of sanctions. Thus, 82.2% of respondents are worried about their future. However, such sentiments strongly contrast with optimism towards the policy of import substitution as a whole. Every fourth resident of the Saratov region (26.8%) admits that "import substitution will have a positive effect on the development of Russia's food potential, taking into account the competent support of domestic producers". 62.9 % of the region residents are ready to support domestic producers with a wallet. Only 15.6% of respondents clearly doubt about the success of food countermeasures of our country (summing up two response lines). 12% of those who do not observe the objective prerequisites for the growth of agriculture and note only the long-term prospect of implementing the import substitution policy can be conditionally subsumed to this category.

In summary, respondents were asked to give a direct assessment of the effects of sanctions imposed on Russia. The majority (41.6%) of them do not feel their effects on the level of their living. However, the ratio of those for whom life has become harder in relation to those people who believe that "on the contrary living has become easier" is 4.5:1. And this assessment is much more optimistic than the assessment of the situation in a particular region.

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