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CHOICE OF ATTRACTIVE MARKETS FOR THE UKRAINIAN MANUFACTURERS OF MACHINE-BUILDING INDUSTRY IN CENTRAL AND EASTERN EUROPE

Importance of development of the machine-building industry for determining the international competitiveness of the country is established. The questions of estimation of attractiveness of international markets are considered and a multilevel system of indicators of their estimation is offered. SWOT analysis of Ukrainian manufacturers' activities on the world market of machine-building was carried out, potential markets were selected for implementation of foreign economic activity of enterprises according to the filter model. An estimation of attractiveness of international markets for Ukrainian manufacturers of the machine-building industry was conducted. The attractiveness of penetrating Ukrainian manufacturers of aviation engineering industry to selected potential markets of Central and Eastern Europe is determined.

Keywords: attractiveness of a market, international markets, penetration strategies, machine building industry, choice of attractive markets, aviation industry, cooperation.

The statement of the problem. Modern processes of globalization cause considerable dynamism, qualitative and quantitative transformations on international markets and are accompanied by increased competition. The global nature of modern economic processes is reflected in the implementation of the policy of openness of national markets, the deepening of the international division and cooperation of labor, which manifests itself in increasing the scale of international trade in goods, services and factors of production.

The growth of the openness of national economies, the general liberalization of foreign economic relations, and scientific and technological progress contribute to the attraction of national enterprises to the world economic system. And this promotes the search for domestic enterprises of attractive international markets. Companies that focus on international markets should take into account the influence of the global economy and conduct a thorough analysis of the international business environment in order to select attractive markets.

Today one of the most globalized markets is the mechanical engineering market, which often determines the international competitiveness of the country. Machine-building is the leading industry in Ukraine, the development of which will enable to strengthen the competitive position of the national economy. Thus, the search for attractive international markets for domestic enterprises of the machine-building industry is becoming particularly acute.

The analysis of resent research and publications. Considering the existing theoretical approaches to the selection of attractive markets, it should be noted that they are mostly connected with the analysis of market environment factors^{1 2}, associated with the analysis of quantitative and qualitative characteristics of the sectoral market^{3 4} of the competitive situation on the market and the assessment of the market competitiveness⁵. Among the most common models for choosing foreign markets for business, filter models

¹ Ламбен, Ж.-Ж. (2004). *Менеджмент, ориентированный на рынок*. Санкт-Петербург: Питер, 118-120.

² О'Шонесси, Д. (2002). *Конкурентный маркетинг. Стратегический подход*. Санкт-Петербург: Питер, 321-322.

³ Каніщенко, О.Л. (2007). *Міжнародний маркетинг в діяльності українських підприємств*: монографія. Київ: Знання-Прес, 122-136.

⁴ Циганкова, Т.М. *Міжнародний маркетинг: теоретичні моделі та бізнес-технології*: монографія. Київ: КНЕУ, 98-104.

⁵ Портер, М. (1998). *Стратегії конкуренції*. Київ: Основи, 51-56.

are the most popular. They include the gradual exclusion of markets from the list of potential markets by individual indicators (filters). As a result, a list of potential markets for conducting foreign trade activities can be obtained¹.

That is, most authors focus on the marketing environment research of these markets when considering the selection of attractive markets. Of course, the choice of attractive markets requires taking into account the peculiarities of the international business environment in order to find effective ways of penetrating and developing successful development strategies. However, this will not make it possible to draw a final conclusion on the level of market attractiveness. The method of analyzing the external market environment of the enterprise, widely used in the literature, is the implementation of the SLEPT analysis (social / cultural, legal, economic, political, technological), which is used to identify the factors of the macro environment (socio-cultural, legal, economic, political, legal, technological), which significantly affect or may affect the company's future activities in foreign markets. Common in the literature by the method of analysis of the external market environment As a rule, it is a list of issues or problems that should be considered when analyzing a particular component, but in general, their structures are rather similar, aimed at identifying the potential opportunities of a country to take capital on a certain scale and forms.

Purpose of the article. The study of the international business environment aims to identify attractive penetration directions for the enterprise. In this aspect, we believe that it is expedient to use the category of market accessibility, which is a set of favorable factors for the enterprise factors of international markets. Its constituents are political and legal accessibility, economic accessibility, socio-cultural accessibility (correspondence of the linguistic background, culture of doing business, traditions, mentality), scientific and technical. That is, all the factors of the enterprise environment, which may be factors of opportunities, we call the factors of market accessibility.

Presentation of basic material. Linking the analysis of the market environment of international business and market accessibility with the analysis of market attractiveness, it should be noted that favorable economic conditions, the political climate, etc. for doing business without justification, it is necessary to consider the opportunities and interests of each particular enterprise. And to speak of the attractiveness of the market is appropriate only in the context of such a characteristic for the enterprise, which depends on its competence, the potential of market activity, resources and know-how, through which the company will succeed in the market². In addition, from our point of view, attractive to the enterprise is a market in which it can operate successfully and that will fit its capabilities and economic interests.

Taking into account the global nature of the world economic space, when considering the concept of attractiveness of the international commodity market, we propose to apply a multi-level system of indicators (Figure 1). Thus, in the process of analyzing the attractiveness of the market at the mega-level, account should be taken of the global nature of the world economic space and the assessment of global economic factors³. Considering the macro level, first of all, one should speak about the external environment of the international market, the degree of attractiveness for the company as a whole, the factors of its market environment. The market environment for international business should be considered in a separate list of indicators and in mezo-level – the level of a separate industry, because the high attractiveness of the business environment of the country and the positive dynamics of its market factors will not yet mean sufficient level of development and attractiveness of the sectoral market of this country. The final conclusion on the level of market attractiveness can be made by determining the degree of conformity of the state of market environment factors on mega-macro-mezolevels to the economic interests of enterprises, their resources, opportunities and goals (market attractiveness at the micro level) associated with the exit and strategies of their activities at international commodity markets.

To analyze the attractiveness of international markets, it is advisable to follow the following steps:

1. Determination of economic interests of the enterprise (analysis of the degree of internationalization of the enterprise and the goals of its foreign economic activity).

¹ Каніщенко О.Л. (2007). *Міжнародний маркетинг в діяльності українських підприємств*: монографія. Київ: Знання-Прес, 134-136.

² Старостіна, А.О. (2012). *Маркетингові дослідження національних і міжнародних ринків*. Київ: Лазуріт-Поліграф, 401-428.

³ Prygara, O. (2006). Techniques for Analyzing the Attractiveness of International Commodity Markets under Conditions of Economic Globalization. *International Economic Policy*, 4, 57-83.

2. Analysis of possibilities of international activity of the enterprise and preliminary selection of target markets.
3. Investigate market accessibility by analyzing quantitative and qualitative indicators of its marketing environment.
4. Research of possibilities of realization of economic interest of the enterprise in the target markets.
5. Distribution of markets by the degree of attractiveness and the choice of effective strategies for penetrating selected markets.

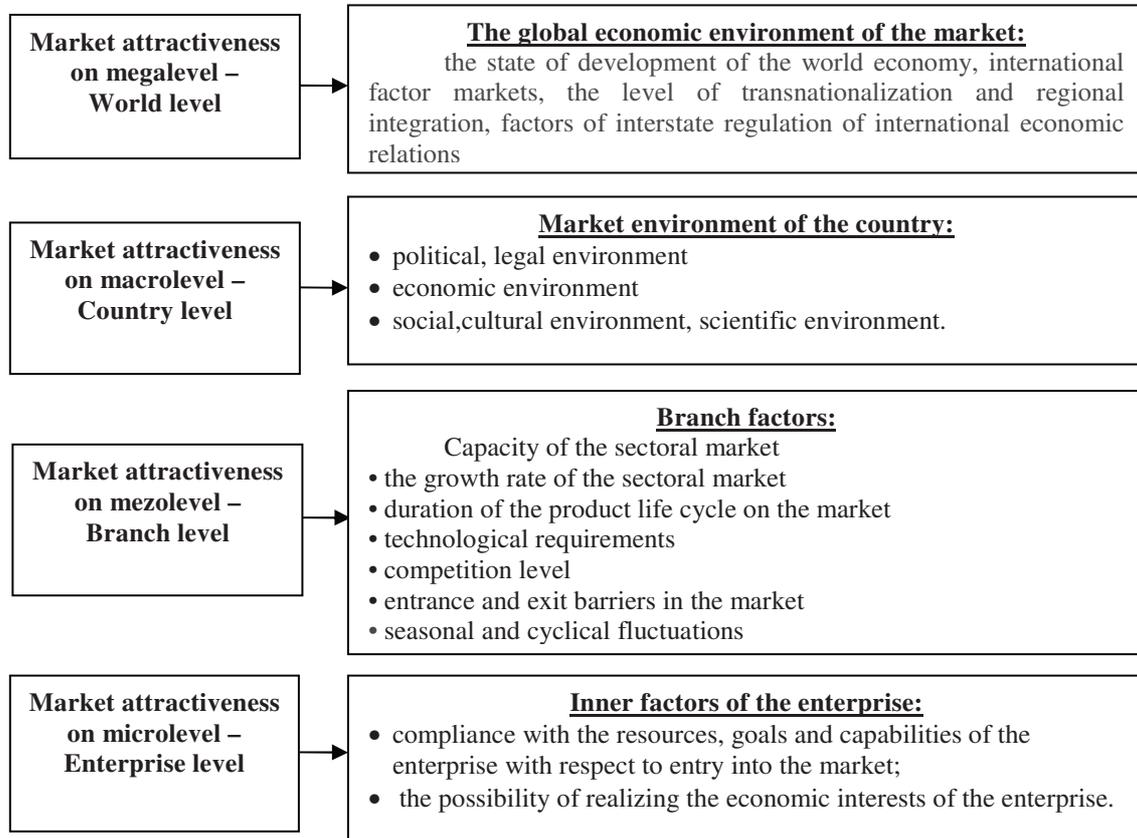


Fig.1. Multilevel system of indicators of international markets attractiveness
(Source: complied by the authors)

Let us consider the proposed methodology for analyzing the attractiveness of international markets on the example of the domestic machine-building industry. In table 1 an analysis of the strengths, weaknesses, threats and opportunities of Ukrainian manufacturers in the world market of mechanical engineering (SWOT – analysis) is provided.

The analysis shows that the Ukrainian machine-building industry, although having many weaknesses and threats from the market environment of international business, has the strengths and opportunities that can be taken into account and used by Ukrainian enterprises of machine-building while penetrating the world market. This means that choosing the best form for the Ukrainian producers to enter the world market, an adequate assessment of their competitiveness potential and opportunities for realizing economic interests, attractive markets for their penetration may be chosen. That is, those markets in which Ukrainian producers can realize their own economic interests, potential and market opportunities, while minimizing the weaknesses and threats of the market environment.

For the purpose of preliminary selection of target markets, we will use a filter model for choosing the markets of the machine-building industry in Ukraine (Fig. 2).

In the scheme shown in Fig. 2, filter 1 defines the overall potential of the regions of the world and takes into account the geographical proximity of countries, political support and the socio-economic situation, as well as global risks. Filter 2 identifies potential markets, taking into account the competitive capabilities of enterprises.

**SWOT analysis of Ukrainian producers on the world market
of machine-building industry**

Strength	Weaknesses
<ul style="list-style-type: none"> ▪ advantageous geographic position in the space of European and world markets; ▪ developed and diversified transport infrastructure; ▪ full technological cycle of production of aircraft; ▪ availability of scientific and research institutes; ▪ qualified personnel; ▪ existing experience in production of the machine-building industry; ▪ high production potential (design, production of passenger and transport aircraft, production of on-board electronic equipment, aircraft engines and aggregates, helicopters and small aircraft; ▪ production of airplanes with a number of passenger seats less than 100; ▪ membership of Ukraine in the International Civil Aviation Organization: aircraft quality control is carried out by the State Aviation Service of Ukraine in accordance with international standards. 	<ul style="list-style-type: none"> ▪ low level of competitiveness compared to products from developed countries; ▪ dependence on the supply of units, parts and components from other countries; ▪ reduction of production; ▪ outdated fixed assets of production; ▪ low level of use of new technologies; ▪ low level of innovation activity; ▪ outflow of skilled personnel abroad; ▪ low efficiency of promotion to foreign markets; ▪ underdeveloped system for stimulating demand and sales for Ukrainian products. ▪ excessive preparations for serial production of aircraft models, which may even lead to their moral aging before the release; ▪ absence of a single vertically integrated efficiently operating complex ▪ high level of depreciation of fixed assets (more than 70%).
Opportunities	Threats
<ul style="list-style-type: none"> ▪ the possibility of revitalization of the domestic market of Ukraine; ▪ high prices in machine building industry on the markets of developed countries ▪ high innovative activity in the industry; ▪ emergence of new technologies on the market; ▪ the possibility of penetration on markets in Asia, Africa and South America; ▪ expansion of international cooperation in the field of air repair. 	<ul style="list-style-type: none"> ▪ reduction of external demand for machine-building products; ▪ increased competition on the market; ▪ intense activity of the main world leaders; ▪ imperfection of state measures for the development of the machine-building industry; ▪ military conflict in the East of Ukraine lack of stable funding of government programs in terms and volumes; ▪ instability of world currency rates; ▪ rising prices for products and services of natural monopolies.

(Source: compiled by the authors)

Filter 3 identifies priority countries from selected regions. As a result of the analysis, Czech, Polish and Russian markets were selected for further study of attractiveness. The next step is to assess the availability of selected markets for Ukrainian producers. The analysis should be carried out in a wide range of quantitative and qualitative characteristics. It should be considered that a favorable marketing environment for doing business in the markets does not mean that these markets are attractive for domestic producers.

Analyzing markets according to the indicators of the attractiveness of the markets, presented in Fig. 1, we can draw the following conclusions. The markets of these countries are attractive for the penetration of domestic aircraft construction companies. Russia was the most promising country for penetrating Ukrainian aircraft manufacturers, as before the collapse of the USSR we had a joint aircraft building complex. But in the world of recent geopolitical events, Ukraine needs to reorient to the markets of Europe,

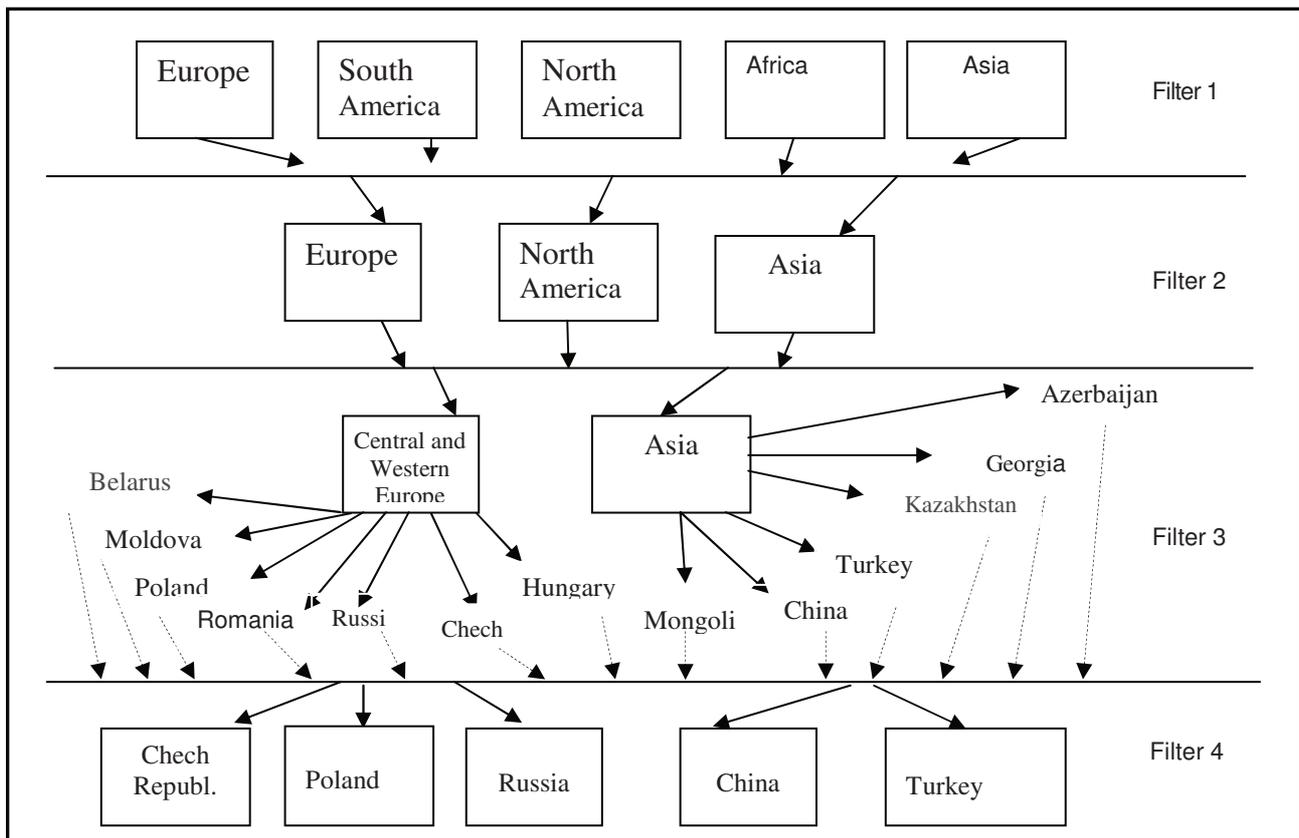


Fig. 2. Scheme of selection of attractive international markets for enterprises of the machine-building industry of Ukraine
(Source: compiled by the authors)

in particular, the Czech Republic and Poland. The Czech Republic has long-standing traditions of the aviation industry and in this sector has always held firm positions. Over the years, the country has achieved a good reputation due to its outstanding quality, reliability and industry innovations. According to the Aerospace Industries Association, about 70 companies operate, of which 8 produce products (planes, engines and air screws). The average number of registered employees in 2016 was about 8700¹. According to this indicator, the Czech Republic is 4th in the world by the ratio of people employed in aviation. Poland is known for the production and maintenance of various types of aircraft. In general, there are 55 aviation companies operating in Poland with about 16,000 people². Rapid growth in production in this sector is possible thanks to cooperation. Parts and components of aircraft equipment are manufactured at Polish enterprises, and the installation takes place abroad.

According to the proposed approach to the analysis of the attractiveness of the markets and considering the assessment of the economic interests of the domestic enterprises of the machine-building industry in the markets of the selected countries, it is appropriate to consider the following forms of penetration into the markets: export of products to the Czech and Polish markets, it is possible to establish a joint venture with the Czech Republic and Poland.

The Czech aircraft industry has a high potential, which explains the expediency and need for cooperation between Ukrainian aircraft construction companies and Czech. The favorable factors that can be chosen as attractive for the Czech market include the high capacity of the market, the development of interstate cooperation, and the development of a cluster of related and supporting sectors of the aviation industry, namely, the existence of research and development institutes. Cooperation is the most attractive form of cooperation, both for the Czech market and for the Ukrainian market. The main competitive

¹ Czech Aviation 2016. <https://issuu.com/laa_cr/docs/katalog_2016_f_300dpi>.

² Авиационная промышленность Польши. <http://www.poland.su/business/ekonomika_avia.html>.

advantages for Ukrainian aircraft building companies in cooperation with the Czech Republic are: R&D, labor qualification and high production capacity – the ability to manufacture aircraft of any destination and size.

Polish aviation industry market is also highly attractive for Ukrainian aircraft manufacturers, given the rapid pace of socio-economic development of the country and its interest in cooperating with Ukrainian avionics companies. The following factors can be attributed to the factors of attractiveness of this market: capacity of the given market, low level of development of aircraft repair industry and infrastructure, as well as low share of own production of airplanes.

Ukraine can offer large-sized aircraft, radar equipment, engines and other components and components to the Central and Eastern European markets. The main competitive advantages of Ukraine in implementing the strategy of exporting Ukrainian aviation production to the countries of Central and Eastern Europe can be: Exclusive technical characteristics of Ukrainian aircraft, the presence of powerful research institutes and research and development bureaus, highly skilled labor force, existing experience, production of large passenger and cargo aircraft, and the provision of a full range of after-sales services. main competitive advantages of Ukraine in cooperation with the countries of Central and Eastern Europe can be: high qualification of personnel and the presence of serious scientific developments, high potential of the precision engineering industry, the presence of production units and components, the presence of aircraft repair companies, which carry out a full range of services from maintenance to after sales service.

Conclusions. From the above analysis it can be concluded that along with a considerable number of problems with the domestic branch of mechanical engineering, it has really significant potential for the development and improvement of the world image of Ukraine. In the search for attractive markets for domestic enterprises, their opportunities and economic interests should be analyzed and those markets should be selected among potentially accessible in terms of favorable business conditions, in which domestic enterprises can have a competitive potential and can realize their own economic interests.

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