Evgen M. Sych¹, Olena V. Boiko² TERMS AND DIRECTIONS OF PROVIDING EFFECTIVE DEVELOPMENT OF UKRAINIAN TRANSPORT MARKET

The article investigates the features of the implementation of transport potential, problems and obstacles arising in the development of national transport market and reasonable directions for its further effective development.

Keywords: transport market; efficient development; transport and logistics infrastructure; government regulation.

Євген М. Сич, Олена В. Бойко УМОВИ ТА НАПРЯМКИ ЗАБЕЗПЕЧЕННЯ ЕФЕКТИВНОГО РОЗВИТКУ ТРАНСПОРТНОГО РИНКУ УКРАЇНИ

У статті досліджено особливості реалізації транспортного потенціалу країни, проблеми та перешкоди, що виникають у розвитку національного транспортного ринку, а також обґрунтовано напрямки його подальшої ефективної розбудови.

Ключові слова: транспортний ринок; ефективний розвиток; транспорно-логістична інфраструктура; державне регулювання.

Табл. 2. Рис. 4. Літ. 12.

Евгений Н. Сич, Елена В. Бойко УСЛОВИЯ И НАПРАВЛЕНИЯ ЭФФЕКТИВНОГО РАЗВИТИЯ ТРАНСПОРТНОГО РЫНКА УКРАИНЫ

В статье исследованы особенности реализации транспортного потенциала страны, проблемы, препятствующие развитию национального транспортного рынка, а также обоснованы направления его дальнейшего ефективного развития.

Ключевые слова: транспортный рынок; эффективное развитие; транспорнологистическая інфраструктура; государственное регулирование.

Introduction. The market reform of the system of economic relations, social transformation and transformational changes occurring in the national economy over the last 20 years, led to the emergence of significant changes in the transport sector. The transport industry faced significant structural and institutional transformations. Initial privatization was accomplished, the transition from the direct transport sector administrative control to government regulation of transport market subjects, laid legal foundations for transport activity under new social and economic conditions. As a result of market transformation at the transport market of the country there are dozens of various organizational and legal forms of business entities and their legal ownership forms.

Problem statement. However, these measures alone were not sufficient to ensure effective development of the transport market. Unacceptably high depreciation of fixed assets, especially of technical equipment and vehicles, causing low productivity and low level of service customers. Moreover, poor state of transport infrastructure neither provide high quality of transportation services, nor meet the current requirements of safe operations, which reduces the efficiency of the transport sector and its

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competitiveness at the global transport market. Ultimately, this situation has a negative impact on social and economic development (gross domestic product, fiscal revenues, employment etc.) and affects its international image.

The resulting problems in the development of the transport market are caused not only by disorder, but also in some cases by the lack of proper institutional framework adequate to new conditions, and necessary mechanisms to ensure compliance with applicable laws, rules and regulations.

Literature review. Problems of transition to new economic conditions of transport functioning are disclosed in the publications of such leading foreign and domestic scientists as V.P. Ilchuk (2004), M.V. Makarenko and Y. Tsvetov (2007), E.M. Sych et al. (2011), V.A. Fursov (2009; 2011) and others. Paying tribute to their development, it should be noted that constant changes in the economic situation in the country and operating conditions of the transport market require adjustment of individual areas of development.

The aim of the article is to analyze the current state and problems encountered in the development of the transport market and justify its further development terms and directions.

Results and discussion. Transport plays an important role in social and economic development. Transport system creates the conditions for economic growth, improving competitiveness of the national economy and quality of life. As a leading sector of the national economy provides transport functioning and development of other sectors, serves as the fundamental basis for economic relations between manufacturers and consumers across the country, as well as externally. Stable and efficient functioning of transport is also indispensable for defense, state integrity and its national security.

Besides, transport complex is a factor of geostrategic potential realization of Ukraine, increasing its role in the international labor division. Indeed, the unique geographical location at the crossroads of trade routes potentially can receive more benefits from globalization's dynamic development and implementation capacity of transport infrastructure. Today, in the strategic arsenal of state transport there is a developed system of pipeline, network of railways, airways, highways in latitudinal and meridional directions. The total Ukrainian transport network includes 21.6 ths km of railways, 166.1 ths km of paved roads, and 4.8 ths km of trunk pipelines, 40.1 ths km of gas pipelines and 1.0 ths km pipeline, almost 2.1 ths km of inland waterways, 18 ships and 10 river ports, 36 airports (State Statistics Service of Ukraine, 2012: 13). In this case, the length of Ukrainian railway network ranks second in Europe.

Also through Ukraine come pan-European transport corridors # 3, 5, 7, 9, corridors of Railways Cooperation (ORC) # 3, 4, 5, 7, 8, 10 and transport corridor Europe-Caucasus-Asia (TRACECA) (Ministry of Transport and Communications of Ukraine). Acting as a major connector in the global space transport, international transport corridors (ITC) have exceptional value in solving traffic problems associated with the provision of interstate relations with feasibility of establishing an international transport infrastructure, characteristics which are consistent and allow the use of modern joint transportation technologies that affect the attraction of transit traffic. According to the British Institute of Rendall in Europe we have the highest traffic

transit rating (3.11 points), which takes into account the sophistication of deployed systems and transport networks, as well as the level and condition of infrastructure (Novikova, 2003: 8). Under such circumstances the structures of transport economy create a single economic space and are also the instrument of national economies integration with the system of world economic relations, which can be considered as a factor of economic growth, the creation of competitive advantage for national economy.

During the years of market reforms transport sector has undergone significant changes. The results of privatization and demonopolization of the transport sector, liberalization of tariffs policy and other factors formed the market of transport services, designed to ensure the production and inter-connection, circulation of goods and services. Today this market has almost 33 ths of registered entities of all forms of ownership and management, 90% of which are private. The share of cargo traffic volume of private entities is 50.0% in road transport -72.0%, respectively, transportation of passengers -42.0%, road -90.0% (Ministry of Transport and Communications of Ukraine, 2007: 2).

Today, Ukraine is showing the first signs of recovery from the crisis of the main branches of the real sector of the economy. The share of enterprises of transport and communications in relation to the gross value added in Ukraine in 2012 was 11.7%, the value of fixed assets at the end of 2010 (at cost) -57.4% of the total production potential. The number of workers employed in this industry is about 7% of the total employed population. In 2012, Ukrainian transport system provided transportation of million tons of cargo (Table 1). The results of transport enterprises in Ukraine in 2012 indicate that despite a slight decline in the carriage of goods (by 1.8% compared with 2011), there is a gradual exit from crisis, such as compared to 2009 – the year of economic crisis, the industry as a whole received incremental carriage of goods by 12% (State Statistics Service of Ukraine, 2012: 54). The volume and dynamics of freight transport are described in Table 1 and Figure 1.

Cargoes transportation, mln t	2005	2006	2007	2008	2009	2010	2011	2012	Rate of increase, %
All types of transport, including	1805	1873	1990	1972	1625	1765	1887	1853	0.98
Land:	1784	1850	1965	1953	1615	1743	1877	1845	0.98
- railway	450	479	514	499	391	422	469	457	0.97
- car	1121	1167	1255	1267	1069	1168	1253	1260	1.01
- pipeline	213	204	196	187	155	153	155	128	0.83
Water:	21	23	24	19	10	11	10	8	0.8
- sea	8	9	9	8	5	4	4	4	1
- river	13	14	15	11	5	7	6	4	0.66
Aviation	0.1	0.1	0.1	0.1	0.1	0.1	0.1	0.1	1

Table 1. The volume of cargo transportation by all types of transport

Source: compiled by the authors according to the data from State Statistics Service of Ukraine, 2012.

Assigned growth rate in 2012 compared to 2011 reached only by road transport. The worst situation is observed in river transport, where there was a decrease in traffic volumes by 34%. However, land types of transport compared to 2009 showed a positive trend.

The structure of transportation in Ukraine by mode of transport in 2012 is dominated by road transport - its share is 67.9%, the share of rail in freight transport

structure -24.66%, pipeline -6.91%, sea and river at 0.21\%, air -0.01% (State Statistics Service of Ukraine, 2012: 55). Organization of cargo transportation by mode of transport in 2012 is shown on Figure 2.





Intensification of production activities of internally oriented industries, industrial complexes and dynamic development of foreign trade provided a growing demand for freight transport in 2011. As a result, freight turnover increased by 6.4% and in 2011 amounted to 445.6 bln t/kms (State Statistics Service of Ukraine, 2012: 104). However, in 2012 this had fallen to 412.6 bln t/km. Freight transport Ukraine in 2008–2011 is shown in Figure 3.



Unfortunately, the main indicators of freight in 2013 (Table 2) compared to the same period in 2012 tend to decrease. Most decreased are the water transport and air transport. Positive indicators are shown only by road transport.

	Freight shipped		Freight turnover						
	mln t	in % to January- November, 2012	mln t/km	in % to January- November, 2013					
By all types of transport	689.2	97.4	344613.3	95.5					
including									
railway	404.6	96.0	204047.2	93.3					
car	166.6	101.1	36758.2	102.5					
water	5.8	79.6	4237.3	86.5					
pipeline	112.1	98.7	99322.3	98.4					
aviation	0.1	80.6	248.3	75.4					

Table 2. Freight traffic in January-November 2013

Source: According to the State Statistics Service of Ukraine, 2013.

For the research peculiarities of transit potential realization (Figure 4) of Ukraine became important information on the dynamics of transit traffic across the country for a certain period (2000–2012), both in terms of changes in the structure of foreign trade cargo flows through the border country and the structure of transit modes (State Statistics Service of Ukraine, 2012: 83).

The analysis of the dynamics and structure of foreign trade cargo flows across the borders of Ukraine allows to state that during the precrisis 8 years (2000 and 2008) in general there was a positive dynamics of traffic across the structure of foreign trade cargo, with the rapid growth in 2007–2006 biennium transit cargo that originated from a favorable conjuncture at the world commodity markets. However, the following two years (2008–2009) were marked as the crisis ones, because there was a sharp drop in foreign trade cargo flows by almost half. The reason is obvious – the global financial crisis of 2008–2010 and the worsening economic forecasts reflected in all the sectors of the economy, which in turn had a negative impact on the dynamics of domestic foreign traffic. The greatest way it affected the reduction of transit cargo flows across the borders of Ukraine. However, a gradual reduction in transit traffic in the last 3 years has other causes, such as a targeted transport policy of that reorients

its foreign trade cargo to bypass Ukraine. Appropriate changes have occurred in the structure of foreign trade cargo, so in 2012 the structure of freight transit amounted to 33.0%, exports accounted for 45.2%, and imports -21.8%. In comparison with the previous years, the share of transit in the structure of foreign trade cargo traffic decreased significantly, for example, in comparison with 2008 by 25.4% (in 2008 the share of transit was 58.4%, respectively exports -24.6% import -17.0%) (State Statistics Service of Ukraine, 2012: 83).



Among other reasons of transit cargo reduction is that Ukraine is much inferior to most of its neighbors as to the quality of infrastructure in general and transit infrastructure in particular. For example, the estimates of Logistics Performance Index (World Bank, 2010) Ukraine has a very low rate: 102nd out of 155, with low level of customer service.

The effectiveness of the transport system and the speed of moving goods do not correspond to current requirements. The average speed on the roads of Ukraine (including railways) is 2-3 times lower than in Western countries. As a result, the share of transport costs in production costs are too high. Thus, the available transit capacity and a favorable geographical position of the country was only at 70-75%.

In general, we must recognize that the transport economy is extremely costly. Increased number of entities at the transport market, fragmentation of the transport system, the prevalence of private financial interests negatively affect the level of transport costs, which are growing rapidly. So to make a conditional 1 USD of GDP on average Ukraine has to carry 6 t/miles of cargo. Meanwhile, in the EU-25 this figure is 0.3 t/km, 20 times less (European Environment Agency, 2006). In Ukraine, this

ratio determines the dependence on the supply of products with mainly low degree of processing: such as metals, ores, cereals.

Basic problem of transport is its growing technical and technological backwardness. For example, the level of the fixed assets outdate in rail transport reaches 80–90%. Obsolete is a certain part of the infrastructure of the railway sector (stations, stations, hotels, communications and traffic control etc.) (Prager, 2011: 37), about 70% of the rolling stock is technically obsolete, and 50% of buses all operate for over 10 years. In the field of air transport there is also the aging fleet: now no more than 6% of their total number in operation is less than 5 years, but aviation enterprises due to lack of funds have virtually no chance to buy new planes. They are too slow to realize the program of leasing aircraft purchase and the funds allocated to it by state, spent inefficiently. No government program rolling stock of domestic airlines, although the need for its development was discussed back in 2008, corresponding NSDC decision, inadequate material and technical base for domestic airports. There is also a technical discrepancy of most airports in Ukraine with the International Civil Aviation Organization (ICAO) and International Air Transport Association (IATA), among other problems airports should be noted: the obsolescence of fixed assets, reduced resource for covering airfield, aircraft ground equipment, facilities and equipment, insufficient geometric dimensions, carrying capacity elements of terminal facilities and more. In the field of water transport have a level of port efficiency and quality of their management and operation of modern international requirements, the demand for their services, the low rate of fleet renewal and infrastructure for maritime transport. This led to the aging of the production means: the average age of domestic vehicles is more than 20 years, which does not allow many ships go to foreign ports. Most of the fleet is controlled by domestic ship owners, foreign ship registarion threatens the independence of transport support Ukraine's foreign trade.

In addition to a number of systemic problems that hinder the provision of transport market include:

- low level of intersectoral coordination in the development of transport infrastructure, which leads to the separation of a common transport space, waste of resources and reduce the effectiveness of the transport use;

- slow improvement of transport technologies and lack of the link with production, trade, and customs warehouse technologies;

- unacceptably low level of information transport process and transport information interaction with other sectors;

- lack of effectiveness of financial and economic mechanisms that encourage the provision of investment on transport and infrastructure;

- lag in the implementation of national and sectoral programs in certain activities, transport means, transport engineering etc.

All of the above will promote further economic development, its European integration and can lead to poor level of transport service, deceleration promotion, Ukraine's foreign trade dependence on foreign transport, loss of competitiveness of domestic transport, increase accidents and environmental stress.

Ensuring sustainable economic growth in the post-crisis requires a change in the ideology of the state policy towards the implementation of complex incentive instruments to ensure the effective development of the transport market. This is possible

only on the basis of combining the efforts of state and market mechanisms of selforganization, the formation of a new quality of economic growth based on the efficient use of national transport capacity, creation of new competitive advantage in response to competitive challenges of the post-crisis world.

Promising areas of effective transport market include:

- implementation of effective state regulation and control of transport services to ensure fair competition and economic conditions on motivation structures of transport activities in order to ensure the quality of transport services and the expanded reproduction of capital assets transport;

- improvement of the legal framework and methods of state regulation aimed at increasing innovation and investment potential of the transport industry, including the issues regarding the development and implementation of economic and financial mechanisms (including leasing) for rolling stock vehicles;

- providing conditions for active investment by introducing concession and other forms of partnerships in order to concentrate resources for mixed financing of transport infrastructure through a combination of public investments and private equity of domestic and foreign investors;

- introduction of advanced transportation and logistics technologies for building national and international transpot & logistics systems that enable coordinated movement of material, information and financial flows by the "door to door" and "just in time" methods;

- improving the organizational and economic cooperation through the development of integrated information and transport and logistics infrastructure, especially the interconnected network of logistics centers and multimodal terminals;

- use of the advantages of combining cluster resources, and more business transport and logistics cluster and so on.

Implementation of these areas should provide a significant reduction in the specific transaction and transportation costs, increased innovation and investment attractiveness and competitiveness of the national transport market actors. General social and economic results of their implementation beyond merely solving transportation problems and solving problems relating to broader plan associated with ensuring sustainable growth of the national economy.

Conclusions. Studies on the implementation of the transport potential revealed a discrepancy between the rate of change of the parameters of the transport system, carrying out institutional reforms and the increasing demands of domestic economy to transport lead to lag the rate of transport sector development needs of social and economic development. Solving these problems is particularly important in the transition of national economy in the phase of intensive growth and European integration course. Under such circumstances ideology of government policy must change towards the implementation of complex incentive instruments to ensure effective development of the transport market. This is possible only on the terms of combining the efforts of state and market mechanisms of self-organization, the formation of a new quality of economic growth based on the efficient use of national transport capacity.

References:

Концепція сталої національної транспортної політики розвитку всіх видів транспорту на 2007–2014 роки: Наказ Міністерства транспорту і зв'язку від 3.05.2007 №360 // www.ten-t.org.ua.

Ільчук В.П. Інноваційно-інвестиційні системи залізничного транспорту: становлення та розвиток: Монографія. – К.: Логос, 2004. – 381 с.

Макаренко М.В., Цветов Ю.М. Системный подход к реформированию железнодорожного транспорта Украины // Проблемы экономики и управления на железнодорожном транспорте: Материалы II Международной научно-практической конференции. – К.: КУЭТТ, 2007. – Т. 1. – С. 5–18.

Мережа міжнародних транспортних коридорів на території України // Міністерство транспорту і зв'язку України // www.mintrans.gov.ua.

Новікова А.М. Україна в системі міжнародних транспортних коридорів. — К.: НІМБ, 2003. — 494 с.

Прейгер Д.К., Собкевич О.В., Ємельянова О.Ю. Реалізація потенціалу транспортної інфраструктури України в стратегії посткризового економічного розвитку. — К.: НІСД, 2011. — 37 с.

Сич Є.М., Бойко О.В., Шишкіна О.В. Розвиток монопрофільних виробничих структур ринку: транспортно-економічний аспект: Монографія. — К.: Логос, 2011. — 220 с.

Транспорт і зв'язок України 2012: Статистичний збірник. — К.: Август Трейд, 2012. — 269 с. Фурсов В.А. Концептуальные основы формирования и функционирования регионального

рынка транспортных услуг: Монография. – Ставрополь: Ставролит, 2009. – 196 с. *Фурсов В.А.* Формирование и функционирование регионального рынка транспортных услуг:

теория, методы, модели: Монография. – Ставрополь: СевКавГТУ, 2011. – 348 с.

European Environment Agency Report No 3/2006.

World Bank (2010). Ukraine: Trade and Transit Facilitation Study.

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КНИЖКОВИЙ СВІТ



Сучасна економічна та юридична освіта престижний вищий навчальний заклад НАЦІОНАЛЬНА АКАДЕМІЯ УПРАВЛІННЯ Україна, 01011, м. Київ, вул. Панаса Мирного, 26 E-mail: book@nam.kiev.ua

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Монографія присвячена управлінню інноваційною діяльністю в економіці України. В основу викладу матеріалу монографії покладені багаторічні дослідження науковців в галузі економічної теорії, фінансів та банківської справи, які були апробовані на сторінках авторитетного журналу «Актуальні проблеми економіки» в 2004—2007 роках. В монографії обґрунтовано основні інноваційно-інвестиційні напрямки та проблеми розвитку економіки України та управління даними процесами.