IMPORT SUBSTITUTION PROCESS IN THE RUSSIAN ECONOMY IN THE CONTEXT OF INTERNATIONAL SANCTIONS: ISSUES OF THEORY AND PRACTICE

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ABSTRACT

The relevance problem of import substitution is explained with the practicability of using a systematic approach to analyze the real state of the Russian economy. This article provides a brief historical background on the origin of the idea of import substitution in the XVIII century and its further development. It considers its essence as a response to international sanctions imposed by the USA, the EU, and their allies. Noting that import substitution should be distinguished from protectionism, which is based on different aims. The mechanisms of import substitution by three main categories are indicated. There is a list of rules that must be followed when developing strategies for import substitution. The article highlights the negative effect of the sanction imposition, reflected on the Russian foreign trade in 2016–2017, compared to 2013, as well as on the supply of high-tech investment products. Also, it gives particular examples of the current situation in some spheres of economic activity and identifies threshold requirements in industrial production in the world practice and Russia. Focusing on the effective re-equipment of the Russian economy, it is necessary to manufacture competitive labour tools in a certain order: from the production of labour tools for the machine-tool industry to their production for the engineering industries and to the production for other sectors of the economy. Attention should be paid to the quality of the workforce capable of servicing advanced technologies and equipment. There are tasks whose introduction will contribute to a successful solution of the problem of import substitution. The aim of this article is to identify "bottlenecks" in the development of the Russian economy and suggest measures to eliminate them, focusing on its essential components. Particular measures to increase the real potential of the country are suggested.
1. INTRODUCTION
Perhaps not all identified drawbacks in the development of the Russian economy can be leveled by import substitution, but this process is a key to restoring the sovereignty of the domestic economy.

The scientific problem of the article is devoted to the development of a more complete picture of the specific nature of import substitution in Russian conditions, in contrast to protectionism, which is unthinkable without new industrialization and is its immediate priority.

Aim of the study. Clarification of specific features of import substitution policy, the result of its introduction will be domestic competitive products and an increase in volumes of knowledge-intensive and high-tech products.

Tasks of study.
- Analysis of the components of the policy of protectionism and import substitution.
- Justification of proposals for a successful solution of problems on import substitution in the economy.

2. METHODOLOGY
The novelty of the research is in reviewing the priorities in the national policy caused by the sanctions pressure of Western countries and the search for new ways of economic development of Russia. The article considers clarification of peculiarities of import substitution in theoretical terms.

A systematic approach was used on the basis of a dialectical method of studying objects. Mathematical-statistical methods were used.

The theoretical and practical importance of research. The peculiarities of import substitution were suggested on the basis of summarizing the research of scientists, which can be used in the development of economic science. The materials of the work can be used by universities in training and retraining of technical and economic specialists.


3. RESULT AND DISCUSSION
The policy of import substitution was a result of the policy of protectionism, developed by theorists of mercantilist theory in the XVI-XVII centuries. The policy of protectionism was aimed at protecting the national economy from foreign competition. K.Marx [1] wrote about the policy of protectionism: «The system of protection was an artificial means of manufacturing manufacturers, of expropriating independent laborers, of capitalizing the national means of production and subsistence, and of forcibly abbreviating the transition from the medieval to the modern mode of production».

In Russia, in the second half of the XVII century, the policy of protectionism was adopted by the
foremost representative of Russian economic thought A.L. Ordyn-Nashchokin. He issued The New Trade Charter in 1667, which became a major legislative act regulating trade duties [2]. He was the predecessor of Peter I, in whose foreign trade policy was the idea of an active trade balance.

Researchers [3; 4; 5; 6; 7] revealed a number of positive and negative aspects of protectionist foreign policy, which characteristics are given in Table 1.

F. Kotler, G. Armstrong, and other researchers paid attention to the methods of protectionism in the global marketing environment, noting that when selling goods to another country, a company faces both trade barriers and trade facilitating factors [8].

The idea of import substitution was put forward in XVII century by A. Hamilton (1757-1804), the American statesman and the first secretary of the US treasury in the government of G. Washington, who developed a system of measures to strengthen the US economy and authorized the American national currency - the dollar [9].

In XIX century his idea was developed by the German economist F. List (1789–1846), the author of the book “The National System of Political Economy” (1841), a forefather of a new historical school. He developed the concept of successive stages of production; gave a justification of the active economic policy of the state and the need to unite various individuals and their interaction to achieve the expected results [10].

Table 1: The characteristics of foreign economic policy

<table>
<thead>
<tr>
<th>№</th>
<th>Positive aspects of protectionism policy</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Protection of domestic producers from foreign competitors</td>
<td>McConnell et al. (2018), Iokhin (2005), Risin et al. (2014), Kosov et al. (2015)</td>
</tr>
<tr>
<td>2</td>
<td>Support of development of emerging manufacturers and industries</td>
<td>McConnell et al. (2018), Iokhin, (2005), Risin et al. (2014)</td>
</tr>
<tr>
<td>3</td>
<td>Stimulation of production and providing employment in the country</td>
<td>McConnell et al. (2018), Iokhin (2005), Risin et al. (2014)</td>
</tr>
<tr>
<td>4</td>
<td>Ensuring the economic and national security of the state</td>
<td>McConnell et al. (2018), Iokhin (2005), Risin et al. (2014)</td>
</tr>
<tr>
<td>5</td>
<td>Prevention of reorientation of consumer demand from domestic products to the imported one</td>
<td>Iokhin (2005)</td>
</tr>
<tr>
<td>7</td>
<td>Maintenance of the required level of the country’s trade balance</td>
<td>Iokhin (2005), Kosov et al. (2015)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>№</th>
<th>Negative aspects of protectionism policy</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>The slowdown in scientific and technological progress</td>
<td>Iokhin (2005)</td>
</tr>
<tr>
<td>2</td>
<td>Neutralization of external competition factors</td>
<td>Iokhin (2005)</td>
</tr>
<tr>
<td>3</td>
<td>Individualization of structural changes in the national economy</td>
<td>Iokhin (2005)</td>
</tr>
<tr>
<td>4</td>
<td>Price increase not only for imported but also for similar goods of domestic production</td>
<td>McConnell et al. (2018), Iokhin (2005), Risin et al. (2014), Kosov et al. (2015)</td>
</tr>
<tr>
<td>5</td>
<td>Redistribution of consumer income in favour of the state</td>
<td>McConnell et al. (2018), Iokhin (2005), Kosov et al. (2015)</td>
</tr>
</tbody>
</table>

In Russia, the idea of import substitution was adopted by an eminent statesman S.Y. Witte (1849–1915), who was strongly influenced by German economic studies, primarily by F. List. In his book, "National Economy and Friedrich List" Witte justified the program of accelerated industrialization of the country. He considered the rise of agriculture as a “national general economic task,” a basis for industry development [10].
In the second half of XX century some countries, including Latin America, carried out the policy of import substitution. The main ideologue of the concept of import substitution was the Argentine economist R. Prebisch [11].

In modern conditions, there is a close relationship between the countries of the world, which is primarily in the mutual exchange of products on the basis of the international labour division. However, economic globalization has not only undeniable advantages but also significant disadvantages. The Nobel Prize winner in economics, J. Stiglitz (2001) [12] believes that "the benefits of globalization were often less than its advocates claimed, and its price is much higher."

Since 2014, in Russia, the import substitution has become a priority in state policy, which was caused by a sharp aggravation of the geopolitical situation for the country, the introduction of Western sanctions and Russian response measures to limit import from the countries, which support these sanctions.

Import substitution is to reduce or stop importing of a certain product due to production same or similar goods in the country [13].

According to Creteil J.-L. Truel and J. Pashchenko [14], the scientists of the Paris University, it is necessary to distinguish import substitution from pure protectionism. If the aim of import substitution is to help increase the competitiveness of the national economy in the long term, but the main task of protectionism is to close the domestic market while maintaining backwardness, rather than making competitive new industries that produce high-quality and demanded products. They distinguish the mechanisms of import substitution by three main categories (Figure 1): restricting imports, stimulating local production and stimulating the consumption of domestic products. These tools have different efficiency in terms of industrial policy.

![Figure 1: The mechanisms of import substitution](image-url)
To make Russian products competitive in the world market, it is necessary to improve all elements of the productive forces and production relations in the country. They should be in absolute interconnection and interdependence with each other, fully immersed into the economic system. The elements of the productive forces - the means of labour, the objects of labour and labour force should in the future correspond to the sixth technological order and it would require considerable financial resources and certain efforts supported by the state.

At the same time, it is necessary to strengthen ties between all participants of the production economic system: education, science, industry and support services. If there are no such ties or they are weak, neither well-developed science nor education will increase the competitiveness of products. A striking example is a huge gap between a high scientific and innovative potential of Russia and a rather low level of output of innovative products in the industry. In general, “the Russian innovation system is strong at the input and relatively weak at the output” [15] and one of the main reasons is probably the lack of interaction between agents.

The industries, especially in the manufacturing industry, are united not only with input/output relations but also with technological ties. This concept is similar to the concept of "the technical system", focused on combinations of technologies and on the conditions in which they operate [16]. However, the competitive advantages in several industries in Russia are not enough if they are not involved in the economy.

According to [17], in the development of an import substitution strategy, the following rules should be observed:
- identification of the main element of import dependence;
- sequential development of domestic production for import substitution;
- complexity, systematic development;
- an assessment of prospects;
- prioritization;
- state regulation and state support.

Each of these rules has its own function in the process of import substitution and works for a common goal. Before considering the necessity and practicability of import substitution in the country's economy, we characterize its status in the context of international anti-Russian sanctions.

The negative effect of the introduction of sanctions reflected, first of all, on the indicators of foreign trade, which is central in the international economic relations. Export, import and external turnover of the Russian Federation in 2016 and 2017 in comparison to 2013 (the year before the imposition of sanctions) are presented in Table 2.

![Table 2](http://TUENGR.COM/V10A/10A09E.pdf)

Table 2: Export, import and external turnover in RF in 2013, 2016 and 2017, billions of US dollars [18; 19]

<table>
<thead>
<tr>
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<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Export</td>
<td>526.0</td>
<td>285.7</td>
<td>357.8</td>
<td>315.3</td>
<td>182.4</td>
<td>227.5</td>
<td>841.3</td>
<td>468.1</td>
<td>585.3</td>
</tr>
<tr>
<td>Import</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>External turnover</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>% to 2013</td>
<td>100.0</td>
<td>54.3</td>
<td>68.0</td>
<td>100.0</td>
<td>57.8</td>
<td>72.1</td>
<td>100.0</td>
<td>55.6</td>
<td>69.6</td>
</tr>
</tbody>
</table>
Data analysis indicates the collapse of indicators in 2016 compared to 2013, which went up to a loss of almost 1/2 of the exports volume, imports and external turnover of the RF. In 2017, the situation improved a little, but still, losses for all indicators were about 30%. Of course, such a significant decline in the components of foreign trade was a result of not only economic sanctions, but also of continuous fall in world prices for energy resources, and ruble devaluation, etc.

There is a structure of the formed export and import of Russia in 2013 and 2017 (Tables 2 and 3). The data shows that in the conditions of sanctions pressure of Western countries with a decrease in exports in 2017 by 32% compared to 2013, the EU is still a key partner of Russia in both exports and imports. So, if in 2013 the EU had 53.7% of total Russian exports, then in 2017 it was 44.6%. For comparison: the trade intensity with the CIS and China in 2017 was lower than that with the EU in 3.3 and 4.1 times, respectively (Table 3).

<p>| Table 3: The country structure of Russia exports in 2013 and 2017 [18; 19] |
|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|</p>
<table>
<thead>
<tr>
<th>Rank</th>
<th>Partner</th>
<th>2013</th>
<th>2017</th>
<th>Rank</th>
<th>partner</th>
<th>2013</th>
<th>2017</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EU</td>
<td>282.2</td>
<td>53.7</td>
<td>1</td>
<td>EU</td>
<td>159.7</td>
<td>44.6</td>
</tr>
<tr>
<td>2</td>
<td>CIS</td>
<td>74.0</td>
<td>14.1</td>
<td>2</td>
<td>CIS</td>
<td>48.1</td>
<td>13.4</td>
</tr>
<tr>
<td>3</td>
<td>China</td>
<td>35.6</td>
<td>6.8</td>
<td>3</td>
<td>China</td>
<td>38.9</td>
<td>10.9</td>
</tr>
<tr>
<td>4</td>
<td>Turkey</td>
<td>25.4</td>
<td>4.8</td>
<td>4</td>
<td>Turkey</td>
<td>18.7</td>
<td>5.2</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>19.7</td>
<td>3.7</td>
<td>5</td>
<td>the Republic of Korea</td>
<td>12.3</td>
<td>3.5</td>
</tr>
<tr>
<td>6</td>
<td>the Republic of Korea</td>
<td>14.8</td>
<td>2.8</td>
<td>6</td>
<td>USA</td>
<td>10.6</td>
<td>3.0</td>
</tr>
<tr>
<td>7</td>
<td>USA</td>
<td>11.1</td>
<td>2.1</td>
<td>7</td>
<td>Japan</td>
<td>10.4</td>
<td>2.9</td>
</tr>
<tr>
<td>8</td>
<td>Switzerland</td>
<td>8.7</td>
<td>1.7</td>
<td>8</td>
<td>India</td>
<td>6.5</td>
<td>1.8</td>
</tr>
<tr>
<td>9</td>
<td>India</td>
<td>7.0</td>
<td>1.3</td>
<td>9</td>
<td>Egypt</td>
<td>6.2</td>
<td>1.7</td>
</tr>
<tr>
<td>10</td>
<td>Taiwan (China)</td>
<td>4.4</td>
<td>0.8</td>
<td>10</td>
<td>Algeria</td>
<td>4.6</td>
<td>0.8</td>
</tr>
<tr>
<td></td>
<td>Top-10</td>
<td>482.9</td>
<td>91.8</td>
<td></td>
<td>Top-10</td>
<td>316.0</td>
<td>88.3</td>
</tr>
<tr>
<td></td>
<td>Other countries</td>
<td>43.1</td>
<td>8.2</td>
<td></td>
<td>Other countries</td>
<td>41.8</td>
<td>11.7</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>526.0</td>
<td>100.0</td>
<td></td>
<td>Total</td>
<td>357.8</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The sustainability of the country structure should be noted. In 2017, as in 2013, the first seven positions were occupied by the same countries: the EU, the CIS, China, Turkey, Japan, the Republic of Korea and the USA. The share of 10 countries was 91.8% in 2013 and 88.3% of total exports in 2017, i.e., a decrease was 3.5 percentage points (p.p.).

In addition, there was a significant change in the structure of Russian exports. If in 2016 and 2017 59.2 and 60.4% of exports were for mineral products (169.1 and 216.2 billion dollars), these figures decreased by 12.9 and 11.1 p.p. compared to 2013 (by 206.7 and 159.6 billion dollars, respectively).

As S. Afontsev notes [20], the country structure of Russian exports is mainly determined with the directions of hydrocarbon supply. The current focus on predominantly pipeline supply channels means high inertia in the export geography and makes it impossible for the trade flows to maneuver quickly in response to changes in the political environment of cooperation with key partners.

As for imports, the stable position of the same seven countries should be noted, and the share of 10 countries in total imports in 2013 was 90.0%, in 2017 - 87.7%, i.e. the decrease was 2.1 p.p. (by 83.8 billion dollars) (Table 4).
Table 4: The country structure of imports in RF in 2013 and 2015 [18; 19]

<table>
<thead>
<tr>
<th>Rank</th>
<th>Partner</th>
<th>Billion dollars</th>
<th>%</th>
<th>Rank</th>
<th>Partner</th>
<th>Billion dollars</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EU</td>
<td>134.3</td>
<td>42.6</td>
<td>1</td>
<td>EU</td>
<td>86.9</td>
<td>38.2</td>
</tr>
<tr>
<td>2</td>
<td>China</td>
<td>53.1</td>
<td>16.8</td>
<td>2</td>
<td>China</td>
<td>48.0</td>
<td>21.1</td>
</tr>
<tr>
<td>3</td>
<td>CIS</td>
<td>39.0</td>
<td>12.4</td>
<td>3</td>
<td>CIS</td>
<td>24.9</td>
<td>11.0</td>
</tr>
<tr>
<td>4</td>
<td>USA</td>
<td>16.5</td>
<td>5.2</td>
<td>4</td>
<td>USA</td>
<td>12.6</td>
<td>5.5</td>
</tr>
<tr>
<td>5</td>
<td>Japan</td>
<td>13.6</td>
<td>4.3</td>
<td>5</td>
<td>Japan</td>
<td>7.8</td>
<td>3.4</td>
</tr>
<tr>
<td>6</td>
<td>The Republic of Korea</td>
<td>10.3</td>
<td>3.3</td>
<td>6</td>
<td>The Republic of Korea</td>
<td>6.9</td>
<td>3.0</td>
</tr>
<tr>
<td>7</td>
<td>Turkey</td>
<td>7.3</td>
<td>2.3</td>
<td>7</td>
<td>Turkey</td>
<td>3.4</td>
<td>1.5</td>
</tr>
<tr>
<td>8</td>
<td>Brazil</td>
<td>3.5</td>
<td>1.1</td>
<td>8</td>
<td>Vietnam</td>
<td>3.3</td>
<td>1.5</td>
</tr>
<tr>
<td>9</td>
<td>India</td>
<td>3.1</td>
<td>1.0</td>
<td>9</td>
<td>Brazil</td>
<td>3.2</td>
<td>1.4</td>
</tr>
<tr>
<td>10</td>
<td>Switzerland</td>
<td>3.0</td>
<td>0.8</td>
<td>10</td>
<td>India</td>
<td>2.9</td>
<td>1.3</td>
</tr>
<tr>
<td></td>
<td>Top-10</td>
<td>283.7</td>
<td>90.0</td>
<td></td>
<td>Top-10</td>
<td>199.9</td>
<td>87.9</td>
</tr>
<tr>
<td></td>
<td>Other countries</td>
<td>31.6</td>
<td>10.0</td>
<td></td>
<td>Other countries</td>
<td>27.6</td>
<td>12.1</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>315.3</td>
<td>100.0</td>
<td></td>
<td>Total</td>
<td>227.5</td>
<td>100.0</td>
</tr>
</tbody>
</table>

The current situation was caused by a decrease in imports of high-tech investment products, where there are significant restrictions, and sometimes the impossibility of compensation from other sources. There was a decrease in purchases of food products and agricultural raw materials, and other components of imports.

Then, let’s identify the import dependence of some particular components of the economy. Thus, scientists [21] believe that the worst situation is with the production potential of mechanical engineering, the industry that should provide the national economy with the means of labour, and this was the result of many years of inattention to the production of machinery and equipment of investment purposes.

According to the authors’ calculations, the level of capacity utilization in 2014 in the production of machinery and equipment was 40%. According to Rosstat [18; 22], the level of use of the average annual production capacity only in the production of metal-cutting machines in 2014–2015; 2016 and 2017 was respectively 17.5; 14.4 and 19.5%. The production volumes of metal-cutting machines in 2010, 2013–2017 are in Figure 2 [18; 19].

![Figure 2: Production of metal-cutting machines in 2010, 2013–2017](http://TUENGR.COM/V10A/10A09E.pdf)

Analyzing the data, we note that there were very small production volumes of metal-cutting machines at domestic enterprises (from 2.8 thousand units in 2010 to 4.2 thousand units in 2016 and 2017) and with the use of imported details.
Vodomerov [23] focuses on the unprecedented decline in production of means of labour by different types in tens and hundreds of times during the years of reform. Imported equipment began to dominate at the market, and many types of machine tools of domestic production are manufactured with a high proportion of foreign components. He also quotes the statement of the Deputy Chairman of the Government of the Russian Federation, D.O. Rogozin, who treated the foreign supply of machines as a “second needle” - along with the oil and gas one - capable of moving the country into “technological slavery”.

As a result, a huge flow of similar, but higher-quality products came from abroad (845 thousand in 2013, 788 and 620 thousand machines, respectively, in 2014 and 2017, with more than 95% of the total supply was from far foreign countries [18; 19] (Figure 3).

Buying abroad individual machines and equipment for some enterprises, L. Orlenko believes [24], is strategically unprofitable for the country, as when purchased machines are depreciated or broken, and new foreign machines must be bought, i.e. such dependence on the West becomes permanent. He stresses that at present the share of imports in the machine tool industry is more than 90%, and in the electronic industry - 80–90%. According to the Ministry of Industry and Trade, with the current methods, it is possible to reduce imports in these sectors up to 50–60% by 2020, i.e., it will take about 20 years to complete import substitution.

\[\text{Figure 3: Imports of metal-cutting machines in 2010, 2013–2017}\]

As researcher V. Faltsman [25] notes, metal-cutting machines are the main technological equipment of both defense and civil engineering, but the production of these products in Russia has practically stopped. Import is almost 100% in the national economy. Low competitiveness of the domestic machine industry threatens the development of the military-industrial sector.

It is difficult to use third-country markets for this purpose, as modern dual-purpose machines are often equipped with location control sensors, and are connected to the Internet, and sometimes have hidden modules for transmitting information about their products. However, Russia can receive machines through importers who are not affiliated with Western companies, i.e. it is a question of the proposal of the Federal Antimonopoly Service on legalization of parallel imports of goods without direct contracts with their owners.

According to N. Vodomerov’s calculations, for effective technical re-equipment of enterprises in various sectors of the economy, it is necessary to put into operation 20 machine-tool factories. This will require 20-25 billion rubles of investments, that is, almost 30 times less than the cost of the program on development and introduction of the 2018 World Cup.
As for the agrarian sector, the comparison of exports and imports of food products and agricultural raw materials (except textiles), as well as the indicators ratios are in Table 4 [18 19].

As it shows, there is still large-scale imports of food products and agricultural raw material (in 2013, 2016 and 2017, respectively, 43255; 25072 and 28,924 million dollars.). Import supply in 2016 and 2017 were respectively 58.0 and 66.9% to the level in 2013, i.e., dependence on foreign supplies was significantly reduced. At the same time, the export did not overcome the import in those periods (Table 5).

Table 5: The ratio of exports and imports of food products and agricultural raw materials (except textiles)

<table>
<thead>
<tr>
<th>Period</th>
<th>Export</th>
<th>Import</th>
<th>Export to import</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mln dollars</td>
<td>% to 2013</td>
<td>Mln dollars</td>
</tr>
<tr>
<td>2013</td>
<td>16262</td>
<td>100.0</td>
<td>43255</td>
</tr>
<tr>
<td>2016</td>
<td>17075</td>
<td>105.0</td>
<td>25072</td>
</tr>
<tr>
<td>2017</td>
<td>20699</td>
<td>127.3</td>
<td>28924</td>
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</table>

V. Uzun [26] considers that to study the issue of food independence of Russia, besides the mentioned ratio, the following should be taken into account: world prices, changes in the ruble exchange rate, domestic prices for agricultural raw materials and processed products, demand of the population and consumption volumes, increase in production volumes due to the import of raw materials. For the period 1997–2013, according to his calculations, the minimum level of food independence was in 1999 — 79%, the maximum in 2012 — 89%.

In agriculture, the main production factor is land, and the activities on it have some peculiarities; they are direct dependence on natural and climatic conditions; seasonality of the nature of economic activity; interconnection of economic and biological processes; a special role of water resources; territorial distribution and vast areas; production of products to satisfy the basic needs of every individual, etc. [27]. At the same time, the economy should be aimed at maximizing the use of innovative technologies that provide products with higher added value. A. Semin writes [28], that trading of products in an unprocessed form should be reduced up to the limit. Trading of whole grains seems to be analogous to the trading of raw oil.

It is very important that the quality of the products supplied to the market ensures food safety. For comparison, confectionery and cereals were selected from a long list of food products, as the greatest number of violations was observed in their quality over a long period of time (Figures 4 and 5) [18; 22; 29].
The given data allowed making a conclusion that a high percentage of products of low quality, and often just dangerous for the health of consumers, are present on the market and, first of all, it concerns imported products. The percentages of low quality products in imported confectionery were 31.6% in 1995, 21.4% in 2000, 14.1% in 2005, 25.4% in 2014.

![Figure 5: Low quality and (or) danger of cereals, %](image)

For imported cereals, the figures are even higher: 81.6% in 1995, 49.9% in 2000, 53.7% in 2005. As for domestic products, high indicators were recorded in 1995 and 2000: 10.6 and 17.1%, respectively, for confectionery products, and 27.5 and 39.2% for cereals.

Thus, attention should be focused on the huge amount of food from abroad of low quality, and therefore the question of import substitution is on the agenda.

There is a significant dependence of the agrarian economy on foreign supplies of machinery and equipment. Thus, academician of RAS A. Altukhov [30] outlined the following positions. In 2015, the food industry was more than 95% dependent on imports of equipment. The share of imported machinery and equipment for animal husbandry was almost 90%, tractors - 66.4, combine harvesters - 29.7 and forage harvesters - 22.0%. For various reasons, in 2015 compared to 2014, agricultural producers purchased tractors and harvesters less by 17%. Besides, the proportion of foreign crop varieties remains significant. In 2015, the share of sugar beet was 96.1%, sunflower - 48.7, maize - 41.7%.

In 2006–2012, as A. Petrikov notes [31], imports of agricultural technologies was 8.1 billion rubles, and exports - only 17.7 million rubles, which indicates a low level of competitiveness of domestic technologies. Development of new technologies and their use by agricultural enterprises, as Altukhov and Semin [32] stress, is impossible without serious state support.

Then, there is no attention at the federal level to import substitution of simple products [33], the production of which (unlike high-tech products) requires relatively less time and money. It concerns consumer goods. For example, an import of bolts, screws, and nuts was over 500 million in 2013 and in 2014, and in 2015 it was 419 million. The main reason is the absence of appropriate machines.

It should be emphasized once again that mechanical engineering is a guarantor of the economic security of the country, whose indicator is the share in the industrial manufacturing industry with a threshold value of at least 70% (in the Russian Federation it is 50%) and the share in the industrial production of mechanical engineering not less than 30% (in the Russian Federation it is 20%). Therefore, the technical re-equipment of machine-building enterprises is the most important strategic
priority which determines the competitiveness of the real sector of the economy [34].

After examining the status of some spheres of the Russian economy, it is necessary to pay special attention to the obstacles that delay the import substitution policy:
- the dominance of the commodity sector, reduction in the share of manufacturing industries, that does not allow producing products with a larger share of gross added value (it is proved with high volumes of mineral resources in Russian exports, for example, in 2013 and 2017 it was 71.5 and 60.4% respectively);
- a high degree of amortization of fixed assets at organizations in 2010–2017 exceeded 47%, i.e. the indicator was at a critical point;
- the annual decline in investments to fixed assets in relation to the previous year;
- a share of employees whose skills and qualifications do not meet modern requirements;
- the lack of an adequate external environment for the activities of enterprises, primarily a high level of taxation.

In our opinion, to solve the challenges of import substitution in the country successfully, it is necessary to focus on the following components:
1) to carry out a large-scale technical and technological renewal of fixed assets with a focus on neo-industrialization;
2) to use the system of state orders, first of all, for the enterprises of the machine-tool industry and other branches of mechanical engineering;
3) to increase the real potential of the economy due to the additional loading of production capacities for investment, intermediate, consumer and fuel and energy products;
4) to decrease the interest rate on loans, especially for mechanical engineering and agricultural enterprises;
5) to determine the state participation in co-financing of promising investment projects;
6) to improve the regulatory framework that ensures the introduction of import substitution in various sectors of the economy;
7) to solve the problem of providing personnel with high qualification to industries and enterprises focused on the production of import substitution products;
8) to make a favourable environment for manufacturers of finished products.

As a result, the tasks are achievable and require the active participation of the state and all economic entities.

4. CONCLUSION

From the study of literary sources, the differences in the protectionism and import substitution policies are summarized. The conditions that make difficulties for import substitution policy are given. The possibilities of manufacturing products for import substitution are shown.

The policy of import substitution appeared after the policy of protectionism, developed in XVI-XVII centuries. The idea of import substitution was first announced in XVIII century and got further development. After studying educational and scientific literature, the positive and negative aspects of the protectionism policy were revealed, and its main drawback is the slowdown of the STP.
Import substitution aims to increase the competitiveness of the national economy in the long term, moving to the sixth technological order to ensure the manufacture of products with higher gross added value, which require the improvement of all components of productive forces and production relations.

The mechanisms of import substitution are identified in three main categories, the rules for developing an import substitution strategy are revealed. The import substitution program should play a role of a triggering mechanism in the development of an active industrial policy. The strategy should be selective and stimulate investment and innovation activities of promising industries and enterprises, which focus on import substitution and on the production of competitive products for the world market. The introduction of the import substitution program will allow our country to keep the status of an independent subject of world politics.

5. CONFLICT OF INTERESTS
The authors confirm that the revealed information does not contain a conflict of interest.

6. DATA AVAILABILITY STATEMENT
No data has been used or generated in this study.

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8. REFERENCES


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