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**CONTEMPORARY METHODOLOGICAL APPROACHES
TO THE DESIGN OF ECONOMIC MECHANISMS FOR
THE DEVELOPMENT OF MACROLOGISTICAL SYSTEMS
IN ACCORDANCE TO INTERNATIONAL INTEGRATION FACTORS**

Abstract. The article studies and systematizes modern methodological approaches to the design of economic mechanisms for the development of macrologistical systems, taking into account the factors of international integration. Methodological approaches were considered in two priority areas - the development of macrologistical systems at the national and international levels. Taking into account the designated methodological techniques for building and developing macrologistical systems, attention was focused on that in modern logistic systems both material flows and resource flows that are of an intangible nature should receive intensive development. At the same time, the scientific postulate was advanced that the development of macrologistical systems directly implies the minimization of material flows and the maximization of intangible flows. Also, special scientific attention was focused on the design of mechanisms for the development of international macrologistical systems, which makes it possible in theory and practice for specialists participating in international integration relations to intensify economic growth and increase the competitiveness of economic systems.

Keywords: logistics, macrologistical system, material and non-material flows, international integration, economic mechanism of development.

Introduction

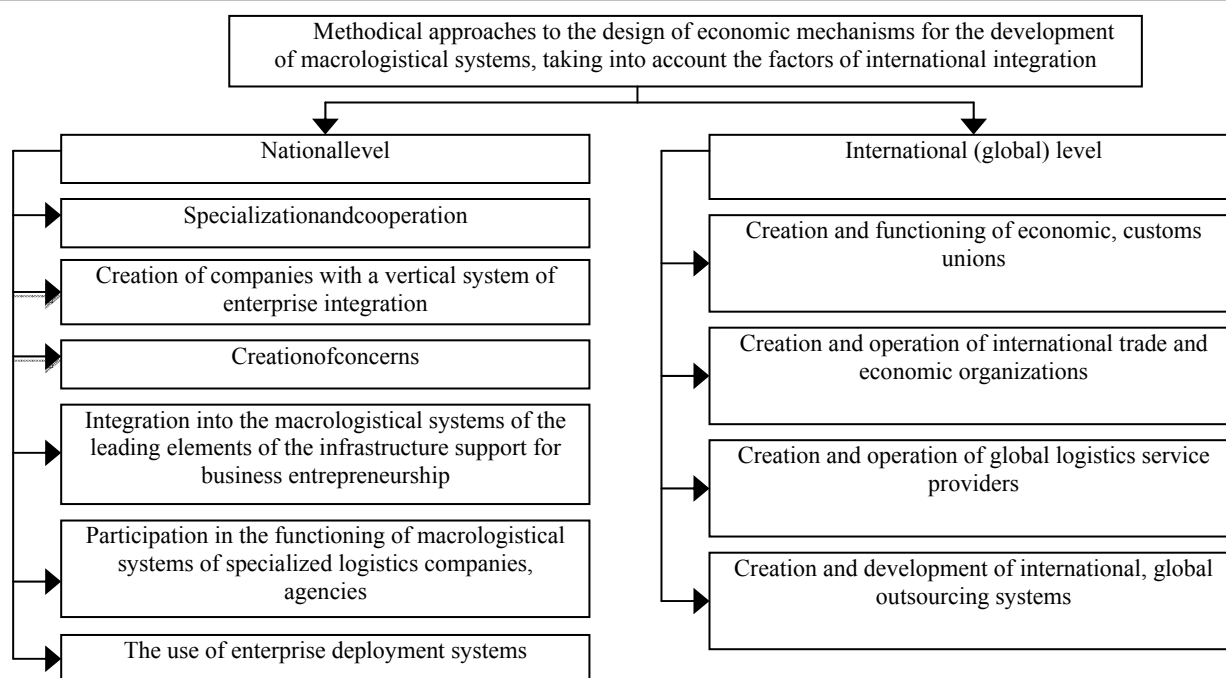
Logistics and logistics systems on a global international scale are an integral part and an important economic tool for ensuring the economic development of both individual enterprises and national production and economic systems as a whole. Methodical approaches to the design of economic mechanisms for the development of macrologistical systems take place at the national and international (global) levels, and it is important to take into account the complex factors of international integration.

Methods

In general, methodological approaches to the design of economic mechanisms for the development of macrologistical systems, taking into account the factors of international integration, are presented in accordance with Figure 1.

In our opinion, the initial basic methodological method of building macrologistical systems at the national level is the specialization of production. This fact is due to the fact that each element of the macrologistical system performs a specific, specialized role.

In an integrated analytical format, specialization is the concentration of activity of enterprises in special production areas, individual technological operations or types of products [1, 2]. These special directions form a logical sequence of functioning of macrologistical systems.



Note – this was developed by the author

Figure 1 - Methodical approaches to the design of economic mechanisms for the development of macrologistical systems, taking into account the factors of international integration

As the theory shows, the derivatives of the specialization are:

- higher forms of labor development and production organization;
- diversification of production processes;
- the concentration of production in certain areas and territories [3].

Economic aspects, potential benefits, parameters of the economic effect of specialization, are:

- high level of optimal application of technologies for computerization, automation and digitalization of production processes;
- a significant improvement in the quality of products and organizational and management systems of enterprises, including through standardization and unification;
- improving the efficiency and intensity of the use of basic production capital, ensuring a high level of progressivity of technical and economic indicators;
- reduction of production costs due to the output of production on economic capacity [3].

In the construction and economic development of macrologistical systems, the processes of cooperation are built on the basis of the construction of specialization.

In modern science, cooperation is considered as an organizational process of interaction between a number of specialized enterprises involved in the production process, divided into systematic interconnected logistic operations [4, 5].

Within the framework of the interaction of logistics chains, industrial cooperation is of two types:

- production and technology cooperation - cooperation ties are built on the principles of integration of elements of the production process;
- patent-technological cooperation - cooperation ties are built on the principles of the integration of intellectual property rights (patent integration, know-how) [4, 5].

In macrologistical systems, specialization and cooperation can take place within the framework of the creation of large firms with a vertical system of enterprise integration, as well as the creation of concerns. In this aspect, firms and concerns, in theory and practice, are the organizational beginning of the functioning of the macrologistical system.

As the organizational beginning of a macrologistical system, a vertically integrated company is an organization that owns and manages the activities of technologically interconnected enterprises located in various territorial districts of the national economy [6].

In the system of creation and functioning of macrologistical systems, concerns represent the logistic

interaction of enterprises of different sectoral affiliations, as well as various sectors of the economy. Like firms, concerns may be vertically integrated [7].

In the organizational elements of the macrologistical system - firms and concerns, enterprises unite on the principles of accumulating economic potential and strategic orientations [7].

In the macrologistical systems, at the national level, various economic models of the location of enterprises are used and used.

To determine the optimal economic effect when placing enterprises in the framework of the functioning of the logistics system, the following models of their placement can be applied:

- Sheffle gravity model;
- Weber model;
- Tinbergen model[8].

The above methodological techniques for building and developing macrologistical systems are focused to the greatest extent on the coordination of processes in the field of organization and optimization of material flows. It should be noted that in this aspect a specific and especially important role for the economic and organizational coordination and logical centralization of the functioning of macrologistical systems is assigned to two market economic entities - logistics companies and logistics centers.

The target landmark of logistics companies focused on the development of optimal time and cost trajectories of the movement of material flows from one destination to another [22].

In theory and practice, logistics companies solve the following problems:

- delivery of raw materials, materials, commercial products on the best routes;
- minimization and optimization of cargo transportation over time;
- loading, unloading, warehousing of goods;
- ensuring the safety of material flows [9].

Logistics centers - organizations that provide technological platforms for the storage of goods and transport services for all types of transport, transport systems [10].

Also, in our opinion, logistics centers at the macroeconomic level can play a higher meaningful role, namely, to coordinate the activities and interaction of all elements of the macrologistical system with the latter's orientation to the medium-term, strategic and long-term effects..

The dynamic development of macrologistical systems within the framework of their consideration from the standpoint of material flows is ensured by the economic effect, which takes place by minimizing all types of inventories in enterprises, which can be represented by an economic expression:

$$\left\{ \begin{array}{l} \downarrow I(N)_{I.I.}^{W.C.} = R_{M.R.}^{O.E.} \times \downarrow N_{days} \\ N_{days} \rightarrow \min \\ I(N)_{I.I.}^{W.C.} \rightarrow \min \end{array} \right.$$

in which $I(N)_{I.I.}^{W.C.}$ – investments in industrial inventories of enterprises (standards of inventories); $R_{M.R.}^{O.E.}$ – one-day expenses of material resources in enterprises; N_{days} – inventory standards in days.

Note – this was developed by the author in accordance to source [11]

In modern scientific theory, the methodological aspects of designing the economic mechanisms for the development of macrologistical systems are the integration tools into the macrologistical systems of the leading elements of the infrastructure support of enterprises, business and entrepreneurship. In our opinion, the target task of the infrastructure support of business and entrepreneurship within the framework of the macrologistical system is the formation of intangible logistic flows.

In macrologistical systems, the leading elements of infrastructure support for enterprises include:

- research institutes (SRI);
- science and technology parks (technology parks);
- engineering centers, companies;
- recruitment agencies and universities of entrepreneurial type;

- consulting organizations.

Research institutes as an element of macrologistical systems are focused on research and development [12]. As part of these functions, all issues of designing technology for production processes are being worked out, the composition of the main production capital, norms and standards of revolving funds are specified.

Research institutes in the process of accumulation and development of intangible flows in the macrologistical system are integrated with the activities of science and technology parks (technoparks).

Scientists consider technopark as a territorial, scientific, technological and technical base for the implementation of innovative projects in specific priority sectors of the economy. Technopark is a territorial (regional) property complex, which combines research laboratories equipped with high-tech equipment, experimental production facilities of the industry, business business centers, exhibition grounds, educational institutions, and service facilities (means of transport logistics, access roads, mini - residential areas, security system, other elements) [13, 14].

In the system of intangible logistic flows, the activity of technoparks is concentrated in the following areas:

- creation of effective bases for the commercialization of research and development;
- comprehensive in-depth development and technological tests;
- approbation of technologies, norms and standards, carrying out comprehensive technological tests;
- obtaining patents, licenses;
- consumer tests of prototypes of goods focused on commercialization.

Along with the functioning of research institutes and technoparks, a higher division of the formation of intangible flows is concentrated in the system of functioning of engineering centers.

Modern engineering centers are focused on providing a wide range of technical consulting services directly related to the development and preparation of the production process and ensuring a normal balanced prospective course of the production process [15, 16].

Intangible logistic flows in the activities of engineering centers are concentrated in the following areas:

- comprehensive marketing research of the market from the position of optimal technical, technological and resource support for production;
- performance of technical and economic calculations (feasibility studies);
- conducting engineering surveys;
- preparation of documentation for construction and installation works, test work of equipment and technology;
- special engineering services [15, 16].

A specific intangible flow in macrologistical systems is the flow of human resources (HR resources). These streams are formed by two types of organizations:

- recruitment agencies;
- universities of business type.

The activity of recruitment agencies is a business process focused on the selection and placement of personnel on behalf of and order of enterprises, firms, companies. The strategic target of recruitment agencies is to recruit for vacancies of enterprises in accordance with the initial attributes set - knowledge, skills and competencies [17].

The university of entrepreneurial type is a special type of higher education institution that is focused on the training of personnel in entrepreneurial formations and provides comprehensive conditions that direct the faculty and students to engage in entrepreneurial activities based on the commercialization of academic and scientific achievements [18].

Under the cadre of an entrepreneurial formation, we mean human resources capable of performing not only labor functions in accordance with professional knowledge, skills and competencies, but also putting into practice - entrepreneurial ability that allows to combine all types of investment resources into a single production process of a product or service [19, 20].

By forming optimal flows of HR resources and ensuring the need for them by enterprises, recruiting

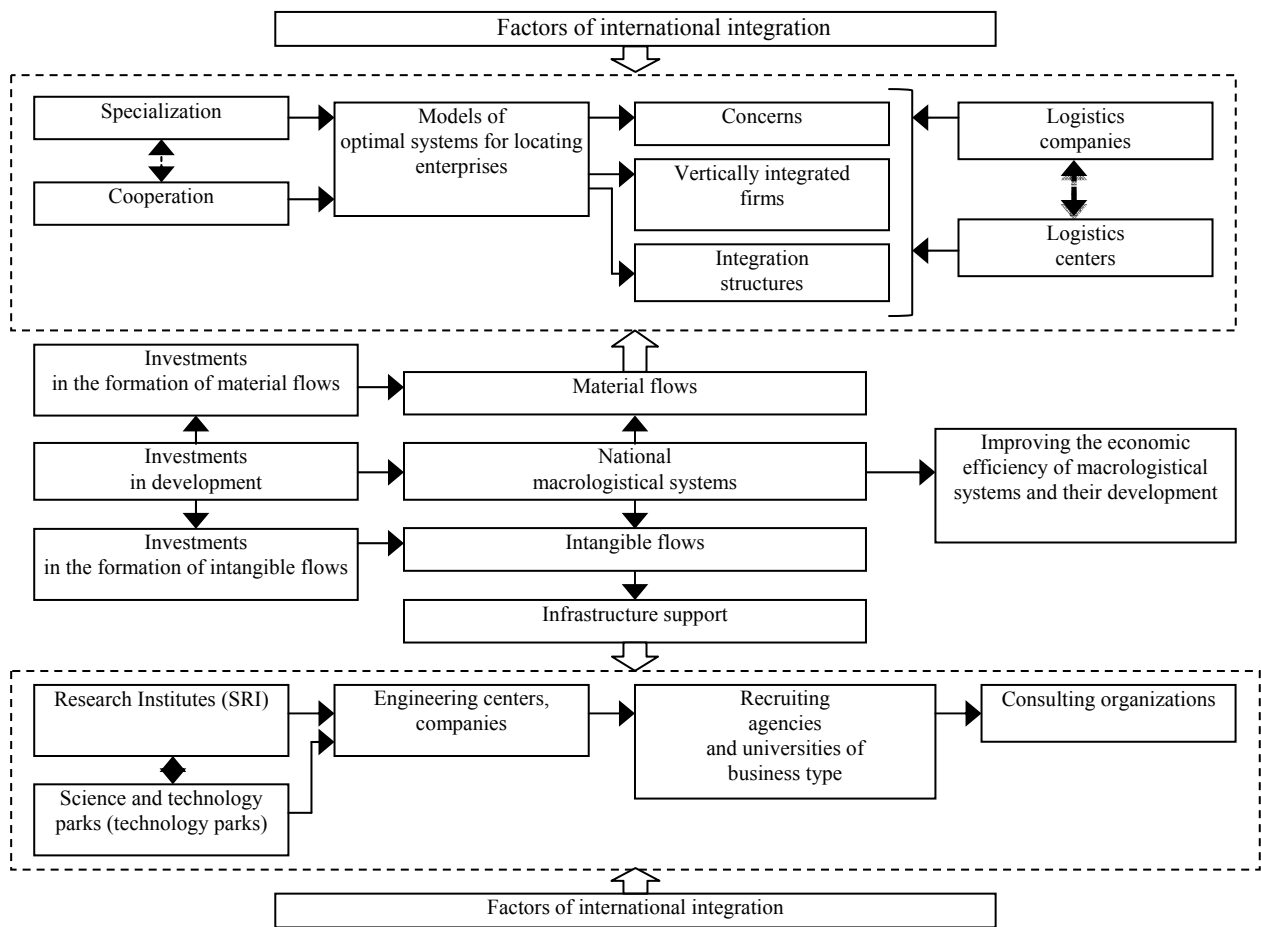
agencies and business-type universities ensure the effective functioning of macrologistical systems and their ongoing development.

The systemic and dynamic development of HR-resources in macrologistical systems is aimed at the activities of consulting organizations.

In the system of logistic flows, the activities of consulting organizations are focused on providing advice and recommendations on solving a wide range of organizational and economic aspects of production and business activities, including solving problems of enterprises in the field of entrepreneurship and business [21].

Intangible logistic flows are most sensitive to the factors of international integration and they determine the competitiveness of macrologistical systems and enterprises, both at the national and international levels.

Taking into account the reviewed methodological approaches to the design of economic mechanisms for the development of macrologistical systems, the very economic mechanism itself for the functioning of the macrologistical system at the national level can be represented in accordance with the figure 2.



Note – The figure was developed by the author

Figure 2 – The economic mechanism of the functioning of the macrologistical system at the national level

As studies show, the ultimate strategic priority of the functioning and development of the macrologistical system is the minimization of material flows and the maximization of intangible flows. This economic postulate can be represented by the expression:

$$\left\{ \begin{array}{l} \sum I_{M.F.} < \sum I_{I.F.} \\ I(N)_{I.I.}^{W.C.} \rightarrow \min \\ I_{RD,PP} \rightarrow \max \\ I_{HR} \rightarrow \max \end{array} \right.$$

in which $\sum I_{M.II.}$ – total investments in the formation of material flows; $\sum I_{H.M.II.}$ – total investments in the formation of intangible flows; $I(N)_{I.I.}^{W.C.}$ – investments in industrial inventories of enterprises (standards of inventories); $I_{RD,PP}$ – investment in research and development, pre-production; I_{HR} – investment in human resource development.

Note – this was developed by the author

In the formation of macrologistical systems at the international level, methodological approaches to their development become global.

The initial methodological approach to the formation and development of global (international) macrologistical systems is the creation and functioning of economic, including customs unions.

The economic union in theory and in practice is a complex integration of the economies of two or more countries [22].

The functioning of economic alliances and economic integration of the economies of several countries is determined by the following attributes:

- complex elimination at the system level of customs duties and the introduction of special customs duties to increase the competitiveness of economies and their protection in relation to the economic systems of other (third) countries (customs union);

- free and dynamic movement of all variable factors of production (production capital, revolving funds, HR resources, entrepreneurial ability) [22].

The highest level of creation and development of economic unions is the creation of a single currency, monetary and credit and fiscal policy [22].

Taking into account the above, it is clear that economic unions have a direct impact on the accumulation of all conditions aimed at creating and improving the functioning of global (international) macrologistical systems. First of all, these are favorable conditions for the movement of material and non-material flows.

In global (international) macrologistical systems operating in conditions of economic unions, one of the postulates of their development is the integration of production potentials, educational, scientific potentials.

Global (international) macrologistical systems can be formed and developed taking into account the creation and influence of the activities of international economic organizations whose activities comprehensively and comprehensively regulate the liberalization of both material and non-material flows [23].

Liberalization of material and non-material flows in global (international) macrologistical systems takes place in the following areas:

- liberalization of trade systems, trade policy (international trade organizations);
- liberalization of the systems of movement and interpenetration of intellectual property (international organizations of intellectual property, international organizations for industrial, industrial and innovative development);

- liberalization of transport communication systems (international transport organizations of the industry-specific direction by type of transport);

- liberalization of the movement of HR resources (international organizations that directly and indirectly regulate and facilitate the free movement of human resources);

- liberalization of the movement of monetary and financial flows (international banks, international financial funds) [23].

In international (global) macrologistical systems, global operators (providers) of logistics services are involved in activating and increasing the efficiency of the movement of material flows.

Operators (providers) of global logistics services may correspond to different status, the characteristics of which are presented in accordance with the table 1.

Table 1 – Characteristics of the statuses and functions of operators (providers) of global logistics services

The status of the global operator (provider) of logistics services	Characteristics of the main activities	ResourceRequirements
3PL-provider	<ul style="list-style-type: none"> - organization of transportation; - Inventory Management; - preparation of documentation (export-import, freight); - warehousing of goods; - cargo handling; - delivery of goods to the final consumer. 	<ul style="list-style-type: none"> - vehicle fleet of a high level of quality in terms of positions for transportation of variable tonnage cargo; - regional-territorial warehouses of multifunctional use for goods of various nomenclature and assortment positions; - availability and use of a centralized computer database.
4 PL-provider	<ul style="list-style-type: none"> - planning of material flows; - coordination and regulation of material flows; - control of material flows; - formation of special guarantees to minimize the risks of increasing value added in the system of material flows. 	<ul style="list-style-type: none"> - a single and integral system of all organizational elements involved in the organization of the material flow; - the presence of a special organizational and management platform (procurement department, inventory management department, brand management department, other special functional units).
5 PL-provider	<ul style="list-style-type: none"> - planning of material flows based on integrated marketing research; - improving the quality and availability of logistics information. 	<ul style="list-style-type: none"> - availability and use of a single digital IT-platform based on the Internet; - Dynamic investments in digital IT-technologies.

Note – Developed by the author in accordance with the source [24]

In shaping the economic mechanisms for the development of international (global) macrologistical systems, in theory and in practice international outsourcing systems are widely used.

To improve the efficiency of the movement of material flows, the systems of production outsourcing are applied (contract manufacturing, operators of production processes).

The American scientist-economist Griffin R. defines contract manufacturing as a process of attracting other companies in order to reduce the amount of financial and labor resources necessary for production. Other scientists introduce the term “co-production” to refer to the manufacture of a complete product or its components by one of the foreign partners [25].

Potential participants of international (global) macrologistical systems, resorting to the services of industrial outsourcing achieve a positive effect and benefits in the following areas:

- the embodiment in reality and the materialization of innovation, business ideas;
- reduction, optimization of production costs;
- focus on promoting products and increasing sales [25].

To improve the efficiency of the movement of intangible logistic flows in international macrologistical systems, the following business actors will be involved:

- international scientific centers and science and technology parks, engineering centers;
- international recruitment agencies and international universities of business type;
- international consulting and accounting organizations.

Taking into account the considered methodological approaches, the economic mechanism of functioning of macrologistical systems at the international level can be directly represented in accordance with the figure 3.

When considering the mechanisms for the development of global (international) macrologistical systems, it is necessary to emphasize the scientific view of the economic effect that is the result of their functioning.

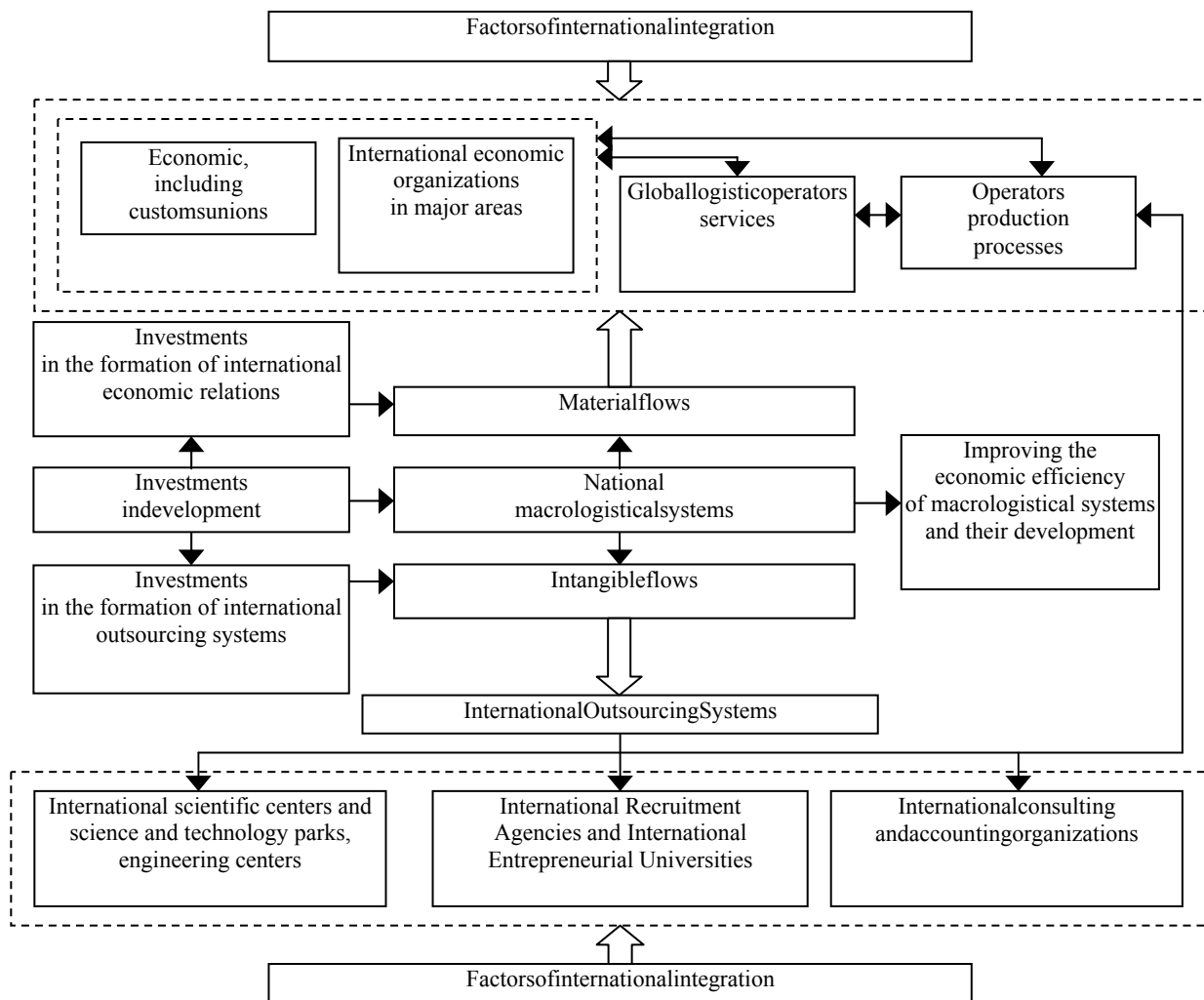
While considering the development mechanisms of macrologistical systems at the national level, the main focus was on the economic effect resulting from minimizing material flows and maximizing intangible flows, while developing international (global) macrologistical systems, the main emphasis should be focused on the growth dynamics of gross domestic product -participants forming logistic flows.

Theoretical studies allow us to advance the postulate that the countries participating in international (global) macrologistical systems experience an increase in gross domestic product and an acceleration in its growth rates. This postulate may be represented by the expression:

$$\begin{cases} GDP_j > GDP_i \\ GDP_j = GDP_i \times M \end{cases}$$

in which GDP_i – gross domestic product before state (country) participation in global (international) macrologistical systems; GDP_j – gross domestic product in the process of participation of the state (country) in the global (international) macrologistical systems; M – multiplier that takes into account the coefficient of growth of gross domestic product due to the integration of economic systems and the interpenetration of production factors.

Note – This was developed by the author



Note – The scheme was developed by the author

Figure 3 – The economic mechanism of the functioning of the macrologistical system at the international level

Conclusion

The study of methodological approaches to the design of economic mechanisms for the development of macrologistical systems, taking into account the factors of international integration in the complex, shows that there is a wide range of scientific approaches to the design of macrologistical systems at both the national and international levels. In order to dynamically ensure the development of macrologistical systems, methodological approaches should be comprehensive. The use and application of a set of methodological approaches to the development of macrologistical systems at the national level create the basis for the integration of macrologistical systems into the global (international) economy, which is an important fact of increasing the competitiveness of both specific economic entities and national economic systems.

The application of methodological approaches to the design of economic mechanisms for the development of macrologistical systems can be widely developed in practice, in relation to existing trends and factors in the dynamics of economic systems. At the same time, the direct economic mechanisms of building and developing macrologistical systems can be specified for the intended purpose of solving and eliminating economic problems.

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ХАЛЫҚАРАЛЫҚ ИНТЕГРАЦИЯНЫҢ ФАКТОРЛАРЫ ЕСЕБІМЕН МАКРОЛОГИСТИКАЛЫҚ ЖҮЙЕЛЕРДІ ДАМУДЫҢ ЭКОНОМИКАЛЫҚ МЕХАНИЗМДЕРІН ЖОБАЛАУДЫҢ ЗАМАНАУИ ӘДІСТЕМЕЛІК ЖОЛДАРЫ

Аннотация. Мақала халықаралық интеграцияның факторларын есепке ала отырып, макроэкономикалық жүйелерді дамытудың экономикалық механизмдерін жобалаудың заманауи әдістемелік тәсілдерін зерттелген және жүйеленген. Методологиялық тәсілдер екі басым бағыт бойынша - ұлттық және халықаралық деңгейлерде макроэкономикалық жүйелерді дамыту мәселелерінде қаралды. Зерттеудің макроэкономикалық жүйелерді құру мен дамытудың әдіснамалық әдістерін ескере отырып, материалдық емес материалдық ағындар мен материалдық ағындар қазіргі материалдық жүйелерде қарқынды дамуы керек екеніне назар аударылды. Осыған байланысты, ғылыми постулаттар макрологистикалық жүйелердің дамуы тікелей материалдық ағындарды барынша азайтуды және материалдық емес ағындарды максимизациялауды білдіреді. Сондай-ақ, халықаралық интеграциялық қатынастарға қатысушылардың экономикалық өсуін күшейтуге және экономикалық жүйелердің бәсекеге қабілеттілігін жоғарылатуына теориялық және практикалық мүмкіндік беретін халықаралық макрология жүйелерін дамыту тетіктерін әзірлеуге ерекше назар аударылды.

Түйін сөздер: логистика, макрологистикалық жүйе, материалдық және материалдық емес ағымдар, халықаралық интеграция, дамудың экономикалық механизмі.

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СОВРЕМЕННЫЕ МЕТОДИЧЕСКИЕ ПОДХОДЫ К ПРОЕКТИРОВАНИЮ ЭКОНОМИЧЕСКИХ МЕХАНИЗМОВ РАЗВИТИЯ МАКРОЛОГИСТИЧЕСКИХ СИСТЕМ С УЧЕТОМ ФАКТОРОВ МЕЖДУНАРОДНОЙ ИНТЕГРАЦИИ

Аннотация. В статье исследованы и систематизированы современные методологические подходы к проектированию экономических механизмов развития макрологистических систем с учетом факторов международной интеграции. Методологические подходы были рассмотрены по двум приоритетным направлениям – развитие макрологистических систем на национальном и международных уровнях. С учетом обозначенных методологических приемов построения и развития макрологистических систем было акцентировано внимание, что в современных логистических системах должны получать интенсивное развитие как материальные потоки, так и потоки ресурсов, которые имеют нематериальный характер. При этом был выдвинут научный постулат, что развитие макрологистических систем непосредственно

предполагает минимизацию материальных потоков и максимизацию нематериальных потоков. Также особое научное внимание было сосредоточено на проектировании механизмов развития международных макрологистических систем, что позволяет в теории и практике старанам-участникам международных интеграционных отношений интенсифицировать экономический рост и повысить конкурентоспособность экономических систем.

Ключевые слова: логистика, макрологистическая система, материальные и нематериальные потоки, международная интеграция, экономический механизм развития.

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REFERENCES

- [1] Specialization. Encyclopedia of Economics and Law. Electronic resource: https://dic.academic.ru/dic.nsf/dic_economic_law/14814/СПЕЦИАЛИЗАЦИЯ
- [2] Kurakov L.P. Economics and Law: dictionary. Moscow, Institute and School, 2004
- [3] Specialization of manufacturing: essence and forms. <http://finlit.online/predpriyatiya-ekonomika/151-spetsializatsiya-proizvodstva-suschnost-32515.html>
- [4] Cooperation. Types of cooperation. Electronic resource: <https://en.wikipedia.org/wiki/cooperation>
- [5] Gintis H., Bowles S., A Cooperative Species: Human Reciprocity and Its Evolution, Princeton University Press, 2011
- [6] McConnell K.P., Brew S.L., 14th edition, Economics – Moscow: Infa-M, 2005
- [7] Concern. Electronic resource: <https://en.wikipedia.org/wiki/concern>
- [8] Begentayev M.M. Economics of manufacturing. Study guide for students of economic specialties. “Kereku” publishing house, Pavlodar, 2008
- [9] Markovoz D.A. Multicriterial mathematic model of supporting decision-making of providers and volume of purchases of goods. Eastern-European magazine of innovation technologies – 2012, T.1, N 2(55). – pages 45-51
- [10] Logistical center. Electronic resource: https://en.wikipedia.org/wiki/logistical_center
- [11] Borodai B.A., Galenko E.V., Degteba L.V. Economics of a company (organization); study guide // Nizhniy Novgorod: NOO “Professional science”, 2018
- [12] Sheinin Y.M. Scientific-research institutes. Big encyclopedia, 2012
- [13] Essence, functions and objectives of technoparks: scientific bulletin. Rating agency RAEX, Moscow, 2015
- [14] Scientific and technological park. Electronic resource: <https://en.wikipedia.org/wiki/technopark>
- [15] Blockley D. Engineering: a very short introduction. New York: Oxford University Press. 2012
- [16] Engineering. Electronic resource: <https://en.wikipedia.org/wiki/engineering>
- [17] Ossovickaya N. HR-Branding: best practitioners of the decade. “Piter” Publishing House, 2016
- [18] Gelmanova Z.S., Butrin A.G., Gart N.A. Entrepreneur university, in the context of interrelation of “Triple helix”. International magazine of applied and fundamental research. – 2016. - #7 (part 3) – pages 444-449
- [19] Burganova R.I., Abdugalina S.E., Tuyakova A.E. Improving the quality of education through student-centered education. News of the national academy of sciences of the republic of kazakhstan. Series of social and human sciences. Volume 6, Number 322 (2018), 102 – 104. <https://doi.org/10.32014/2018.2224-5294.40>
- [20] Abdullina G.A., Bazarbaeyev A.G. Modern concepts of human resources management in organizations. News of the national academy of sciences of the republic of kazakhstan. Series of social and human sciences. Volume 5, Number 321 (2018), 33 – 38. <https://doi.org/10.32014/2018.2224-5294.5>
- [21] Sinyakova M.G. The fundamentals of management consulting: study guide / Moscow: Fenix, 2015. – page 400
- [22] Economic union. Electronic resource: https://en.wikipedia.org/wiki/economic_union
- [23] International economical organization. Electronic resource: https://en.wikipedia.org/wiki/international_economical_organization
- [24] Global logistics systems. Electronic resource: https://studme.org/58852/logistika/globalnye_logisticheskie_sistemy
- [25] Griffin R.W., Pustay M.W. International business. A Managerial Perspective. Fourth Edition. UpperSaddleRiver, NewJersey.

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