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**CONCEPTUAL APPROACHES TO THE PROCESS OF FORMING
AN ORGANIZATIONAL AND ECONOMIC MECHANISM
FOR MANAGING FOREIGN ECONOMIC ACTIVITY
OF A MANUFACTURING PHARMACEUTICAL ENTERPRISE
ON THE BASIS OF LOGISTICS**

Successful functioning of domestic manufacturing pharmaceutical enterprises directly depends on the efficiency of their foreign economic activity. The article studies dynamics of foreign trade of Ukraine in pharmaceutical products. It is established that the average share of imports of pharmaceutical products in the total structure of commodity imports of Ukraine was 3.4 %. It is determined that the volume of export supplies of medicines has increased significantly, and their share in the total structure of foreign trade of Ukraine varied within 0.3-0.5 %. It is proved that imports for the specified period increased by 2.2 times in 2021 compared to 2015. The factors influencing the efficiency of foreign economic activity of manufacturing pharmaceutical

enterprises are formulated. The definition of the concept of «organizational and economic mechanism for managing the logistics of foreign economic activity of manufacturing pharmaceutical enterprises» is proposed. It is determined that the organizational and economic mechanism for managing the logistics of foreign economic activity is a multilevel system of interrelated elements, namely: subjects, objects, principles, methods, tools, ways of their interaction, which generally harmonize the economic relations of the state, owners of pharmaceutical enterprises, creditors, staff and business partners. The components of the organizational and economic mechanism for managing the logistics of foreign economic activity of a manufacturing pharmaceutical enterprise – economic and organizational - are proposed. It is determined that the organizational element regulates the organizational relations between the elements of the system, the economic element implements the system of economic relations in the management process. The mechanism of action is proposed. The advantages of using the organizational and economic mechanism for managing the logistics of foreign economic activity of a manufacturing pharmaceutical enterprise are estimated.

Key words: *organizational and economic mechanism, management, foreign economic activity, logistica, pharmaceutical enterprise, activity, conceptual approach, process, formation, manufacturing enterprise, medicinal products.*

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КОНЦЕПТУАЛЬНІ ПІДХОДИ ДО ПРОЦЕСУ ФОРМУВАННЯ ОРГАНІЗАЦІЙНО-ЕКОНОМІЧНОГО МЕХАНІЗМУ УПРАВЛІННЯ ЗОВНІШНЬОЕКОНОМІЧНОЮ ДІЯЛЬНІСТЮ ВИРОБНИЧОГО ФАРМАЦЕВТИЧНОГО ПІДПРИЄМСТВА НА ЗАСАДАХ ЛОГІСТИКИ

Успішність функціонування вітчизняних виробничих фармацевтичних підприємств напряму залежить від ефективності здійснення ними зовнішньоекономічної діяльності. У статті досліджено динаміку зовнішньої торгівлі України фармацевтичною продукцією. Встановлено, що в середньому частка імпорту фармацевтичної продукції в загальній структурі товарного імпорту України становила 3,4%. Визначено, що обсяги експортних поставок лікарських засобів значно зросли, а їх частка в загальній структурі зовнішньої торгівлі України варіювала в межах 0,3-0,5%. Доведено, що імпорт за зазначений період збільшився в 2,2 рази у 2021 році порівняно з 2015 роком. Сформульовано фактори впливу на ефективність зовнішньоекономічної діяльності виробничих фармацевтичних підприємств. Запропоновано визначення поняття «організаційно-економічний механізм управління логістикою зовнішньоекономічної діяльності виробничих фармацевтичних підприємств». Визначено, що організаційно-економічний механізм управління логістикою зовнішньоекономічної діяльності становить собою різнорівневу систему взаємопов'язаних елементів, а саме: суб'єктів, об'єктів, принципів, методів, інструментів, способів їхньої взаємодії, які загалом гармонізують економічні стосунки держави, власників фармацевтичних підприємств, кредиторів, персоналу і бізнес-партнерів. Запропоновано складові організаційно-економічного механізму управління логістикою зовнішньоекономічної діяльності виробничого фармацевтичного підприємства – економічну та організаційну. Визначено, що організаційний елемент регулює організаційні відносини між елементами системи, економічний елемент реалізує систему економічних відносин у процесі управління. Запропоновано механізм дії. Оцінено переваги застосування організаційно-економічного механізму управління логістикою зовнішньоекономічної діяльності виробничого фармацевтичного підприємства.

Ключові слова: організаційно-економічний механізм, управління, зовнішньоекономічна діяльність, логістика, фармацевтичне підприємство, діяльність, концептуальний підхід, процес, формування, виробниче підприємство, лікарські засоби.

Statement of the problem. Fierce competition in the pharmaceutical market during the economic crisis and increasing requirements for the quality and range of medicines require pharmaceutical manufacturers to expand the areas of international cooperation, which, in turn, can not be done without a quick response to changes, without the use of new approaches and methods of enterprise management, which will allow it to fully realize the existing potential to provide the population with quality and affordable medicines, and increase competitiveness in the international market.

Analysis of recent studies and publications. The problems of foreign economic activity have always been given considerable attention. Thus, we can distinguish such studies as the study of the development of foreign economic activity of enterprises, taking into account the peculiarities of strategic planning [1-2], research of enterprise risk management problems [3-4] and issues of foreign trade of pharmaceutical enterprises [5-6]. Considerable attention was paid to the study of internal logistics issues [7-8]. The study of these issues was carried out by O. S. Vihanskiy, O. P. Grebelnyk, I. I. Dakhno, M. V. Zarichkova, A. A. Mazaraki, Z. M. Mnushko, V. M. Tolochka and others.

However, there is often no connection between the elements of foreign economic activity management taking into account the specifics of pharmaceutical production and comprehensive research to identify differences in foreign economic activity of pharmaceutical enterprises.

The aim of the article is to study the state of foreign economic activity of the pharmaceutical sector of Ukraine and to develop an organizational and economic mechanism for managing the foreign economic activity of a manufacturing pharmaceutical enterprise on the basis of logistics. The methods of generalization, analysis and synthesis, mathematical statistics were used in the study.

Summary of the main research material. The forms of foreign economic activity of pharmaceutical enterprises are the export of finished medicines, import of active pharmaceutical ingredients, basic and auxiliary materials, equipment, as well as the provision of services.

The domestic pharmaceutical market is characterized by significant import dependence – the share of imports of pharmaceutical products in the total structure of commodity imports of Ukraine. Thus, on average it was 3.4 %. It is worth noting the outstripping increase in imports and the increase in the negative balance of pharmaceutical products (table 1).

Table 1. Dynamics of foreign trade of Ukraine in pharmaceutical products in 2011-2021 [9]

Years	Export			Import			Balance, thousand USD
	cost, thousand USD	in % to the corresponding period of the previous year	in % to the total amount	cost, thousand USD	in % to the corresponding period of the previous year	in % to the total amount	
2011	195144.1	98.30	0.29	2878998.2	117.71	3.49	-2683854.1
2012	243458.2	124.76	0.35	3307942.1	114.90	3.91	-3064483.9
2013	251526	103.31	0.40	3100812	93.74	4.03	-2849286
2014	255591.6	101.62	0.47	2473307.8	79.76	4.54	-2217716.2
2015	155441.6	60.82	0.41	1367034.5	55.27	3.64	-1211592.9
2016	184182.8	118.49	0.51	1606956.3	117.55	3.24	-1422773.5
2017	193111.2	104.85	0.45	1767455.8	109.99	3.56	-1574344.6
2018	216178.0	112.5	0.5	1947012.5	110.2	3.4	-1730834.5
2019	250792.2	116.0	0.5	2143147.0	110.1	3.5	-1892354.8
2020	268221.7	106.9	0.5	2523224.1	117.7	4.6	-2255002.4
2021	315424.7	117.6	0.5	3056616.1	121.1	4.2	-2741191.4

The volumes of export supplies of medicinal products had an abrupt dynamics, but since 2015, there has been a constant growth, the growth rate of exports is 102.9 %. At the same time, their share in the overall structure of foreign trade of Ukraine remained almost unchanged in the analyzed period, it varied within 0.3-0.5 %.

Imports for this period increased 2.2 times in 2021 compared to 2015. It is worth noting that the intensification of imports of medicines had a negative impact on the country's trade balance. In 2021, the negative balance of foreign trade in pharmaceutical products increased by 27 % (from -2247315.2 thousand USD (2010) to -2247315.2 thousand USD (2015). USD (2010) to -3064483.9 thousand USD. USD (2012)).

The negative balance can be explained by the difficulties of entering the international markets of domestic pharmaceutical manufacturers, which is primarily due to the presence of fierce competition among global pharmaceutical companies, high requirements for the quality control system of medicinal products in European markets. The advantages of domestic pharmaceutical manufacturers, which allow them to compete on the international market, include low production costs, in particular, the costs of paying qualified labor.

The structure of the foreign economic activity of the pharmaceutical sector of Ukraine is characterized by such a ratio of export to import that is on average 9% to 91% (fig. 1).

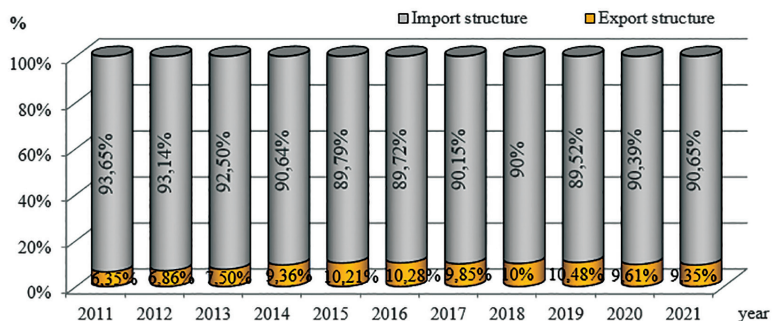


Fig. 1. The structure of import-export of products of the pharmaceutical sector of Ukraine

Factors affecting the activities of pharmaceutical enterprises include military operations and martial law established in Ukraine from 24.02.2022, devaluation of the national currency, high inflation, decreasing demand for pharmaceutical products, impoverishment of the population, outflow of the population abroad, etc.

The SWOT analysis of the foreign economic activity of the pharmaceutical enterprise made it possible to conclude that the negative features of the foreign economic activity of domestic manufacturing pharmaceutical enterprises are the devaluation of the national currency; an increase in the prices of active pharmaceutical ingredients and medicines, which in turn leads to a decrease in the purchasing power of the population and a shift in demand in favor of cheap generic medicines, etc.

The strengths of foreign economic activity include modernization of production, improvement of the quality control system of medicines, stable relations with business partners, quality management system, perfect system of quality control of medicines and a significant share of regular customers.

Summarizing the above, it can be stated that today one of the directions for improving the foreign economic activity of domestic pharmaceutical enterprises is the application of a logistic approach.

The logistics of foreign economic activity should be considered in the managerial and technological spheres. Organizational management includes the fulfillment of contractual conditions of foreign economic activity, the movement of material, financial and informational flows in the customs territory; to the technological sphere – customs clearance, transportation, forwarding, provision of warehouse services, information support, optimization of costs related to the implementation of logistics operations of foreign economic activity (fig. 2).

From the point of view of modern management theory, any processes at any level (the state, the country's economy as a whole, a specific enterprise) take place under the influence of the functioning of a certain type of mechanism, one of which is the organizational and economic mechanism for managing foreign economic activity. Its purpose is to manage the statics (organization of the structure of the management system) and dynamics (organization of the process of functioning of the managed system) of foreign economic activity due to the corresponding influence on the object of management [10-11].

On the basis of conducted research and generalization of world experience [1, 11-12] determined, under the organizational and economic mechanism of managing the logistics of foreign economic activity, it is expedient to understand a set of economic, administrative, legal, organizational, technological, social methods, tools and levers of influence of the subject of management on the object of management in order to ensure the desired vector of development of the object of management thanks to the development of management solutions that provide a combination of statics and dynamics. A distinctive feature of the organizational and economic mechanism is the management of various processes at the micro level, so it can be concluded that the specified mechanism is a component of the economic mechanism of the pharmaceutical enterprise as a whole. On the other hand, the

organizational and economic mechanism for managing the logistics of foreign economic activity is a multi-level system of interconnected elements, namely: subjects, objects, principles, methods, tools, methods of their interaction, which generally harmonize the economic relations of the state, owners pharmaceutical enterprises, creditors, personnel and business partners [13]. That is, the basis of his actions is the reconciliation of the goals and objectives of the foreign economic activity management system with the methods, means of achieving goals and management resources of the general enterprise management system.

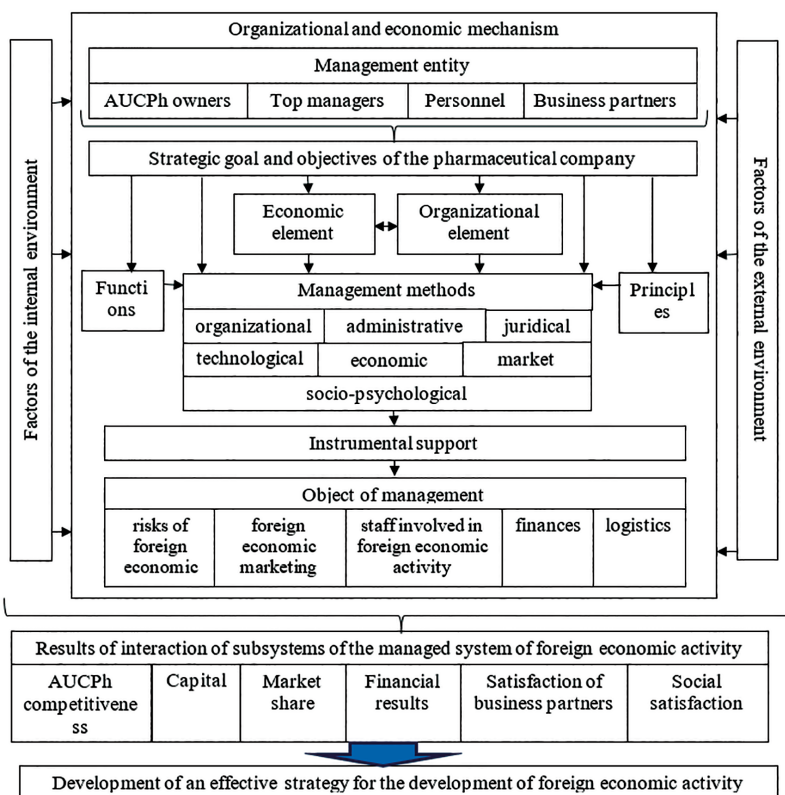


Fig. 2. The proposed organizational and economic mechanism for managing the logistics of foreign economic activity of a manufacturing pharmaceutical enterprise

The organizational element regulates the organizational relations between the elements of the system and contains production and financial relations, management tools; the economic element consists of the mechanism of internal management, the system of market relations and the system of influence from the state, a set of principles for the implementation of these relations between individual elements and tools for achieving goals, that is, implements the system of economic relations in the management process.

The mechanism operates through the establishment of links and compliance of the overall strategy of the enterprise with individual elements of the mechanism of foreign economic activity management and logistics management mechanism.

Conclusions and suggestions. Thus, it can be argued that the above model allows us to study information about the factors of influence at all levels (internal and external environment), to determine their impact on various aspects of the activities of manufacturing pharmaceutical enterprises, the likely risks associated with logistics activities during the implementation of foreign economic operations of manufacturing enterprises, and to develop measures to reduce the losses of the enterprise. The connecting element of the organization of the process of managing foreign economic activity is the development of modern standards for managing foreign economic and logistics activities of pharmaceutical manufacturing enterprises and information and legal support of the studied activity.

Further research requires approaches to managing the organizational and economic mechanism of foreign economic activity of manufacturing pharmaceutical enterprises.

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REFERENCES

1. Vasylykivskiy, D.M. (2020), Mytne ta lohistychne rehuliuвання v systemi mizhnarodnykh ekonomichnykh vidnosyn [Customs and logistics adjustment in the system of international economic relations].

2. Hanin, V.I., Borokh, S.V. (2018), Stratehichni aspekty upravlinnia zovnishnoekonomichnoiu diialnistiu pidpriemstva [Strategic aspects

of management of foreign economic activities of the enterprise]. *"Ekonomichnyi analiz" [Economic analysis]*. Vol. 28(3). Pp. 162-169.

3. Zhyhalkevych, Zh.M., Stanislavskiy, O.V. (2019). Osoblyvosti zovnishnoekonomichnoi diialnosti vitchyznianskykh pidpriemstv v umovakh yevrointehratsii [Peculiarities of foreign economic activity of domestic enterprises in the conditions of European integration]. *"Ekonomichnyi visnyk NTUU «KPI»" [Economic bulletin of NTUU «KPI»]*. Pp.116-123.

4. Zavhorodnii, A.V. (2019). Pryntsypy zovnishnoekonomichnoi diialnosti: natsionalni ta rehionalni vymiry [Principles of foreign economic activity: national and regional dimensions]. *"Ukrainskyi zhurnal prykladnoi ekonomiky" [Ukrainian Journal of Applied Economics]*. Vol.1. Pp. 85–93.

5. Pavliuk, T.S. (2018). Suchasni metody upravlinnia zovnishnoekonomichnoiu diialnistiu mashynobudivnykh pidpriemstv [Modern methods of managing the foreign economic activity of machine-building enterprises]: avtoref. dys. ... kand. ekon. nauk: spets. 08.00.04. Zaporizkyi natsionalnyi universytet. Zaporizhzhia. 21 p.

6. Zvit Antymonopolnoho komitetu Ukrainy za rezultaty doslidzhennia farmatsevytychnykh rynkiv [Report of the Antimonopoly Committee of Ukraine based on the results of research of pharmaceutical markets]. available at: <http://www.amc.gov.ua> (Accessed: 24 november 2022).

7. Nguyen, Bang, Mutum, Dilip, S. (2012). A review of customer relationship management: successes, advances, pitfalls and futures. *Business Process Management Journal*. Vol. 18. № 3. Pp.400–419.

8. Tkachenko, K.E., Tkachenko, I.V., Piven, E.P. (2015). Essence and importance of the concept of relationship marketing. Kh. : NFaU, 466 p.

9. Zakharko, N.V., Sahaidak-Nikitiuk, R.V., Barnatovych, S.V., Gretska, G.A. (2018). Theoretical bases of the implementation of logistics foreign economic activity in pharmaceutical enterprises. *"Ukrainskyi zhurnal klinichnoi ta laboratornoi medytsyny" [Ukrainian Journal of Clinical and Laboratory Medicine]*. Vol.4. Pp. 62–69.

10. Zakharko, N.V., Sahaidak-Nikitiuk, R.V., Demchenko, N.V. (2019). The study of the current state and trends of development of the foreign economic activity of domestic pharmaceutical companies. *"Sotsialna farmatsiia v okhoroni zdorov'ia" [Social pharmacy in health care]*. Vol.3. Pp. 38–47.

ЛІТЕРАТУРА

1. Васильківський Д. М. Митне та логістичне регулювання в системі міжнародних економічних відносин: монографія. Хмельницький: ХНУ, 2020.

2. Ганін В. І., Борох С. В. Стратегічні аспекти управління зовнішньоекономічною діяльністю підприємства. *Економічний аналіз*. 2018. № 28 (3). С. 162-169.

3. Жигалкевич Ж. М., Станіславський О. В. Особливості зовнішньоекономічної діяльності вітчизняних підприємств в умовах євроінтеграції. *Економічний вісник НТУУ «КПІ»*. 2019. С. 116-123.

4. Завгородній А. В. Принципи зовнішньоекономічної діяльності: національні та регіональні виміри. *Український журнал прикладної економіки*. 2019. Т. 4. № 1. С. 85–93.

5. Павлюк Т. С. Сучасні методи управління зовнішньоекономічною діяльністю машинобудівних підприємств : автореф. дис. ... канд. екон. наук: спец. 08.00.04. Запорізький національний університет. Запоріжжя, 2018. 21 с.

6. Звіт Антимонопольного комітету України за результатами дослідження фармацевтичних ринків. URL: <http://www.amc.gov.ua> (дата звернення: 24.11.2022)

7. Nguyen Bang, Mutum Dilip S. A review of customer relationship management: successes, advances, pitfalls and futures. *Business Process Management Journal*. 2012. Vol. 18. № 3. P.400–419.

8. Tkachenko K. E., Tkachenko I. V., Piven E. P. Essence and importance of the concept of relationship marketing. Kh. : NFaU, 2015. 466 p.

9. Zakharko N. V., Sahaidak-Nikitiuk R. V., Barnatovych S. V., Gretska G. A. Theoretical bases of the implementation of logistics foreign economic activity in pharmaceutical enterprises. *Український журнал клінічної та лабораторної медицини*. 2018. Т. 13, № 4. С. 62–69.

10. Zakharko N. V., Sahaidak-Nikitiuk R. V., Demchenko N. V. The study of the current state and trends of development of the foreign economic activity of domestic pharmaceutical companies. *Соціальна фармація в охороні здоров'я*. 2019. № 3. С. 38–47.

СТАТТЯ НАДІЙШЛА ДО РЕДАКЦІЇ 13.12.2022