Exports of Vegetable Oils to Asian Markets: Opportunities, Risks, and Prospects

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Abstract. The paper focuses on the urgent problem caused by changes in the structure of Russian exports in the context of instability and negative dynamics of energy prices. The paper studies Russian exports of the main types of vegetable oils (sunflower, rapeseed, and soybean). The authors analyze the dynamics and product and territorial structures of exports for 2014–2019, relying on domestic and international data. The paper identifies current trends and assesses risks, opportunities, and prospects for domestic exporters. Based on the analysis and review of the secondary literature on the problems of exporting AIC products and trends in world food markets, the authors highlight the main threats for exporters of vegetable oils, focusing on the most capacious Asian markets. The research results may be of interest to the scientific community, students, and graduate students. The results can also be used when assessing export potentials of other member countries of the Eurasian Economic Union, or when making managerial decisions on the structure and direction of exports, as well as on measures to support export activities.

Keywords: Export ∙ Country risks ∙ Food market ∙ World trade ∙ Vegetable oils ∙ Agricultural production

1. Introduction
The relevance of this study is associated with the need to analyze and understand current and emerging trends, prospects, and risks in the Asian market of vegetable oils, which is the sphere of interest and competitiveness of major exporters. As a segment of the growing demand for agricultural products, the world food market is of particular interest to domestic agricultural producers. The Russian potential in many food products is sufficient for the country’s food self-sufficiency. Moreover, it allows the state to claim a leading exporter of food in the world. The study results are of interest when solving the problems of developing non-resource and non-energy exports, formulated in the national project “International cooperation and export” and in the priority project “Export of agricultural products” [10]. This paper reflects the author’s view on the current trends in the Russian export of vegetable oils to Asian countries and the problems and risks that impede the export of competitive products. The authors attempted to identify risks for exporters of vegetable oils, which were not previously considered in works on a similar topic.
2. Materials and Methods
The works of domestic and foreign authors on the problem of the export of food products [1, 2, 3, 4, 5, 7, 8, 9, 13, 14, 15] served as the study’s methodological basis. This paper presents the author’s vision of the conditions that can ensure qualitative improvement in the structure of the exported vegetable oils. The authors discuss what risks can limit the achievement of economic objectives in increasing export earnings. The work’s methodological guideline was the approach to identifying export risks in the context of changing environmental factors. To identify trends in the development of Russian exports of food products, we selected the group of vegetable oils, in the export of which Russia occupies a leading position. The author’s used methods of economic and statistical analysis. The initial information was the official statistics and data from domestic and international export statistics [6, 11, 12]. The authors focused their attention on the structure and dynamics of exports and state of vegetable oil markets for 2014–2019. The authors believe that the analysis of the selected features will justify possible approaches to assessing the opportunities, risks, and problems of the development of Russian food exports.

3. Results
Considering the prospects for developing vegetable oil exports to Asian markets, the authors note that the procedures for assessing the export potential and choosing export directions should consider the risk assessment. Simultaneously, the complexity of risk assessment is caused by a combination of risks of a different nature:

- natural and climatic (affecting the harvest in a particular country or group of countries);
- economic (associated with the competitiveness of products, demand, prices, and costs);
- political (changing the access regime of exported goods, products that depend on subjective, poorly predictable factors).

Within this study’s framework, the emphasis is made on assessing the possibilities and prospects of export and identifying the economic risks of exporting Russian vegetable oils to Asian markets. Russia occupies a leading position in the world export of vegetable oils. The analysis of statistics published on the website of the World Trade Center [6] showed that, in 2019, Russia was the second among exporters of sunflower oil (1st place – Ukraine), third – among exporters of rapeseed oil (1st place – Canada, 2nd place – Germany), sixth – among exporters of soybean oil (behind Argentina, Brazil, USA, Paraguay, and the Netherlands). Additionally, Russia exports flaxseed oil and (in small volumes) such unique oils as camelina, cedar, and fir.

Figure 1 shows the dynamics of exports of the main types of vegetable oils in value terms for 2014–2019.
During the analyzed period, the volume of exports increased 1.5 times (rapeseed oil — 1.74 times, sunflower oil — 1.51 times, soybean oil — 1.37 times). In the structure of Russian exports, sunflower oil retains a dominant position, accounting for approximately 70% of the export throughout the entire period. However, we note the instability of the export of vegetable oils. According to the authors’ estimates, the average deviation from the linear trend in vegetable oil export volume was 10.7%, with the most significant instability in rapeseed oil export (the departure was 28%). The current situation testifies to the risks from the side of demand for exporters. This makes it challenging to make an accurate quantitative forecast of export volumes in the medium and long term.

The data in table 1 show the outstripping growth in exports in physical terms, compared with its increase in value terms.

**Table 1.** Growth rates of Russian exports and prices of vegetable oils.

| Product code and name | Growth rates from 2018 to 2014, % | Average export prices |
|-----------------------|-----------------------------------|-----------------------|
|                       | Export volume in value terms | Export volume in kind |                         |
| 1514 Rapeseed oil     | 122.3                           | 132.89                | 92.03                   |
| 150710 Soybean oil, raw | 126.09                         | 147.95                | 85.23                   |
| 150790 Soybean oil, refined | 298.21                       | 341.32                | 87.37                   |
| 151211 Sunflower oil, raw | 115.37                        | 128.94                | 89.47                   |
| 151219 Sunflower oil, refined | 96.74                         | 117.98                | 82.00                   |
| In general, for vegetable oils | 116.06                        | 132.69                | 87.46                   |

*Source:* Calculated by the authors based on [12].
The lag of export volumes in value terms from their growth rates in physical terms amounted to 0.13 (with fluctuations from 0.8 to 0.18 for certain items), resulting from the negative dynamics of export prices for all types of vegetable oils. The long-term persistence of negative dynamics in export prices creates significant risks for domestic exporters. The desire to increase currency earnings from foreign exports will lead to the need to increase the export mass, the production of vegetable oils, and the share of the area occupied by oilseeds in agricultural land. Despite this fact, during the analyzed period, the export of vegetable oils remained profitable for domestic producers. When converted into a national currency, the revenues significantly increased due to the change in the dollar exchange rate from 35.989 rubles per dollar in 2014 to 63.119 rubles per dollar in 2018.

The leading importers of Russian sunflower oil are (in descending order of import volume) Iran, Turkey, China, Egypt, Indonesia, Uzbekistan, and Kazakhstan. More than 50% of Russian exports of rapeseed oil go to China and Norway. Additionally, significant volumes are exported to the Netherlands, Lithuania, and Latvia. The leading importer of Russian soybean oil is China (more than 50% of Russian exports). Significant volumes are also exported to Algeria, Cuba, and Iran [6]. Asian countries dominate the composition of importers, and their share is continuously growing.

After analyzing the structure of exporters in the context of the Russian Federation’s constituent entities, the authors note that they are mainly located in the European part of Russia. Only the Altai Krai stands out of the exporting entities located in the eastern part of the country. The country structure of vegetable oils export from the Altai Krai significantly differs from the all-Russian one. The leading importers are China, Kazakhstan, Uzbekistan, and Tajikistan. These are countries with a high capacity of the vegetable oils market, which present great opportunities for developing domestic exports. During the period from 2014 to 2019, China’s imports of Russian rapeseed oil doubled (with a two-fold growth of total Chinese imports), soybean oil quadrupled (with a slight decrease in total imports), and sunflower oil – decreased by 20% (with an overall growth of 30%). During the same period, Kazakhstan halved the imports of Russian rapeseed oil. Kazakhstan also decreased the sense of sunflower oil by 20% [6]. The instability of Russian export volumes to Asian countries results from the constant competition between leading exporters and the development of own oilseed processing facilities in the importing countries. Let us note that these countries have a low level of per capita income, which generates demand at prices significantly lower than the average prices of world exports.

The performed analysis allows us to conclude that the export of vegetable oils to Asian countries is a promising direction of Russian non-resource exports. Nevertheless, the results of the development of this direction in the long-term cannot be quantitatively predicted with a high degree of accuracy. This fact creates risks in making management decisions. It requires a deeper methodological justification for assessing the risks of food exports and forming a compensation mechanism to reduce the consequences of natural, climatic, and political risks.

4. Discussion
In scientific literature, considerable attention is paid to the state and development of the world food market [13, 15]. Considering the development of the export of agricultural products, the authors draw attention to the general trends, opportunities, and prospects of Russian exports, which should be considered when forming the national agricultural and export policy [1, 2, 3, 9]. Significant attention is paid to the competitiveness of Russian products in the world food markets [8, 14] and sectoral aspects of export activities [4, 5, 7]. Simultaneously, the issue of identification and assessment of risks arising from the export of agricultural products, including crop production, is still not sufficiently studied.

The comprehension of the scientific discussion on the problems of food export development made it possible to substantiate the author’s position on assessing the opportunities, risks, and prospects for the export of vegetable oils and plant products.
5. Conclusion
Having considered the theoretical aspects, possibilities, and prospects of non-resource and non-energy exports, the authors concluded that the fat and oil industry’s export could drive the sustainable development of regional economies. In the context of the reorientation of the existing export-import practice and the search for a new model of international specialization of Russia, the fat and oil industry can act as a “growth point” for exports. Russia is marked with a historically established specialization in producing these products; the fat and oil industry has many raw materials. The sectoral analysis shows that the oil and fat industry is marked with significant risks that can limit access to markets and reduce export earnings by combining factors. Thus, monitoring and forecasting market conditions are essential tools for researching export markets.

The investment and innovation scenario of the economic development of the fat and oil industry should be considered an opportunity to increase the export potential and minimize risks by increasing the competitiveness of products and the industry’s stability. Minimizing the negative impact of the global price environment requires forming a market system of economic relations that can withstand fluctuations in economic, political, and other global factors and provide the opportunity and flexibility to reorient export markets to other more promising and highly profitable ones.

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