

**KAZAKHSTAN FLOUR MARKET: PECULIARITIES AND FACTORS
OF INCREASING PROFITABILITY OF THE INDUSTRY**

**ҚАЗАҚСТАНДЫҚ ҰН НАРЫҒЫ: САЛАНЫҢ РЕНТАБЕЛЬДІЛІГІН АРТТЫРУДЫҢ
ЕРЕКШЕЛІКТЕРІ МЕН ФАКТОРЛАРЫ**

**КАЗАХСТАНСКИЙ РЫНОК МУКИ: ОСОБЕННОСТИ И ФАКТОРЫ ПОВЫШЕНИЯ
РЕНТАБЕЛЬНОСТИ ОТРАСЛИ**

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Abstract. The most important task of the flour milling industry is to provide the population with high-quality flour, pasta, bakery and confectionery products. Therefore, this industry remains the largest in the food industry. *The aim* is to analyze the structure and mechanism of functioning of the flour products market in the Republic of Kazakhstan. *Methods* - analysis, grouping to collect and process statistical information on production, consumption, exports and prices for these food products; comparison and synthesis - when comparing indicators with similar ones in other countries, identifying common trends and unique features. *Results* - the development of flour-milling subcomplex of the republic is shown, export-import relations from 2011 to 2023 are considered. The leaders of flour-milling enterprises, the structure of exports and the largest importers are determined. Unevenness and decrease in production volumes in dynamics are noted. Information on the factors affecting the cost of industrial grain processing is presented. The authors state a significant increase in grain prices. It is substantiated that the increase in production

Therefore, it is important to analyze the current state of the market, study its features, identify development trends and develop proposals to improve its effectiveness.

The research on the development of the flour market in Kazakhstan reflects a comprehensive analysis of the current state and prospects of this segment of the agro-industrial complex of the country. It made it possible to identify a number of key aspects affecting its development, including economic, social and technological factors (Kaliev G.A.) [8].

The market as an economic category is a multifunctional and multifaceted concept that requires an integrated approach to its research (Chemirbaeva M.) [9]. This is especially true for food markets such as the flour market. Flour occupies a significant place in the consumption of the population, which makes this market an important object of analysis.

Materials and methods

To study the development of the flour market in Kazakhstan, the following hypothesis can be formulated: The development of the flour market in Kazakhstan is determined by the interaction of a number of key factors, such as the level of domestic consumption, export potential, government support for the agro-industrial complex, changes in grain production and processing technologies, as well as fluctuations in world prices for grain and flour. The sustainable development of this market is possible under the condition of an integrated approach to solving the problems of the production and distribution chain, which will contribute to the growth of the competitiveness of the Kazakh flour milling industry at the international level.

The main directions for testing the hypothesis: analysis of domestic consumption; export potential; state support; technological changes; grain and flour prices; competitiveness. The following methods can be used to test this hypothesis (Tregub I.V.) [10]: statistical analysis; econometric analysis; qualitative research; comparative analysis.

Thus, a comprehensive study of the flour market in Kazakhstan using various analysis methods will confirm or refute the hypothesis put forward and develop recommendations for the development of the flour milling industry.

Results

After reaching record levels in 2017-2018, flour production in Kazakhstan slowed down its growth rate, which led to a significant decline in subsequent years. For example, production decreased by 16% by the end of 2019 and by another 12% in 2020. A slight increase was

recorded in 2021, but after that there was a prolonged decline in production volumes. However, an analysis of the data for 2023 and taking into account the average share of production in the first half of the year over a long-term period allows us to conclude that there is a significant increase in production in the current season. This indicates the beginning of a recovery in production volumes in the industry after a period of recession (Gan E.) [7].

Flour production in Kazakhstan is determined by several key factors. Firstly, it depends on the level of wheat harvest in the country, which affects the availability of raw materials for processing. Secondly, the volume of flour production also depends on the demand for finished products and the possibilities of its sale on the market.

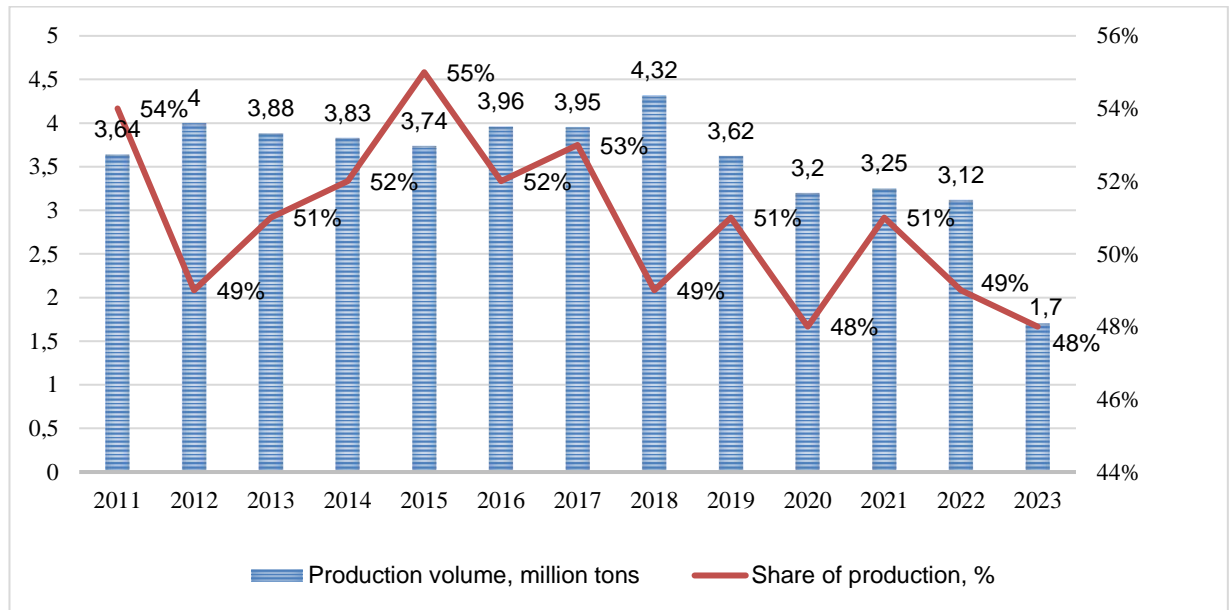
Until 2018, Kazakhstan saw a steady increase in the gross wheat harvest, reaching about 15 million tons in 2017 and 2018. However, in the next few seasons, crop losses occurred due to unfavorable agro-climatic conditions. Despite this, from the point of view of raw materials for flour production, this decline has not become critical (Chemirbaeva M.) [9].

The analysis of AIC-Inform shows that, on average, over the past 12 seasons, about 38% of the grown wheat was used for flour production. Even in lean years such as 2019 and 2021, this figure ranged from 35% to 37% (figure 1). This indicates that flour production in the country remains relatively stable due to the efficient use of available raw materials. It is also important to consider a balanced ratio between production and demand for finished products to ensure the long-term sustainability of the flour milling industry.

Analyzing the sales of manufactured products, it can be noted that exports play a key role for the flour mills of Kazakhstan. The export market is becoming a determining factor affecting production volumes and, consequently, the overall dynamics of the industry.

Over the long term, the average share of flour exported from the Republic of Kazakhstan is an impressive 52% of the total production in the country. This highlights the significant dependence on export markets and the focus on external demand.

Thus, export volumes are largely determined by production volumes. The dynamics of export supplies is parallel to production volumes. Any changes in production volumes have a direct impact on exports, which underlines the importance of sustainability and growth of the production base in order to maintain and expand its share in the global market.



Note: compiled by the authors based on sources (Statistical data of the Bureau of National Statistics...; The website of Fact.mr) [11, 12]

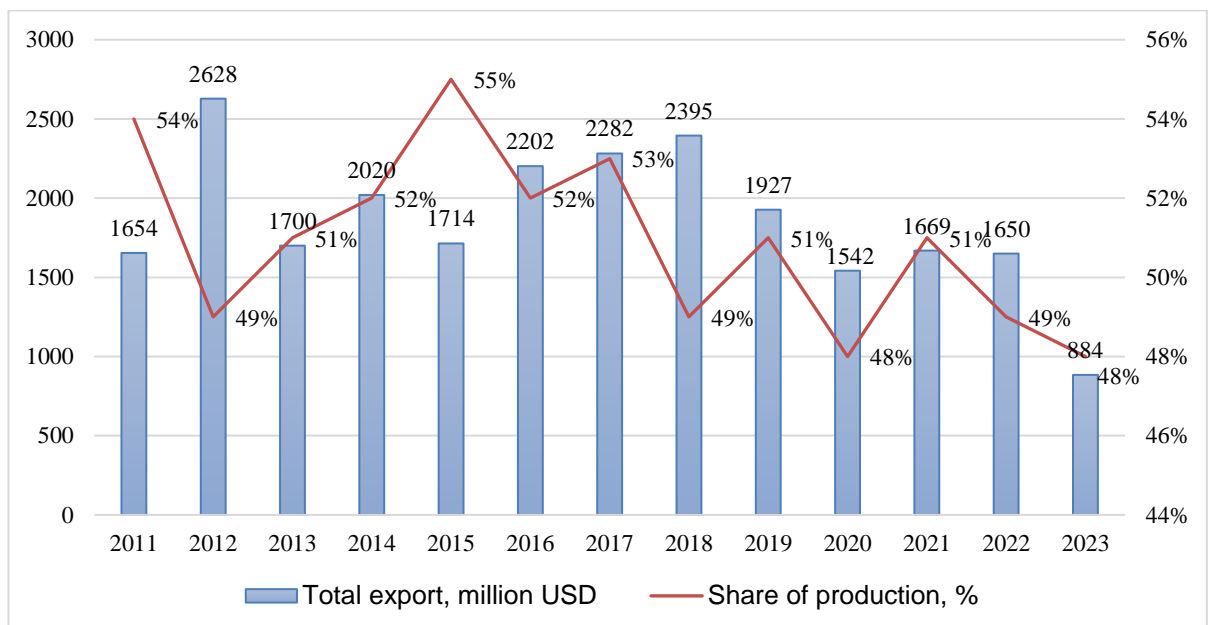
Figure 1- Dynamics of flour production in Kazakhstan from 2011 to 2023

In addition, stability in the field of export supplies also plays an important role in the development of long-term strategies for the development of the industry, strengthening its position on the world stage and contributing to sustainable economic growth.

After analyzing the dynamics of revenue generation from flour exports, several notable trends can be identified. From 2016 to 2019 inclusive, there was a period of significant revenue decline caused by relatively low prices for

exported flour. For example, in 2018, the average cost of export shipments of Kazakh flour reached its minimum value, amounting to 195 US dollars per ton (figure 2).

From 2020 to the present, there has been a significant increase in export revenue due to an increase in the average cost of export shipments. For example, by the end of 2023, this indicator is estimated at 399 US dollars per ton, which is an absolute record for the last 12 seasons.



Note: compiled by the authors based on sources (Statistical data of the Bureau of National Statistics...; The website of ResearchGate) [11, 13]

Figure 2 - Dynamics of flour exports from Kazakhstan

However, an increase in revenue from the sale of flour for export does not necessarily mean an increase in the efficiency of flour milling enterprises in Kazakhstan. Despite the increase in revenues, the workload of enterprises remains insufficient, and the cost of raw materials, auxiliary resources and logistics costs continues to grow.

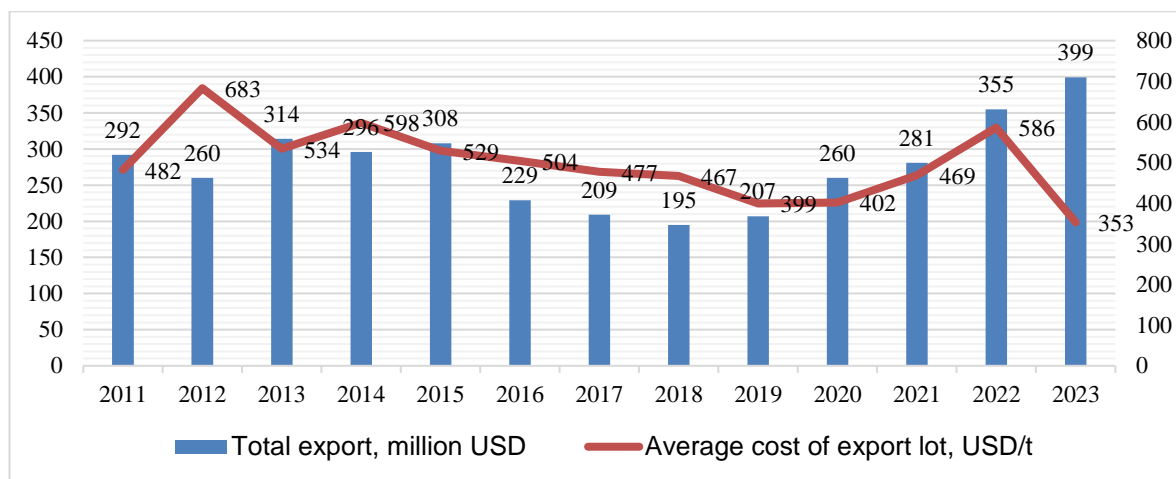
Accordingly, although the increase in export revenue indicates positive changes in the flour milling industry in Kazakhstan, in order to achieve higher efficiency, it is also necessary to pay attention to other aspects of production and cost management.

Over the past 12 seasons, approximately 85% of Kazakhstan's flour has been exported to two major countries – Uzbekistan and Afghanistan (figure 3). While Uzbekistan was the

main importer until 2015, since 2016 Afghanistan has become the key buyer of Kazakh flour, holding a leading position to this day.

However, the increase in flour supplies to Afghanistan is more due to the loss of this market by Pakistan, which over the past five years has moved from the category of stable exporters of wheat and flour to the category of active importers of these products.

The development of the milling industry in Uzbekistan has become a significant factor affecting the wheat and flour market in the region. The active development of the flour milling industry in Uzbekistan, supported by strong government support, has created competitive conditions for Kazakhstani flour producers.



Note: compiled by the authors based on sources (Statistical data of the Bureau of National Statistics...; Website "Agrarian sector") [11, 14]

Figure 3 – Dynamics of exports of Kazakh flour in monetary terms

One of the interesting aspects of this development is the emergence of enterprises in Uzbekistan, headed by experienced millers from Kazakhstan. These enterprises use imported grain from Kazakhstan, providing convenient logistics and producing flour on site, which turns out to be economically more profitable.

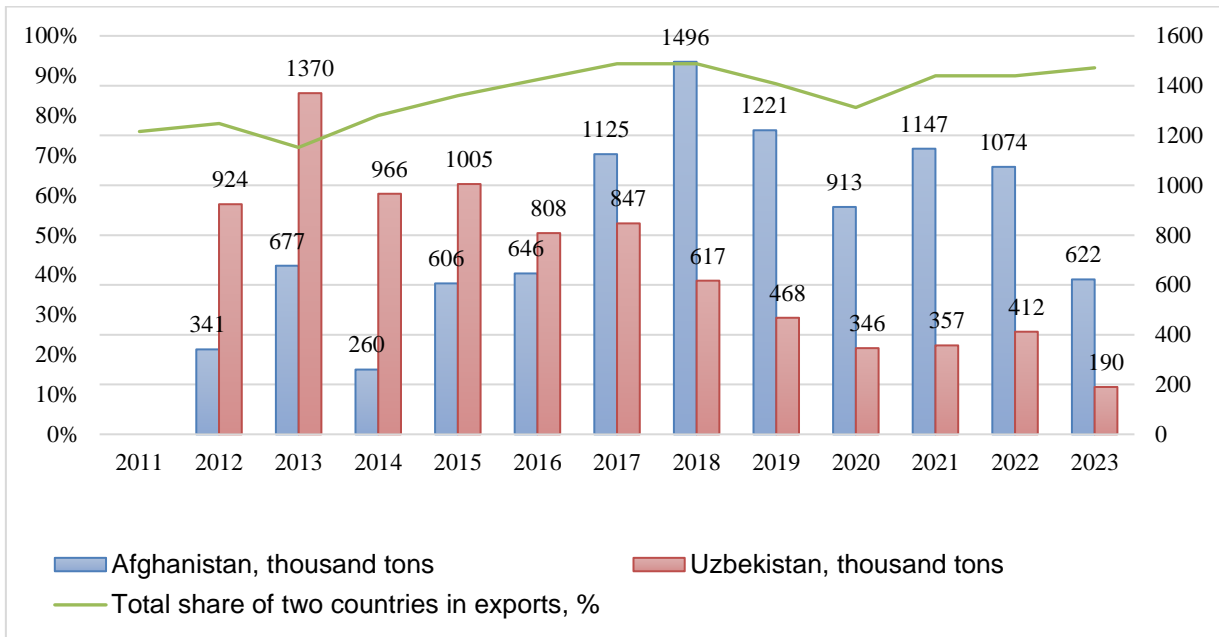
In addition, a significant part of the mill enterprises in Uzbekistan belongs to Afghan investors. Due to the political instability in Afghanistan, these enterprises prefer to process wheat coming from Kazakhstan and Russia according to the tolling scheme in Uzbekistan, and then export flour back to Afghanistan (figure 4).

As a result of this situation, according to the results of the 2021 marketing year, a record high import of Kazakh wheat to Uzbekistan was recorded, reaching 3.23 million tons. At the same time, the supply of flour from Kazakhstan

to Uzbekistan decreased to minimum values - only 0.36 million tons. This situation highlights the importance of competition in the flour market and the need for Kazakhstani producers to adapt to changing conditions and competitive pressure from other countries.

Analyzing the export trends of Kazakh flour over the past few seasons, several interesting observations can be identified. When comparing the periods from July to November over the last three seasons, it becomes obvious that this season there is a significant increase in supplies to Afghanistan (+70% compared to the previous season) and to Uzbekistan (+14%).

However, it is worth noting that supplies to Tajikistan, Turkmenistan and Russia decreased by 11%, 6% and 38%, respectively. Despite this, the absolute volume of supplies to these countries remains relatively small.



Note: compiled by the authors based on sources (Statistical data of the Bureau of National Statistics...; Website «inbusiness.kz») [11, 15]

Figure 4 - Dynamics of supplies of Kazakh flour in the direction of key importing countries

The analysis allows us to draw several conclusions. Firstly, the increase in supplies in Afghanistan and Uzbekistan indicates an increase in demand for Kazakh flour in these countries, possibly related to population growth or a change in consumer preferences. Secondly, the decrease in the volume of purchases in Tajikistan, Turkmenistan and Russia may be due to various factors, such as the economic situation or changes in consumer preferences.

Thus, the analysis of trends in the export of Kazakh flour is important information for strategic planning and marketing decisions in the milling industry, allowing for a better understanding of changes in demand for products and market trends in various countries.

Russia is actively expanding its presence in the markets of Central Asia, tightening competition with Kazakh flour. This season, the situation has worsened due to the increased pressure of Russian flour on the market caused by the military actions of the Russian Federation against Ukraine and the imposition of sanctions. The surplus wheat harvest in Russia led to a significant increase in flour production, which began to use new logistics routes through Kazakhstan, which have long been used by Kazakhstani exporters.

An example of such dynamics is the supply of Russian flour to Turkmenistan, which increased from 3.2 thousand tons in 2021 to 25.8 thousand tons by the end of 2023, which is an increase of more than 8 times! The analysis of KTZ data on the transit of Russian flour through

Kazakhstan also reflects an increase in this indicator. In 2022, transit increased by 84%. If in 2020 and 2021 about 166 thousand tons of flour of Russian origin passed through the Republic, then in 2022 this figure increased to a record 307.7 thousand tons.

This growth in transit has a significant impact on the economy of Kazakhstan, raising concerns about job losses and lost tax revenues. For example, 300 thousand tons of transit flour can lead to the loss of 5 jobs and losses in the amount of 2.5 billion tenge of tax revenues to the economy of Kazakhstan, according to the Union of Grain Processors of Kazakhstan. This situation highlights the need to take effective measures to protect the interests of the flour milling industry and the economy of the country as a whole, in order to minimize the negative consequences of increased transit of Russian flour through the territory of Kazakhstan.

The increase in wheat imports from Russia to Kazakhstan is due to several key factors. First, the growing consumption of bread products in the countries of Central Asia and Afghanistan requires additional grain supplies. Secondly, the outstripping growth rates of the cost of wheat grown in Kazakhstan compared to Russian, stimulate companies and entrepreneurs to look for more profitable sources of supply.

However, in addition to official imports, the Kazakh market is under pressure from smug-

gled Russian grain. The growing volume of illegal imports is stimulated by the possibility of selling Russian wheat through Kazakhstan without paying taxes and duties. This is due to document manipulation, when smugglers falsify information about the origin of goods and their passage through the territory of Kazakhstan in order to avoid rules and tax obligations.

The smuggling of Russian wheat through Kazakhstan really poses a serious threat to the country's economy and leads to significant losses both for the state budget and for legal business in agriculture. This shadow business bypasses tax and customs duties, which violates the law and creates unequal conditions for law-abiding participants in the grain market.

According to the estimates of the Union of Processors of Kazakhstan, the annual losses from the smuggling of Russian wheat reach about 500 million dollars. These losses not only reduce state budget revenues, but also distort competitive conditions in the market, infringing on law-abiding companies.

To solve this problem, it is necessary to strengthen control over the border, as well as improve monitoring and coordination between various government services. It is also important to develop cooperation with Russia on grain export control and anti-smuggling issues. Taking effective measures to prevent smuggling will help reduce losses and ensure fair conditions for all participants in the grain market in Kazakhstan.

According to the results of the analysis, it can be concluded that in addition to external challenges, internal factors significantly negatively affect the Kazakh flour market. Logistical problems, such as a shortage of wagons during peak demand and restrictions from Kazakhstan's Temir Zhol, as well as grain and flour transportation routing strategies, make it difficult to deliver products to markets and increase costs for producers.

The lack of sufficient government support is also a serious problem. Despite the appeals of the President and statements by officials about the need to develop the processing and export of finished products, rather than raw materials, real support from the state is insufficient. This creates additional difficulties for flour mills.

One of the key problems for the milling industry is the issue of VAT refunds. The inability to receive a VAT refund leads to significant losses of working capital, which are estimated at about 40 billion tenge annually. These losses have a serious impact on the operational efficiency of enterprises.

Due to a shortage of working capital, milling enterprises are forced to apply for loans at high interest rates of up to 25% per annum. This increases the cost of flour and reduces its competitiveness in the market. Moreover, such conditions do not contribute to the development of exports and create additional obstacles to the growth of the industry.

In general, these internal factors increase the difficulties faced by flour mills in Kazakhstan. Solving these problems requires a comprehensive approach from the government and the business community aimed at improving logistics, ensuring adequate government support and improving financing conditions for the industry.

Apparently, the milling industry is on the verge of crisis. If the problem with VAT refunds is not resolved in the near future, this may lead to the risk of losing sales markets, which is already beginning to manifest itself. This situation can have serious consequences both for individual enterprises and for the entire industry as a whole.

Discussion

The crisis in the milling industry can cause a snowball effect, since non-repayment of VAT will necessarily affect tax revenues and the economy as a whole, leading to negative social consequences. Considering that about 60 thousand people are employed in this industry, job losses can become a serious problem for many families and regions.

Kazakhstani processors are in a difficult situation: on the one hand, they are being aggressively pushed out of the sales markets that they have been holding for a long time. On the other hand, the rules of the game are constantly being violated inside the country, which creates additional difficulties and complicates the situation.

Analyzing the current situation, it can be noted that the decision of the Government of the Republic of Kazakhstan on possible supplies of Kazakh grain products to Pakistan is an important step for the development of the country's export opportunities. However, at the moment, the lack of formal agreements limits the specific prospects of this direction. The need to conclude appropriate agreements and establish partnerships with Pakistan remain key steps for further export expansion.

The situation with the Chinese market, although it represents a potentially attractive destination due to geographical proximity, high capacity and solvency, is complicated by a high customs tariff of 65%. This is a significant obstacle to the supply of Kazakh flour, which

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