Industry analysis of the competitiveness of Rostselmash as a major manufacturer of agricultural machinery

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Abstract.

The article discusses issues related to the industry competitiveness of Rostselmash in the context of agricultural machinery for various purposes and performance classes. As estimated indicators, the total turnover in the direction of grain and forage harvesters, market capacity, total shipments of combines, etc. are highlighted. The analysis of the mutual conditionality of grain prices, effective demand and the world's shifting grain residues is given. A significant part of the article is devoted to assessing the competitive position of Rostselmash in the domestic market and the markets of Belarus, Kazakhstan and Ukraine in the context of grain and forage harvesting equipment and combines of various performance classes. The reasons for the weakening of certain positions and the strengthening of others are analyzed. Conclusions are drawn about the prospects of strengthening positions in the competitive struggle in the designated markets. The illustrative material contains bar charts of the dynamics of the total turnover of Rostselmash grain and forage harvesters for the analyzed period, the Russian market of combine harvesters, the market share of Rostselmash, the fleet of combine harvesters of the Russian Federation, the total shipments of grain and forage harvesters Rostselmash in the Russian Federation and for export, the export of Rostselmash machinery to foreign countries.

1 Introduction

Since 2013/14 a.y. by 2020/21 a.y. the total turnover in the direction of grain and forage harvesters increased 4.5 times. At the same time, over the last two years of the analyzed period, this indicator has more than doubled: from 22 billion rubles in 2018/19 to 10.8 billion rubles in 2020/21 (see Fig. 1).

Today, the capacity of the Russian market of self-propelled combine harvesters has decreased by more than two times compared to 2012/13 and amounted to 3,794 units, which is the minimum for the last ten years. The dynamics of the Russian market of combine harvesters is shown in Figure 2.
According to Rosagromash, the weight of Rostselmash in the Russian agricultural machinery industry increased by 14% in 2020/21 a.y. compared to the previous year. At the same time, in absolute terms, the volume of Rostselmash output decreased from 20196 million rubles in 2019/20 a.y. to 16720 million rubles in 2020/21 a.y. At the same time, the market capacity decreased by 37% during the reporting period (see Figure 3).
Fig. 3. Dynamics of the market share of Rostselmash for the period 2019/20-2020/21 a.y.

The decrease in the production of agricultural machinery occurs against the background of a decrease in the quantitative composition of the fleet of agricultural machinery. Thus, the fleet of combine harvesters in Russia decreased by almost 2.5 times over the period from 2014 to 2021 and amounted to 104 thousand units in 2021 (Fig. 4).

Fig. 4. Dynamics of the fleet of combine harvesters of the Russian Federation for the period 2014-2021, thousand units

Figures 5 and 6, respectively, show the dynamics of total shipments of grain and forage harvesters manufactured by Rostselmash (in units) and exports to non-CIS countries (in millions of rubles).

2 Materials and Methods
The grain market is closely related to such an indicator as the world's shifting grain residues [1-3].

Fig. 5. Dynamics of total shipments of grain and feed harvesters Rostselmash (RF + export), units

A decrease in the world's shifting grain residues below 300 million tons leads to a significant increase in stock quotes. Exceeding the limit of 300 million tons leads to lower prices. In addition, an additional negative effect can be caused by speculative money, which the grain market is pumped up from time to time. The withdrawal of this speculative money from the commodity markets at the moment of price decline leads to an acceleration of the dynamics of the fall [4-9].

Rostselmash is rightly considered the leader of the Russian market – despite the complex of negative factors that appeared in the last years of the analyzed period (lack of support from the state, unfavorable conditions in the grain market, etc.), the company retained its leading position in the Russian market.
Until recently, the main competitor for Rostselmash was imports, which systematically increased its share in all markets, using concessional lending in its national bank and moderate measures of customs regulation in all three importing countries. The strengthening of the dollar and euro against all CIS currencies, together with the fact that the Russian consumer was additionally supported by the introduction of an increased combined customs duty rate on imports of self-propelled grain and feed harvesters, led to the strengthening of the Company's position in the markets of Russia and Kazakhstan.

Simultaneously with the weakening of competition from imports, there was a significant increase in competition from Belarusian producers. Gomselmash managed to show significant growth rates of market share for the following reasons:

- the focus of the Belarusian authorities on increasing exports, which is expressed in its direct support;
- the use of dumping mechanisms in foreign markets (individual combines are sold more expensive in Belarus than in export markets);
- the use of risky financial schemes for the sale of combines (provision of installments);
- copying engineering solutions of recognized market leaders (Rostselmash, Claas).

The number and composition of suppliers in all three main markets for the company is identical:

- Agromashholding. The main combine building asset is the Krasnoyarsk Combine Plant (Krasnoyarsk, Russia). Produces combines of 3 and 4 performance classes under the brand Agromash. In addition, Agromashholding has Class 6 and 7 combines in its product line (repainted DEUTZ-FAHR combines), however, these machines were not in any demand in the analyzed period. Taking into account the slow updating of the model range, and the wear and tear of production equipment, in the analyzed period the holding did not seriously compete with RSM;
- Gomselmash. The main asset is located in Gomel, Republic of Belarus. Produces combines of 4, 5, 6 performance class under the brand Polesie. It has joint production facilities in the Russian Federation, mainly to receive regional subsidies for a certain volume of combines. Today there are about 5 production sites, the largest of the m is Bryanskselmash;
- Import. This group consists of products from Claas (Germany, Russia), John Deere (USA, Germany, Brazil), New Holland (Belgium, Poland), Case IH (USA), AGCO (Italy, Denmark). All of the above manufacturers have either their own or joint production facilities on the territory of the Russian Federation.

The Claas company was the first of the foreign market operators to open production in the Russian Federation (Krasnodar Territory), at the moment the plant produces more than 6 models of combine harvesters and 1 model of tractors. The company plans to build the second stage of production, the total capacity will be about 2 thousand units per year.

In 2010, JD opened production in the Russian Federation, currently producing 2 models of combine harvesters and 3 models of tractors. With the opening of the plant, all JD products received the status of "Made in Russia" and are subject to financing by state banks. The volume of JD investments in the development of joint ventures in the territory of the Russian Federation for the analyzed period is estimated at more than $ 500 million.

CNH together with JSC "Kamaz" organized a joint venture for the production of combine harvesters (2 models) and tractors (2 models). On average, 150 combine harvesters and 50 tractors are produced per year. These machines were subsidized by the Government of Tatarstan under the "50/50" program. The company plans to open production lines with a capacity of 4 thousand units per year.

AGCO based on the capacities of JSC "NefAZ" in 2009 created a joint venture for the production of 1 model of combine harvesters. The company plans to produce 100 units of equipment.
Despite the announced indicators, during the analyzed period, foreign companies did not compete strongly with RSM. Given that most of the components for assembly are imported, localization of production will not significantly reduce the cost of combines.

As you can see, the choice of agricultural producers is small – only 7 companies, 5 of which are representative of the Western market model, in which harvesting equipment has increased requirements for appearance and innovation. The same requirements are instilled in consumers in the markets traditional for Rostselmash, since these manufacturers do not differentiate the product portfolio by quality and identical equipment is offered in all markets.

The increase in the Company’s share in the Ukrainian market is due to the following factors:

- start of the Rostselmash program on modernization of agricultural machinery fleet;
- participation in regional programs;
- coverage of the largest number of customers through the formation of the institute of regional representatives and the expansion of the dealer network;
- active promotion of Rostselmash products (conducting a cycle of marketing events and PR campaigns).

The Company’s main competitor in the Ukrainian market is imports from Europe and North America. It should be noted that the lion’s share of imports in 2020/21 a.y. (more than 40%) are combines whose service life exceeds 5 years, the share of used combines in 2020/21 a.y. exceeded 65%.

The main motive for buying this equipment is the price, given this, Rostselmash has launched a program to modernize the fleet, allowing farmers to purchase new combines, similar in their characteristics to imported models, at a discount of 13%. Thus, in the five-year perspective, the Company will change the consumer preferences of farmers, and Rostselmash equipment will displace most of the outdated imported analogues.

Local producers are represented on the Ukrainian market. However, they cannot compete fully with the main market operators due to the lack of experience in the production of self-propelled combine harvesters.

Kazakhstan has traditionally been one of the key markets for Rostselmash combine harvesters. Due to the balanced product portfolio taking into account the conditions of the local market and close cooperation with the republican authorities, the Company’s share is on average 40%. The 2020/21 a.y. was a negative period for the main market operators, the main reasons are a sharp decline in grain prices and instability in the financial and credit sector of the economy. Under the current conditions, low activity was observed not only in the commercial sales sector, but also within the framework of KazAgroFinance programs.

The strengthening of the position of Gomselmash in the 2020/21 a.y. is associated with the one-time shipment of a large batch of machine kits to the assembly site of the Kostanay Diesel Plant. However, since there is no information on sales of combines to agricultural producers, there is every reason to consider the shipped volume as warehouse residues.

In the five-year perspective, Gomselmash and Agromashholding will be limited to the existing capacities of the Kostanay Diesel Plant, the main efforts of these companies will be focused on lobbying for the purchase of combines through budget lines of KazAgroFinance. It is possible that some of the combines assembled at the own production facilities of foreign competitors (John Deere) in the Russian Federation will be delivered to Kazakhstan.

3 Conclusion

It should be noted that Rostselmash occupies a leading position thanks to its products. This is clearly seen in the segmentation of the market by class (using the example of the Russian market): Rostselmash occupies at least 38% in each class. The exception is Class 6, since the TORUM series has entered the market relatively recently.
It is not difficult to notice that the 4th class of productivity is problematic for the Company, since mainly producers from the CIS with identical goods that most fully take into account the specifics of the Russian agro-industrial complex are concentrated there. In addition, a significant increase in the share of Gomselmash was a consequence of the dumping policy on the part of this manufacturer and the active support of exports by the leadership of Belarus.

Given Rostselmash's experience in developing market segments to values above 92% (class 5), over the next 5-7 years the Company has every chance to bring its share in each segment to a level of at least 60%.

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