CURRENT STATE AND PROSPECTS OF DEVELOPMENT OF THE TRACTORS MARKET IN UKRAINE

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SUMMARY

The article contains a detailed analysis of the current state and prospects for the development of the production of tractor equipment in Ukraine. The marketing characteristics of the tractors market in Ukraine and the Russian Federation are considered. The technical and economic indicators of the work of the leading Ukrainian manufacturers of tractor equipment are investigated. In particular, the authors studied in detail the development prospects of the Kharkov Tractor Plant. Based on the research carried out by the authors, a number of innovative measures are proposed, the implementation of which can lead to a drastic change in the market condition of domestic tractor construction. These proposals are mainly related to the state and legislative support of tractor-building at the national and regional levels and can be summarized as follows.

INTRODUCTION

Tractor engineering is one of the branches of the machine-building complex, which works to meet the needs of various industries, such as: agriculture, construction of road vehicles, handling and transport complex, etc. In view of this, research on tractor construction was and remains a very topical issue in modern science. In the scholarly works devoted to the history of the development of tractor construction in Ukraine, the analysis of which has been made by us, has not yet been reflected in the comparison of the development of this industry in different countries.

The distribution of tractors for the mechanization of work in the village took place in accordance with the specific characteristics of the production of a particular country. On the territory of Ukraine, this process was limited by the level of development of industry on the one hand and the needs of agricultural production - on the other. The introduction of tractors was carried out taking into account the climatic conditions, the level of production development, demographic and political situation. Features of domestic agricultural production and machine building formed specific features of domestic tractors. At this time, the theoretical foundations of the construction of a domestic tractor, which was supposed to correspond to the level of production development in the country, were developed in the concrete historical conditions.

The relevance of the coverage of the topic is obvious. This is due to the fact that to date, researchers have not yet created scientific works, from which it would be possible to draw conclusions about the true scientific and technological and technological level of domestic tractor construction. Not having a comparison with how it was done in foreign countries, it is difficult to give a unambiguous answer to the question of why the tractor industry in Ukraine has fallen into decline. The purpose of our study is the need to objectively demonstrate everything that accompanied this industry in its development. Particular attention is paid to the industrial production of tractors in Ukraine.

TRACTORING IN THE COMPOSITION OF THE ECONOMY OF UKRAINE

In recent years, the theme of compliance is in the focus of the world community. It defines the standards of doing business worldwide, directly affects the stability of the global economy as a whole, and the business of a particular company in particular. Over the past few years, the frequency of investigations of compliance violations, the magnitude of the consequences and the magnitude of sanctions against a business whose activities have not been recognized to comply with different compliance standards has increased significantly and has become a significant risk that should be known and should be taken into account by any manager, Carrying out a production, commercial, client or legal analysis of the national or international activity of an industrial enterprise.

Today, compliance in the whole world, and in particular in Ukraine and Hungary, is becoming increasingly relevant every day. Both the owners and top managers are interested in the development and implementation of the compliance function, as usually the violation of mandatory requirements leads to both financial losses of the organization, and sometimes to the liquidation of the organization, as well as to the criminal responsibility of executives.

In order to fully derive the advantages that can give the industrial enterprise a systematic approach to compliance, based on risk analysis, enterprises need to consider adopting strategic documents in the area of compliance, long-term compliance programs approved by the Board of Directors and short-term bank-level management Compliance plans. There are no universal compliant programs, the development of each program requires a certain amount of time, which is necessary to identify the specific organization, as well as proper accounting of its business model, organizational structure, development strategy, as well as material and human resources available for this project.

The term «compliance» came into our country with the arrival of the Ukrainian market of subsidiaries of Western financial structures for which this is legally necessary and because, well formed. Compliance program is an integral part of the activities of Western corporations and its main goal is minimizing legal and reputational risks arising from violations of professional and ethical standards.

Despite the fact that in the Ukrainian legislation currently conspicuously absent from this short term «compliance» in a professional environment, the concept of «compliance» is well-established (especially in the stock market, but also in banks). In addition, the Central Bank of Ukraine, without compliance, as a single system into business practice, gradually introduces the banking community with its elements. Currently, the Central Bank of Ukraine continued the positive practice of issuing recommendations based on the documents developed by the Basel Committee on banking supervision.

ANALYSIS OF RECENT RESEARCHES AND PUBLICATIONS

Mechanical engineering is of great importance to strengthen the economy of Ukraine and its formation as an independent highly developed countries. The «economic miracle» of Germany, Japan, South Korea and other States began with the development of modern industries. Mechanical engineering is one of the leading units of heavy industry. Creating the most active part of basic production assets (tools), machine-building industry significantly affects the rate and direction of scientific and technical progress in different sectors of the economy, productivity growth, other economic indicators that determine the effectiveness of the development of social production.

In Ukraine, this complex is one of the most developed. From 1940 to 1990, the volume of production increased by 95 times. Since the late 70-ies of engineering is becoming the leading

industry. It accounts for more than 40% of the total industrial production capacity industrial production. The share of plant production in the total production of industry is 29%.

MODERN STATUS OF THE TRACTOR TECHNOLOGY MARKET IN UKRAINE AND THE RUSSIAN FEDERATION

The design and production of machinery for agriculture in Ukraine is carried out 129 of specialized enterprises and 19 design and research institutions. To the manufacture of equipment for agriculture attracted 42 enterprises of the military-industrial complex. To coordinate their activities, to consolidate the efforts in carrying out market reforms to create the necessary conditions for free enterprise, to protect common economic and social interests called the State Department of tractor and agricultural mechanical engineering of Ukraine.

Table 1.- The structure of the market (volume of sales) of tractors in Ukraine, thousand

pieces

Years	Market, thousand	Market structure, thousand pieces				
	pieces	Production	Import	Export	HTZ	
2012	17,9	2,9	16,0	1,0	0,5	
2013	5,5	0,8	5,1	0,4	0,2	
2014	14,9	1,2	14,4	0,7	0,3	
2015	18,2	2,1	17,6	1,5	0,5	
2016	17,8	2,0	17,3	1,5	0,3	

A similar situation is observed in the market of tractor equipment Russian Federation (table 2)

Table 2 - Market structure ((sales vol	lume) of tra	actors in Russia	thousand piece	S

Years	Market, thousand	Market structure, thousand pieces				
	pieces	Production	Import	Export	Production	
2008	35,8	24,7	12,6	1,5	1,6	
2009	7,9	4,2	4,3	0,6	0,3	
2010	13,3	7,2	6,4	0,3	0,5	
2011	29,5	15,7	14,0	0,2	1,2	
2012	32,6	16,5	16,4	0,3	1,3	

It should be noted that the market share of tractors manufactured Kharkov tractor factory (HTZ) at the market of Ukraine and on the Russian market is small and is about 3...7%. However, the proportion of import of tractors in Ukraine and in Russia is decisive.

Analysis of imports of tractors in the Ukraine showed that since 2000 there has been a significant increase in the import of both new and used tractors, particularly through the use of public preferences. In 2000, there were imported 1 634 PCs, and in 2008 imported almost 17,5 thousand units (of which 1 101 PCs used) tractors from 32 countries. The main importing countries are Belarus - 7 457 PCs China - 274 PCs 7, United States - 1 020 PCs, Japan - 589 PCs, Germany - 429 PCs, France - 132 PCs.

On the proposal of the Ministry of industrial policy was the decree of the Cabinet of Ministers of Ukraine dated March 11, 2009 N 264 «On enlargement of internal market for products of domestic enterprises of mechanical engineering for agricultural industry». This document prohibited the use of public preferences in the purchase of imported agricultural machinery in 2009. The time taken industrial policy measures have helped in 2009 to reduce the number of imports in Ukraine of equipment to 6 thousand.

STRONG AND WEAKNESSES OF UKRAINIAN TRACTOR FACTORS

We investigated the strengths and weaknesses of the market Kharkov tractor factory, the essence of which can be reduced to the following provisions.

The strengths of the Business Kharkov tractor factory:

- ✓ known, recognizable brand «Kharkov tractor factory»;
- ✓ high market capacity of tractors in the Ukraine and Russian Federation;
- ✓ affordable prices;
- ✓ simplicity of design of the product;
- ✓ a well-developed distribution and service network business.

Weaknesses Kharkov tractor factory:

- ✓ narrow segment of the product line;
- ✓ export orientation of the business (mostly Russian Federation)
- ✓ the lack of financial instruments sales (leasing, trade credit, etc.)
- ✓ inflexible production line, with high physical and moral depreciation.
- ✓ insufficient technical equipment level for aggregation with modern agricultural technologies
 - ✓ low technological equipment engineering and technological services of factory.

AUTHOR'S PROPOSALS ON DEVELOPMENT OF UKRAINIAN TRACTOR ENGINEERING

In coordination with the management of Kharkov tractor factory we offer a number of innovative measures, the implementation of which may lead to a sharp change in the market condition of the domestic tractor construction. These proposals are mainly related to public and legislative support of the tractor at the national and regional levels and can be summarized to the following provisions.

1. Amendments to the Law of Ukraine «On stimulation of development of domestic engineering for the agro-industrial complex»

Article 1. Definition of basic notions. In this Law are used following concepts: domestic machinery and equipment for agriculture – machinery and equipment noted in paragraph 1 of this article manufactured by enterprises of Ukraine, which cost the share of raw materials, components, assemblies, parts and components of domestic production represents more than 50% for products produced in Ukraine and less than 50% (10% - first year 20% second year, 30% - for the third year) for products not produced in Ukraine, with investments of foreign enterprises in the production capacity of the enterprises of Ukraine and liabilities of the foreign entity withdrawal after three years of enterprises of Ukraine on volumes that cover the need of Ukraine in technology, it is not produced in Ukraine.

2. To Refine the existing Program of development of domestic engineering for the agroindustrial complex in 2018-2020

To account for the newly formed Program new trends in agricultural production associated with alternative forms of tillage that lead to the need to create new systems of agricultural machines. Clearly define the Program priority of JSC «Kharkov tractor factory» in the provision of these complexes energoresursami capacity of $180-240~\mathrm{HP}$ with the further expansion of the model range up to $350~\mathrm{HP}$

3. Support of domestic engineering through the mechanisms of the customs legislation

3.1. To impose import duty of 15% on import of equipment does not fall under the definition of domestic appliances under the rule of Law, offer higher - machinery and equipment manufactured by enterprises of Ukraine, which cost the share of raw materials, components, assemblies, parts and components of domestic production represents more than

50% for products produced in Ukraine and less than 50% (10% - first year 20% second year, 30% - for the third year) for products not produced in Ukraine, with investments of foreign enterprises in the production capacity of the enterprises of Ukraine and liabilities of the foreign entity withdrawal after three years of enterprises of Ukraine on volumes that cover the need of Ukraine in technology, it is not produced in Ukraine.

- 3.2. To impose import duty 20% for imported equipment in Ukraine, used with a lifespan of no more than 8 years. To ban the import of equipment in Ukraine with a lifetime of more than 8 years.
- 3.3. You need to instruct the economy Ministry to create a list of items «critical import» followed by the exemption of goods specified in this list from the payment of customs duties and VAT when imported into the customs territory of Ukraine, if such goods are used exclusively for the needs of own production. For example, in Ukraine there is no production of diesel engines, which could be categorized as «critical imports».
- 4. Sales promotion equipment of a domestic production through mechanisms of the state leasing and partial compensation of interest on loans\x manufacturers
- 4.1. Given that the most appropriate scheme for purchasing agricultural machinery is the purchase of equipment on lease through the NAC «Ukragroleasing» to provide agricultural producers of Ukraine more favorable conditions for the acquisition of tractors, namely the decrease of the percentage of the initial payment for the equipment from 22% to 10% decline in percent annual appreciation from 4.2 to 3% and provide the capability to pay off the total value every six months. With the changes made to oblige NJSC «Ukragroleasing» to implement in conjunction with the distribution network of the plant 300 tractors in 2018.
- 4.2. To provide the State budget of Ukraine for the year 2018 the allocation of the funds to compensate the rate of Bank loan in the amount of 50% rate of lending to farmers for purchasing agricultural machinery. To extend this program just for the tractors of Ukrainian origin
- 5. To improve the mechanism of regulation of tariffs of natural monopolies for industrial consumers
- 5.1. Organization of periodic (repeated during the year) state audit costs of natural monopolies (railway transport, generation and transportation of electricity and heat carriers, the transportation of gas and waste water transport, etc.) with the obligatory establishment of fixed standards of profitability for each of these monopolies, depending on their industry sector and technology used.
- 5.2. It is necessary to legislatively fix the tariffs for a period of not less than quarter, and the change of such tariff to inform consumers at least two months prior to the expiration of the current quarter. This measure will allow to control the costs of industrial consumers across the economy and avoid inflation of prices caused by the unpredictable growth of tariffs.
- 5.3. In respect of the supply of electricity is required to establish a mechanism of competition among generating and transport companies on a single wholesale electricity market. You must provide free access to the market for industrial consumers having consumption above a specified threshold, subject to the availability of such consumers properly certificated automatic system for commercial accounting of electricity.
 - 6. Changes in the tax law VAT
 - 6.1. Timely budgetary compensation of VAT to exporters.
- 6.2. To return to the enterprises the right to payment of import VAT for customs, tax bills in the presence of budgetary compensation of the VAT. Repayment of VAT by presenting a tax bill c 2008 prohibited. Offer to cancel the effect of legislation to ban the use of tax bills for customs clearance.

6.3. To review the current legislation in part of the examination of the treaties in the audits of VAT refunds by eliminating the subjectivity of the tax authorities, in particular the taxpayer's liability for the actions of third parties.

In the old days with Kharkov tractor factory were supplied to Russian Federation from 24 to 26 thousand tractors a year. Now the company is unable to meet the needs of the Ukraine agricultural machinery — from 12 to 16 thousand cars per year, according to statistics. This year Kharkov tractor factory have signed supply contracts on terms of financial leasing 5085 tractors. Put yet only 854 of the machine. For next year have already signed contracts for the supply of nearly 5 thousand cars Kharkov tractor factory, but the Ministry of agro-industrial complex decided to Finance the supply of 3 thousand tractors.

CONCLUSIONS AND RECOMMENDATIONS

Leaders of Kharkov tractor factory more than once considered the possibility of establishing joint ventures with producers from far-abroad countries. Usually all plans are cut off at the moment when the foreign party meets with the plan of distribution shares — 51% owned by the state. With government conduct business does not want any foreigner. Therefore, the way out of the situation at the tractor factory to see the new owner of 30% stake. And talk about the future of Kharkov tractor factory and the prospects of its development will be possible only after this controlling stake will change hands.

REFERENCES

- Kobeleva T.O. (2011) Yelektrotekhnichna galuz Ukraini: suchasniy stan ta perspektivi rozvitku // T.O. Kobeleva // Visnik NTU «KhPI». № 26. S. 34-43.
- Kosenko A.P., Kotsiski D., Maslak O.I., Pererva P.G. & Sakay D. (2009) Ekonomicheskaya otsenka innovatsionnogo potentsiala. Kharkov-Mishkolz : NTU "KhPI", Mishkolz.tekhn.un-t. 170 s.
- Kotsiski D., Pererva P.G. & Kosenko A.P. (2010) Strategichne upravlinnya virobnichim potentsíalom i pidvishchennya konkurentospromozhností pidpriêmstva / D. Kotsiski, P. G. Pererva, A. P. Kosenko // Vísnik Natsionalnogo tekhnichnogo universitetu «KhPI». Kh.: NTU «KhPI». Vipusk 62. S. 112-118.
- Pererva P.G., Kocziszky G., Szakaly D. & Veres-Somosi M. (2012) Technology transfer.— Kharkiv-Miskolc: NTU «KhPI», 2012. — 668 p.