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DUTCH DISEASE IN UKRAINE: ASSESSMENT OF THE PROBLEMS OF THE DOMESTIC EXPORTS

Abstact. Dutch disease manifests itself in the deindustrialization of the economy that occurs when a nation possesses natural resources constituting a significant share in its exports. Its main limit is the growth of the national currency rate due to the improvement in the trade balance, which reduces the competitiveness of the manufacturing sector products. However, the symptoms of the Dutch disease may develop when the proportion of the mining sector in national exports grows at a relatively faster pace. In any case, an increase in the revenues from the export of natural resources contributes to raising the equilibrium exchange rate, thus limiting the competitiveness of the other commercial sectors of the economy.

The study aims to identify the causes and economic effects of the Dutch disease for Ukraine's economy and develop proposals for improving the country's export oriented policy in the context of eliminating the negative effects caused by the fluctuations in the conditions on the world markets of natural resources.

One of the key trends in the development of Ukraine's economy in recent years is the priority development of the export oriented industries mainly the primary ones. Steel making remains a major export industry of Ukraine. Ukrainian exports of steel and other ferrous metals constitute approximately 30 % of the country's exports and is a major source of foreign currency supply. This raises the issue of evaluating the effectiveness of such a development from the standpoint of the national economy as a whole. The raw materials orientation does not provide the acceleration of scientific, technical and socio-economic development.

Thus, the problem of the Dutch disease (i.e. an almost complete lack of competitive products on the world markets of manufactured goods) is particularly

acute for Ukraine, and, without having provided its solution, it is difficult to expect a rapid and sustainable economic growth in the long run. In such circumstances it is necessary to pursue the public policies aimed at redistribution of the income from raw materials exports for its investment in the manufacturing industry, as well as to increase funding and stimulating innovation in the economy, primarily pure science and innovation focused enterprises.

Keywords: Dutch disease, export, deindustrialization, orientation towards raw materials export, nations dependent on natural resources.

JEL Classification: E23, F14, O10, O40.

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«ГОЛЛАНДСЬКА ХВОРОБА» В УКРАЇНІ: ОЦІНКА ПРОБЛЕМ ВІТЧИЗНЯНОГО ЕКСПОРТУ

Анотація. Авторами досліджено особливості виникнення та розвитку «голландської хвороби» в країнах світу, яка виражається в деіндустріалізації економіки в результаті володіння країною сировинними ресурсами, які займають значну питому вагу в експорті країни. Виявлені причини та економічні ефекти «голландської хвороби» для економіки України. Зазначено, що металургія залишається головною експортною галуззю країни. Український 30 % експорту експорт сталі та інших чорних металів становить приблизно країни та є основним джерелом надходження валюти. Це піднімає проблему оцінки ефективності такого розвитку з позиції вітчизняної економіки в цілому. Розроблені пропозиції щодо вдосконалення політики експортної орієнтації країни в контексті усунення негативних наслідків, спричинених змінами кон'юнктури на світовому ринку сировини. Наголошено на необхідності реалізації державної політики, що спрямована на перерозподіл доходів від сировинного експорту з метою їх інвестування у розвиток обробної

промисловості та інноваційно-активних підприємств.

Ключові слова: «голландська хвороба», експорт, деіндустріалізація, експортосировинна орієнтація, ресурсозалежні країни.

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«ГОЛЛАНДСКАЯ БОЛЕЗНЬ» В УКРАИНЕ: ОЦЕНКА ПРОБЛЕМ ОТЕЧЕТВЕННОГО ЭКСПОРТА

Аннотация. Авторами исследованы особенности развития «голландской болезни» в странах мира, которая выражается в деиндустриализации экономики в результате владения страной сырьевыми ресурсами, которые занимают значительный удельный вес в ее экспорте. Выявлены причины и экономические эффекты «голландской болезни» для экономики Украины. Металлургия остается главной экспортной отраслью страны. Украинский экспорт стали и других черных металлов составляет около 30 % экспорта страны и является основным источником валютных поступлений. Этот факт поднимает проблему оценки эффективности такого развития с позиции отечественной экономики в целом. Авторами разработаны предложения по усовершенствованию политики экспортной ориентации страны В контексте устранения негативных последствий, которые могут быть вызваны изменениями коньюнктуры на мировых сырьевых рынках. Также отмечена необходимость реализации государственной политики, которая нацелена на перераспределение доходов от сырьевого экспорта с целью их инвестирования в развитие обрабатывающей промышленности и инновационно-активных предприятий.

Ключевые слова: «голландская болезнь», экспорт, деиндустриализация, экспортно-сырьевая ориентация, ресурсозависимые страны.

Introduction. Ukraine is very rich in natural resources, with a share of the mining industry and exports of raw materials with low level of processing being

rather big in total exports. That explains heavy dependence of both national income and budget revenues on the current prices for raw materials on the world markets and causes extreme urgency and acuteness of the issue of formulating export oriented policy in Ukraine. The question whether Ukraine is suffering the Dutch disease, which is reflected in the growing dependence of its economy on the extremely high incomes of steel making, is vitally important. This causes the need for a thorough and objective investigation of the current state of the national economy and foreign trade policy of Ukraine.

A brief review of the publications. The phenomenon of the Dutch disease has always generated interest among the researchers, both historians and economists. The most fully the Dutch disease issues were dealt with in the writings of the following scientists: J. Sachs (1995) [4], R. Torvik (2002) [6], O. Zabelina (2004) [1], V. Dvornikov (2013) [7], V. Karavaev (2006) [3], J. Gluhov (2008) [13] and others.

However, the problems of the Dutch disease in the Ukrainian economy have hardly been considered, hence the relevance of the study.

The study aims to identify the causes and economic effects of the Dutch disease for Ukraine's economy and develop proposals for improving the country's export oriented policy in the context of eliminating the negative effects caused by the fluctuations in the conditions on the world markets of natural resources.

Results

The essence and the social and economic effects of the Dutch disease.

The term Dutch disease arose after the famous economic developments in the Netherlands, the country which owns the largest in Europe Groningen gas field and many other fields in the North Sea. In 1960 the twentieth century Groningen gas field, located 400 km. from the Ruhr, it was really a gold mine, but soon became apparent quite unpleasant effects: inflation, the output gap along with the economic growth rate.

In 1960s of the 20th century the Groningen gas field, located 400 km from the Ruhr, proved to be, in fact, a bonanza, but soon quite unpleasant effects like inflation, a drop in production against the background of the economic growth, and

unemployment became apparent. It was then that the economists got interested in the nature of this phenomenon. The term Dutch disease was first used in 1977 in The Economist weekly magazine. In 1981, this phenomenon was in detail described by Ellman, and, at that, his work was rather devoted to the problem of inefficient use of the state oil revenues for the needs of the social sector of the Netherlands than the exchange rate problems [1].

Although the Netherlands was not ailing long the term Dutch disease was firmly fixed by this economic phenomenon. Even thus far the economists engage in the debate about the phenomenon of the Dutch disease. Some scientists advocate the position that, in this case, one sector of the economy only gains at the expense of another one without any serious macroeconomic implications for the country and its people. [2] Others, on the contrary, regard the situation as a disease since the resources of the country's economy are shared among different sectors disproportionately, i.e. they flow from the high-tech industries and services into the areas of low-tech production [3].

Empirical studies prove that countries rich in natural resources are characterized by slower economic growth and higher poverty rates than the other countries. In 1971 J.D. Sachs, A.M. Warner produced a sample of 97 developing countries which showed that countries with a large share of primary sector in GDP had lower growth rates over the next 18 years [4].

T. Gylfason, T. Herbertsson, G. Zoega (1999), based on an analysis of 125 countries between 1960 -1992, also emphasized a negative correlation between the size of the primary sector and the economic growth rates. [5]

Some aspects of the political economy also help explain the "curse of the natural resources". It has been shown that the countries rich in natural resources are characterized by rent oriented behavior, when different groups compete for the appropriation of natural resources rents, which leads to reduced production, and inefficient use of natural resources. R. Torvik (2002) built a model that takes into account the increasing returns from scale and the mechanism of rent oriented behavior. The author shows that the larger the size of the primary sector, the more

entrepreneurs are involved in the rent oriented activities. The corresponding drop in production negates the positive effect of the increasing primary sector income, which results in reduced total output and welfare. [6]

The Dutch disease is characterized by some common features that indicate the beginning of the economy degradation, namely deindustrialization, cutbacks in the total number of jobs in the industrial sector, the real strengthening of currency, reduction in net exports, protectionism (as a result of a high actual exchange rate), large cyclical fluctuations related to the changes in the world prices for resources, an increase in exchange rate fluctuations, concentration of power and wealth, growth of inequality and poverty, spread of corruption, fall in demand for human capital and the consequent deterioration of education and loss of its prestige, increased defence expenditure to protect the sources of huge profits made by a small group of people.

Resource-driven economies. With the integration of a growing number of countries into the global economy and an increase in the volume of trade flows within the international division of labor, there began to form a new type of national economies, an economy oriented towards raw materials export. A special feature of this type of the economic system is the predominant share of raw materials and semi-processed products in the structure of the merchandise exports with a significant fraction of the latter in the country's GDP.

The economies oriented towards raw materials export include a considerable number of countries: most countries of the Middle East area (Iraq, Iran, Kuwait, Saudi Arabia, etc.) Latin American countries (Brazil, Venezuela, Colombia, Chile) and African countries (Algeria, Angola, Libya, Nigeria) and some countries of the former Soviet Union (Kazakhstan, Azerbaijan, Russia, Ukraine).

The number of resource-driven economies has significantly increased in recent years: in 1995, these countries numbered only 58, and they only accounted for 18 % of the global GDP, in 2011 these countries numbered more than 81, and they accounted for 26% of the world economy. In 20 years, these countries might make up more than a half [7].

McKinsey & Company, Inc. in its report "Reverse the curse: Maximizing the

potential of resource-driven economies "singles out resource-driven economies by the following criteria:

- Resource export (oil, gas, minerals) makes up more than 20% of exports of the total country exports;
- Resources provide more than 20 % of the total tax revenues;
- Mining makes over 10 % of the total production [7].

Ukraine certainly meets all of these criteria.

By the average rate of the economic growth the resource-driven economies are inferior to the ones not dependent on resources. The majority of the resource-rich countries live in poverty as 2/3 of the world's investments are shared among the developed countries.

General directions of export oriented policies in Ukraine. One of the key trends in the development of Ukraine's economy in recent years was the priority development of the export oriented industries, mainly the primary ones. This raises the issue of evaluating the effectiveness of such a development from the standpoint of the national economy as a whole. On the one hand, Ukraine has enough mineral resources to specialize in mining raw materials and act as a supplier of raw materials in the international division of labor. On the other hand, the indicated benefits can be used for manufacturing products with a high degree of processing (emulating the United States) that will enable Ukraine to successfully compete in the market of high-tech products.

The model of economic development in Ukraine now is characterized by:

- raw materials export type of economic growth;
- structural disparity between the sectors of economy;
- degradation of social systems, which increases negative social trends.

Steel making remains a major export industry in Ukraine (Table 1) [8].

Ukrainian exports of steel and other ferrous metals constitute approximately 30 % of the total country exports being a major source of foreign currency supply. At the same time, the dependence of the industry on the global market fluctuations leads to a higher level of risk in business.

Table 1
Commodity Pattern of Ukraine's Foreign Trade, %

	2010		2011		2012	
	exports	imports	exports	imports	exports	imports
Total	100	100	100	100	100	100
I. Livestock and livestock products	1,5	2,0	1,4	1,3	1,4	2,0
II. Herbal products	7,7	2,6	8,1	2,2	13,4	2,9
III. Fats and oils of animal or vegetable	5,1	0,7	5,0	0,6	6,1	0,5
origin						
IV. Finished foods	5,0	4,1	4,3	3,7	5,1	3,5
V. Mineral products	13,0	34,8	15,0	36,4	11,1	32,5
VI. Chemical and related industries	6,8	10,6	7,9	9,7	7,4	10,1
products						
VII. Polymer materials, plastics and	1,3	6,0	1,4	5,4	1,5	5,3
products thereof						
VIII. Raw hides, leather	0,3	0,3	0,2	0,2	0,2	0,3
IX. Wood and wood products	1,6	0,6	1,6	0,5	1,5	0,4
X. Wood pulp or pulp of any other fibrous	1,8	2,7	1,6	2,2	1,6	2,1
cellulose materials						
XI. Textiles and textile products	1,4	3,3	1,3	2,4	1,1	3,0
XII. Footwear, headgear, umbrellas	0,3	0,8	0,3	0,4	0,3	0,9
XIII. Stoneware, plaster and cement	0,8	1,5	0,8	1,4	0,8	1,3
products						
XIV. Natural or cultured pearls, precious	0,1	0,5	0,1	0,9	0,2	0,6
or semi-precious stones						
XV. Base metals and products thereof	33,7	6,8	32,3	6,9	27,5	6,2
72 ferrous metals	28,4	3,2	27,0	3,4	22,3	2,7
73 ferrous metals products	3,9	1,5	4,2	1,4	4,1	1,5
XVI. Machinery, equipment and gears;	11,0	13,4	9,9	15,5	10,2	15,5
electrical equipment						
XVII. Road, air, water transport facilities	6,3	6,0	7,1	7,5	8,7	9,5
XVIII. Optical instruments and devices,	0,5	1,5	0,4	1,3	0,4	1,4
photographic equipment						
XX. Different industrial products	0,8	1,1	0,8	1,0	0,9	1,2
XXI. Artwork	0,0	0,0	0,0	0,0	0,0	0,0

Today, to describe the economic situation in Ukraine one can apply the term the Dutch disease. In a broad sense this notion means dependence of the economy on the conditions of the world raw materials markets. The problem is that the growth of export earnings allows to increase investments in iron ore mining without an increase and modernization of industrial production.

Characterizing the resource potential of Ukraine, it is necessary to note that on its territory there have been discovered about 20 thousand fields and displays of 117 different minerals [9]. Of these 8,290 fields with 98 types of minerals are of commercial value and are on the public register. 3,349 deposits are under the industrial development. The most important, in terms of production volume and

reserves are coal, iron, manganese, titanium and uranium ores, kaolin, graphite, rock salt, and a number of non-metallic minerals.

At the same time the country suffers a shortage of oil and natural gas, lack of major agronomic ores, non-ferrous and rare metals and some other minerals. Furthermore, the best parts of the reserves have highly been exploited and the mining conditions are progressively getting complicated.

In the early 80s of the 20th century the mining of minerals in Ukraine reached 1.05-1.10 billion tons, accounting for about 5 % of the world output. However, since the mid- 80s the downturn began (824 million tons in 1990), which increased during the crisis of the 90s. Extraction growth started in 2000s. Current mining indices make about 50-55 % of the 1991 level and about 135-145 % relative to 2001. The crisis 2009 was characterized by a sharp decline in mining to 119, 4% compared to 2001 [10].

Considering the largest steel producers in the world, one can note that Ukraine, being among the top ten is not the major producer (Table 2) [11]. Moreover, steelmaking process in Ukraine lags behind the world standards.

Table 2
The Ten Largest Steel Producing Countries

	Country	2012, million t	% against 2011
1	China	716,5	103,1
2	Japan	107,2	99,7
3	USA	88,6	102,5
4	India	76,7	104,3
5	Russia	70,6	102,5
6	South Korea	69,3	101,2
7	Germany	42,7	96,3
8	Turkey	35,9	105,2
9	Brazil	34,7	98,5
10	Ukraine	32,9	93,1

Among the world exporters Ukraine is also not the first: it ranks third after Japan and China (2011) [12].

The semi-finished products, which are products manufactured at lower levels of production, constitute the largest share of steel produced in Ukraine, with the result that Ukrainian enterprises lose a substantial fraction of the added value. Ukraine is the world's most export-oriented country among the steel producers. Nearly 70% of

the steel produced in Ukraine is exported overseas, therefore domestic steel makers have to take into account changes in the world prices for steel. Thus, in 2012 the average price for exported Ukrainian steel was 604 USD/t, and in 2011 the price was 675 USD/t [12]. It accordingly affects the amount of foreign currency earnings from exports.

Promising directions of counteracting the Dutch disease. It should be stressed that in today's global economy the availability of raw materials is considered ambiguously. On the one hand, the availability of natural resources is becoming one of the factors of economic security of the country. But, on the other hand, it inhibits the process of industrialization, creating disparities in the economic and social development.

In the Ukrainian economy natural resources are one of the most controversial factors of the further balanced economic development as their significant share in exports leads to an increasing dependence of the domestic economy on the world raw materials markets. The raw materials orientation does not provide the acceleration of scientific, technical and socio-economic development. Priority development of primary industries puts high-tech industries on the back burner, contributing to the enrichment of a tiny fraction of people who control the natural resources fields. In such circumstances, one cannot even think about the improvement of the economic and social situation in Ukraine.

The question arises whether the Dutch disease can be cured. The experience of some countries proves it can. The example is China, which is now one of the largest exporters of ferrous metals. But the huge profits of the Chinese exporters of metal are taken away by the government introducing export duties [13].

It is essential not to encourage the enrichment of the natural resources exporters who do not spend a single dollar on upgrading domestic steel plants, but to develop the production of highly processed finished goods with high value added. In addition to that, it is necessary to redistribute steel makers proceeds so that they would not leave the country "hiding" offshore, but were invested in the development of the national economy. Long-term economic growth can be achieved primarily

through domestic investors.

According to Credit Suisse Group AG, the population in Ukraine is mostly poor, 97.3 % of Ukrainians have assets under 10,000 USD. There is no middle class which, in developed countries, gives major investors. There are only 23 countries in the world, primarily in Africa, in which the fraction of the low-income people is even larger (Table 3) [14].

Table 3

The share of the adult population with corresponding assets

(excluding real estate), %

Country/Region	The poor	Middle class	The well-to-do	The rich(over	
	(under 10,000	(10,000 -	(0,1-1 million)	1 million	
	USD)	100,000 USD)	USD)	USD)	
Ukraine	97,3	2,4	0,2	0,0	
Belorus	97,0	3,0	0,0	0,0	
Russia	91,2	8,0	0,8	0,1	
Kazakhstan	90,7	8,6	0,7	0,1	
Africa	92,7	6,8	0,5	0,0	
Asia	71,2	19,5	8,8	0,5	
The world	69,3	22,5	7,5	0,6	
Latin America	64,6	32,2	3,1	0,1	
Europe	47,0	28,9	22,6	1,6	
North America	31,7	33,7	30,1	4,5	

In Ukraine there is a significant disparity in the incomes of the citizens. In the developed countries, the middle class makes up 50-60% of the total population, while in Ukraine there is no suchlike basis for investment. This is a terrible manifestation of the Dutch disease in Ukraine when given the growing unemployment, and closures, steel makers get huge profits.

Conclusion. To conclude, it should be noted that under increased competition, the Ukrainian steel making enterprises might keenly feel the problems accumulated in the field, including lagging behind the developed countries in terms of modernization, high cost of energy, not enough wide range of steel products etc. Also one should bear in mind the forecast decline in demand for steel in the world. Hence there is a need for sound public policy aimed at improving the structure of the country's exports.

The Ukrainian finished product exports are extremely small, so the monetary policy as the only way to treat the Dutch disease is ineffective as it is difficult to stimulate things which do not exist. The problem of the Dutch disease (i.e. an almost complete lack of the competitive manufacturing industries products on the world markets) is particularly acute for Ukraine; and it is difficult to expect a rapid and sustainable economic growth in the long run without having addressed it.

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