St.Petersburg State University

As a manuscript

Evtikhova Svetlana Alexandrovna

# Regional economic policy as a factor in the formation of the transport infrastructure of the Baltic States

Scientific specialty: 5.2.5. World economy

Dissertation for a scientific degree of Candidate of Economic Sciences

Translation from Russian

Scientific Supervisior Doctor of Economics, associate Professor Efimova Elena Glebovna

St.Petersburg

2022

## Table of contents

Introduction
Chapter 1. Formation of the transport infrastructure of the Baltic countries: issues
of methodology and practice10
1.1. Transport infrastructure as an object of regional economic policy: issues of
theory and methodology10
1.2. Factors in the Baltic countries transport infrastructure formation: background
Chapter 2. The Baltic States transport infrastructure in the system of EU regional
policy
2.1. The Baltic States in the EU Regional Policy67
2.2. Transport infrastructure of the Baltic Sea region in the European transport
infrastructure
Chapter 3. Modern Strategies for the Development of Port Infrastructure in the
Baltic States
3.1. Cooperation and Competition of Eastern Baltic Ports: An Analysis of the
Second Decade of the 21st Century113
3.2. Anti-Russian Sanctions as a Factor of Modern Transit Policy Politics of the
Baltic States: Results of the First Half of 2022128
Conclusion149
Bibliography152

#### Introduction

**Research topic relevance** The location of the region, its economic development level, the nature of economic relations over the centuries have been key factors taken into account in the infrastructure formation. The favorable geographical position, historical heritage and economic ties with Russia contributed to the development of national transport and logistics complexes in the Baltic countries. The transport infrastructure for a long time was more focused on servicing transit cargo. As a result, a pronounced specialization in transport and logistics services has formed in the economies of the Baltic countries, which, on the one hand, provides opportunities for replenishing the budget and contributes to the growth of national GDP, but, on the other hand, endangers further balanced economic development and increases the risks of national security.

Transport and logistics, being undoubtedly an important sector of the national economy, are operations that ensure the turnover. Like any infrastructure industry, it depends on the needs of material production and the population for movement. In conditions of insufficient cargo and passenger base, traffic flows are compensated by transit.

The transport infrastructure of the Baltic republics for a long time was focused on transit cargo transshipment. After the countries gained independence, the strategy continued. However, the changed geopolitical situation required certain adjustments. The political vector chosen by the countries eventually deprived or significantly reduced transit commodity flow intensity. Difficulties in financing measures to support infrastructure facilities, as well as a keen desire to achieve independence, led to the decline of some of them and even dissolution, as it happened with the Riga-Vilnius railway line.

In a complicated situation, the regional economic policy of the European Union has become the financial and technical basis for the formation of the transport infrastructure of the Baltic countries. Close cooperation with European institutions makes it possible to attract investments for the construction of new and modernization of existing facilities of high importance.

Another opportunity is key shippers investment, primarily those from Russia and Belarus. The interest of Chinese business and political circles is traced to a lesser extent, which we attribute both to the use of traditional sea routes and the pragmatic choice of the shortest land routes that bypass the territory of the Baltic countries. However, recent events show that the prospects for such cooperation also depend on the neighboring countries' political decisions, their decisions in the field of transit / regional policy.

The ports of the Baltic countries traditionally handle Russian cargo. The need to transfer all cargo flows from these ports to domestic terminals is not obvious. Until the recent times, the Baltic ports were considered ordinary competitors. The geopolitical situation has changed the regional transport cooperation vector. Competition and cooperation strategies often seem equally acceptable to the functioning of the Eastern Baltic ports. At the same time, the volatility of world commodity markets, the unstable positions of leading exporters and importers, the volatility of the economic and geopolitical environment require the search for new strategies and forms of interaction. This study is aimed at identifying the possibilities for the Administrations of the Eastern Baltic ports to combine the policy of competition and cooperation both in the formation of their development concepts and in solving operational problems.

**Degree of research topic development** This study is based on Russian and foreign publications in the field of transport routing theory and practice, and key infrastructure facility operation.

The issues of regional economic policy are reflected in the works of famous Russian scientists A.G. Granberg, B.L. Korsunsky, S.N. Leonova, P.A. Minakira, V.I. Suslova, A.N. Pilyasova, E.M. Korostyshevskaya, G.A. Shmarlovskaya. The main attention of domestic researchers is drawn to the problems of socio-economic development of territories, the development of mechanisms for their industrial development and their evaluation system, as well as the features of the development of individual regions. Foreign scientists have made a significant contribution to the development of the problem. F. Perroux and J. Budeville explained the expediency of developing peripheral territories, their relationship with centers of economic growth, linking regional economic development with the formation of an industrial network, which creates prerequisites for the development of related industries through the input-output mechanism. Within the framework of the macroeconomic theory of the export base, D. North divided the region's economy into a basic export-oriented sector and a "non-core" area for satisfying domestic demand, emphasizing the influence of external factors on the economic development of territories. R. B. Andrews and J. Duesenberry proposed to apply a model approach to the study of the export base of the region. The review of neoclassical and later models of economic growth, done by R. Barro, H. Sala-i-Martin, served as a methodological basis for studying the economic factor in the formation of the transport infrastructure of the Baltic countries. The concept of the "rut effect", put forward by R. Nelson and S. Winter, is interesting. B. Arthur explains it as a development predetermined by previous events.

The issues of the geographical location of economic activity, including transport infrastructure, are discussed in the works of R. Cantillon, E. B. de Condillac, D. Hume, J. Denham-Stewart, V. Crystaller, A. Lesh, W. Izard and others. Stolper proposed to combine macro- and micro-approaches to determine the competitive advantages of the region. G. Bristow devoted his works to the main directions of regional economic policy, including a list of special actions within the boundaries of the allocated territory in order to strengthen regional competitiveness.

The essence of the European regional policy is covered in the works of M. Keating, L. Hooghe, B. Hawking, W. Bullman, published during the period of the revival of interest of politicians and representatives of the academic community in the expansion and territorial development of the EU. K. Button and E. Pentecost made a significant contribution to the study of the institutional framework for the formation of EU policy. In the 21st century, the regional policy of the EU was influenced by new challenges, which affected the issues of publications. M. Doidge considers the mechanisms of mutual influence and interdependence of the categories "regionalism" and "interregionality", which he interprets as a separate level in the hierarchy of global governance, within which regional actors operate. Questions of inter-regionality have also been developed in the concept of multilevel management by L. Hooghe and G. Marx. The importance of multi-level governance and strengthening partnerships for the development of regional policies in the European Union in the context of the EU's cohesion policy is emphasized by L. Van den Brande. T. Borzel and T. Riess showed that economic interdependence is not always a key factor in regional integration. M. Dunford and G. Kafkalas contributed to the study of the transformation of the hierarchy and decision-making algorithms in the EU. Russian researchers N.M. Mezhevich, I.M. Busygina, V.A. Olenchenko, M.G. Filippov, Yu.M. Zverev, S.F. Sutyrin, E.G. Efimova and others.

The transport and transit issues at the academic level are widely reflected in the foreign experts' academic studies: H. White, B. Hoyle, R. Knowles, who proposed using an economic and economic-geographical approach to the study of transport. D. Johnson and K. Turner assessed the first results of implementing EU strategy for trans-European transport networks creating. J.-A. Vinoy researched individual European transport market sectors. Spence, G. Kovacs and D. Wellenga studied the transport and logistics networks of the Baltic countries through the prism of their impact on national economic development. The issues of international transport corridors and transit traffic were paid attention in their studies by K.V. Kholopov, D.F. Skripnyuk, P. Rarovsky, V.A. Shamakhov, N.M. Mezhevich. The importance of the transport sector for European economy

development is confirmed by the publication of numerous official documents and Roadmaps, which were used in the dissertation research process.

Strategies for individual economic entities interaction in the transport sector are formed taking into account external forces. J. Tyrol made a great contribution to the study of relations between competing companies within the framework of economic theory, focusing on industrial or market structure. A. Brandenburger and B. Neilbuff revealed the possibility of simultaneous application of cooperation and competition strategies by business entities, which was called "coopetition". A. Lado, N. Boyd and S. Hanlon showed the possibility of using coopetition within the framework of a strategic alliance. It is important for the Baltic countries to unite efforts in the development of national transport complexes. The results of research by M. Bengtsson and S. Kok showed that cooperative behavior is a situation where partners seek mutual benefit by combining complementary resources, skills and capabilities. A.A. Shirov, A.A. Yantovsky and V.V. Potapenko assessed the potential impact of sanctions on the economic development of Russia and the EU. N.M. Mezhevich and A.D. Khlutkov focus on anti-Russian sanctions imposed by Western countries in 2022.

The purpose of this study is to determine the significance of regional economic policy in the process of formation and functioning of the transport infrastructure of the Baltic countries. To achieve **the goal**, the following tasks were set:

- 1. Identifying trends in the regional economic policy of the European Union;
- 2. Determining the Baltic States' place in the programs of the EU regional economic policy;
- 3. Characterizing the current state of the transport infrastructure of the Baltic countries (for 2020);
- Identifying the interests and opportunities of Estonia, Latvia and Lithuania in attracting transit cargo;
- Determining the nature of the relationship between the majority ports of the Baltic countries and the Baltic basin of Russia;
- 6. Showing the impact of sanctions on the attraction of transit cargo sent to the Baltic ports.

Two hypotheses are put forward and tested on the basis of official statistics. (H1): The cooperation of ports in the process of transshipment of some types of cargo while simultaneously competing for the attraction of others has a positive effect on the activities of the ports of the

eastern Baltic to a greater extent than a purely cooperative or competitive strategy. (H2): The imposed anti-Russian sanctions<sup>1</sup> contribute to attracting transit cargo to the Baltic countries.

The **object** of research is the transport infrastructure of the Baltic countries. The **subject** of the study is the totality of socio-economic relations that develop in the process of formation, modernization and operation of the main elements of the transport infrastructure and national transport networks as a whole.

The **scientific novelty** of the study lies in the fact that the assessment of the factors of formation and development of the transport infrastructure of the Baltic States and its individual elements in the historical context was carried out. In modern academic literature, political factors are mainly analyzed, as well as various consequences of the applied decisions and ongoing activities in the field of regional transport and logistics.

In the course of the study, the following most significant scientific results received personally by the author were obtained and are submitted for defense:

- the features of the historical development of the port infrastructure of the Baltic countries have been identified and summarized;
- the characteristics of the current state of the transport infrastructure of the Baltic countries have been given;
- the continuity of European regional policy over the past 70 years has been snown;
- the dependence of the transport infrastructure of the Baltic countries on the transit policy of Russia, "external" in relation to the Baltic countries, has been proved;
- the possibility of applying the strategy of coopetition as the most effective solution to the commercial problems of the port infrastructure of the Baltic countries and the Baltic basin of the Russian Federation in the first quarter of the 21st century has been assessed;
- the impact of anti-Russian sanctions imposed by the European Union on the functioning of the transport infrastructure of the Baltic countries has been shown.

The **theoretical basis** of the study is the fundamental theoretical provisions presented in the scientific works of Russian and foreign scientists, affecting the issues of regional economic development, the formation and development of transport systems, as well as various aspects of European integration.

<sup>&</sup>lt;sup>1</sup> For 01.09.2022

**Methodology and research methods** The theoretical and empirical methods of studying economic processes served as the methodological basis for the study. In addition to the traditional general scientific method system, including analysis, synthesis, induction, deduction, comparative analysis, analogy, classification, case studies, statistical tools, the integral assessment method, and historiography were used. The chosen methods made it possible to determine the current situation in the ports of the eastern Baltic and the potential opportunities of the ports to attract additional flows of Russian foreign economic cargo.

The **information base** of the study was made up of materials from the official statistical services of Estonia, Latvia and Lithuania, information from the sectoral ministries and departments of the Baltic countries and the Russian Federation, the statistical service of the European Union (Eurostat), international organizations, as well as data presented in the public domain on the official websites of the majority ports and other transport organizations of the Baltic States, the Association of Sea Trade Ports of Russia, the Administration of the Sea Ports of the Baltic Sea. Due to limited access to the official statistics of the Russian Federation after February 24, 2022, the information base for writing paragraph 3.2. data published by Russian state news agencies, materials from business and industry media served as the basis.

The theoretical significance of the dissertation research lies in supplementing and rethinking the role of regional economic policy in shaping the transport infrastructure of the Baltic States in a changing environment. The study of the behavior of ports as economic entities contributes to the expansion and deepening of scientific knowledge in the field of strategizing, allows the development of theoretical and methodological approaches to the choice of the competitive policy of quasi-market actors. The practical significance lies in the fact that the results obtained and practical conclusions, as well as the author's recommendations and proposals, can be used in the development of documents that determine the strategy for the development of the transport system of the Russian Federation, as well as the strategy for interaction with the Baltic countries. The results of the study can be used in research work on the study of the Baltic countries. The factual and statistical materials contained in the work can be used in higher educational institutions in the development of academic disciplines "International Economic Relations", "European Integration", "International Business", "Transport Logistics".

**The reliability degree and approbation of the results.** The results obtained in the course of the study were repeatedly reported at international<sup>2 3</sup> and all-Russian<sup>4</sup> scientific conferences in St. and Humanities in 2017-2020), Warsaw (World Economy Conference in 2019) and Antwerp (The Port and Maritime Sector: Key Developments and Challenges WCTRS - Special Interest Group A2 in 2021).

Based on the results of the dissertation research, 6 papers were published personally and in co-authorship, including 2 articles in journals from the list of publications recommended by the Higher Attestation Commission of the Ministry of Education and Science of the Russian Federation, 2 articles in journals indexed in the international citation databases Scopus and Web of Science.

**Field of study.** The dissertation research for the degree of candidate of economic sciences was completed in accordance with paragraph 13 "Strategies for the participation of regional and corporate structures in international economic interaction (global, regional and national aspects)", paragraph 19 "Infrastructural factors for the development of world economic relations" and paragraph 20 "Economics of foreign countries and regions (economic regional studies and regional studies). Comparative studies of national economies in the system of world economic relations" specialty passport 5.2.5. The world economy according to the nomenclature of scientific specialties in which academic degrees are awarded (Order of the Ministry of Education and Science of Russia dated February 24, 2021 N 118).

The dissertation research consists of an Introduction, the main part, consisting of three chapters, a Conclusion and a List of References. The content is presented on 155 pages of the main text, including 10 drawings, 24 tables.

In the introduction, the relevance is substantiated, the goals, objectives, object, subject area of research are defined, the theoretical and practical significance of the work is indicated.

<sup>&</sup>lt;sup>2</sup> Efimova E.G., Vroblevskaya S.A. Innovative environment as a factor in the development of international transport infrastructure In the collection: Science of St. Petersburg State University-2020. Proceedings of the International Conference on Natural and Human Sciences. St. Petersburg State University. 2021. S. 906-907

<sup>&</sup>lt;sup>3</sup> Efimova E.G., Vroblevskaya S.A. Transport and transit policy in the Baltic Sea region: the interests of the Baltic countries and the position of Russia In the collection: Evolution of the international trading system: problems and prospects. Materials of the International conference. 2017. S. 174-189

<sup>&</sup>lt;sup>4</sup> Efimova E.G., Vroblevskaya S.A. On the issue of the integration of logistics systems In the collection: Science of St. Petersburg State University - 2020. Collection of materials of the All-Russian Conference on Natural Sciences and Humanities with International Participation. St. Petersburg, 2021, S. 864-865.

In the first chapter "Formation of the transport infrastructure of the Baltic States: issues of methodology and practice" transport infrastructure is considered as an object of regional economic policy. From a theoretical point of view, the importance of making relevant political decisions for the further development of transport systems for the sustainable development of territories is substantiated. The special strategic importance of the transport sector of the Baltic States determined the need to study the issue of its formation and development in a historical context. Theoretical views on the issues of regional economic development are systematized. A comparative analysis of the transport systems of the Baltic countries has been carried out.

The second chapter "Transport infrastructure of the Baltic States in the system of EU regional policy" examines the evolution of the EU regional policy. The main directions and mechanisms of financial and administrative support for individual countries and regions of the EU have been studied. The role and place of the transport infrastructure of the Baltic Sea region in the European transport infrastructure are determined.

In the third chapter "Modern Strategies for the Development of the Port Infrastructure of the Baltic States", on the basis of the theoretical and empirical studies carried out, the current and prospective forms of cooperation and competition of the majority ports of the Baltic countries are considered. The current situation in the industry in the context of the imposed anti-Russian sanctions has been studied.

# Chapter 1. Formation of the transport infrastructure of the Baltic countries: issues of methodology and practice

## 1.1.Transport infrastructure as an object of regional economic policy: questions of theory and methodology

In 2004 Estonia, Latvia and Lithuania joined the European Union. As full members of the EU, they have the right to count on support from European institutions within the framework of the European regional economic policy, as well as adhere to the EU recommendations on the further development of their national economies. Regional economic policy is usually understood as a system of legislative, administrative and economic measures aimed at the socio-economic development of the territory. Hence, the main goal of regional policy is to solve social and economic problems and level out disproportions between individual territorial units of the region. Regional policy is implemented at least at three levels: regional, national and supranational. Initially, regional policy was associated with the state level of its implementation. In particular, it was believed that European integration was impossible without the coordination of the regional policies of individual countries.

The European Union and individual member countries have accumulated rich experience in building and implementing regional economic policies. However, the powers granted to regional authorities, the capabilities of national governments differ significantly. In the academic literature, there are three alternative approaches<sup>5</sup> to the formation of relationships between central institutions, governments of member countries and territorial governments:

- the concept of a "managed market", in which the state, with the help of financial mechanisms and instruments of direct regulation, carries out the spatial redistribution of resources to form the territorial structure of the national economy;
- the concept in which the replacement of obsolete elements of the economic system with innovative ones is under the control of regional bodies;
- the concept of "dualistic economy".

In connection with this classification, there are three main types of national regional policy: with the dominant role of the state in relation to local authorities, with a developed division of powers between the state and local authorities, with the dominant role of local authorities in

<sup>&</sup>lt;sup>5</sup> Economic policy: regional dimension. / Ed. P.A. Minakira. Vladivostok: Dalnauka. 2001, p. 6.

relation to the state<sup>6</sup>. Different principles of building a national regional policy significantly complicate the creation and functioning of European regions and other sub-regional territorial entities.

The formation of regional policy in the Baltic countries has common features, which is associated with a constant desire for independence and sovereignty. By the time the state independence was restored, experience had been accumulated in the field of reforming local self-government and state administration in the regions. By the mid 1990s. in Estonia and Lithuania, radical reforms of the administrative-territorial division of the country were successfully carried out.

The main achievement of Estonian regional policy was the realization of its importance both at the state level and in each administrative unit. Thanks to the support of Finland and Sweden, as well as the relatively rapid implementation of market transformations and the desire to comply with EU requirements, Estonian regional policy was carried out along the Western European model. We also note the objective prerequisites for such transformations. Regional problems of Estonia: the uneven development according to the "center-periphery" model, the difference in the unemployment rate in the regions (1.9–11.5%), wages (more than 1.7 times), social disparities, were similar to those in Western Europe. In Lithuania, taking into account the experience of Denmark, Sweden and Finland<sup>7</sup>, a two-tier system of administrative structure was adopted. The regional problems faced by Lithuania are similar to those in Estonia: a high variation of unemployment in the counties (3.8–16.5%), income differentiation of the population (1.8 times), etc.<sup>8</sup> In Lithuania, the same as in Estonia, there is a model of regional development "centerperiphery" in the absence of pronounced disproportions "west-east" and "north-south".

In Latvia, there is a significant differentiation of regions in the directions "north-south" and "west-east". The "center-periphery" development model is not traceable at the national level. Hence, the problems of the country's regional development are the most acute and least studied. The severity of these problems is determined by the serious scale of territorial disproportions and the impotence of the Latvian government in smoothing out regional differences.

Estonia, Latvia and Lithuania are small economies. International cooperation, regional cooperation acquire special significance for their economic development. Achieving competitive

<sup>&</sup>lt;sup>6</sup> Korsunsky B.L., Leonov S.N. Management of the development of the problem region / Editors P.A. Minakir. Russian Academy of Science. Far East Branch. Institute of Economics research. Khabarovsk: RIOTIP, 2006, p. 71.

<sup>&</sup>lt;sup>7</sup>Nordic Regions and Transfrontier Co-operation. Copenhagen. Nordic Council. 1991.

<sup>&</sup>lt;sup>8</sup> The specifics of regional policy in the Baltic countries <u>URL:https://economy-web.org/?p=450</u>

advantages requires coordination of efforts, active interaction with European institutions, the search for sustainable business partners and political compromises.

Regional economic policy, the purpose of which is to ensure the competitive advantages of the region, should, to a large extent, be determined by the regional authorities themselves. In stable conditions, this contributes to the rapid improvement of the business climate. In the future, this will lead to a focus of regulation on the management and financing of socially important projects. The role of regional authorities is to create institutional conditions that promote, in particular, the development of industrial and social infrastructure, which ultimately comes down to control over the efficient use of financial resources to address the most significant issues. The use of regional and multi-regional models by A. Granberg and V. Suslov<sup>9</sup> as early as the 1990s. led to a similar conclusion: the analysis of interregional interactions is increasingly transferred to the financial sphere. A. Pilyasov<sup>10</sup> formulated the main vectors of modern regional industrial policy, which are formed on the basis of energy, food and transport security, the prospects for the development of the construction complex, the greening of industry, the localization of industrial projects, and the restructuring of old industrial cities and regions.

In this regard, the choice of regional policy instruments depends on the nature of production activities, business conditions, as well as on the theoretical basis on which decision-makers rely. In modern conditions, five economic theories are used to justify political choice:

- neoclassical growth theory, first introduced by R. Solow and T. Swan in 1956. According
  to this theory, economic growth is determined by accumulated capital, labor supply, the
  ratio of which determines the productivity of the economy, and technological progress that
  increases labor productivity. The limitedness of the first two factors suggests the limitless
  contribution of technology to economic growth. Regional economic policy is designed to
  stimulate inter-regional mobility by providing investment and migration subsidies,
  improving physical infrastructure, etc..<sup>11</sup>
- the theory of the export base, emphasizing the influence of external factors on the economic development of territories. This macroeconomic approach assumes that the region's economy is divided into a core export-oriented sector and a "non-core" area to satisfy

<sup>&</sup>lt;sup>9</sup> Granberg A.G., Suslov V.I. Coalition analysis of multi-regional systems: theory, methodology, results of analysis (USSR on the eve of collapse). Scientific report. Novosibirsk. 1993, p. 62

<sup>&</sup>lt;sup>10</sup> Pilyasov A.N. Regional industrial policy in the Arctic territories: what is it and what should it be? The North and the Market: Shaping the Economic Order. 2021. No. 3 (73). pp. 7-29.

<sup>&</sup>lt;sup>11</sup> See, for example, Barro R., Sala-i-Martin H. Economic growth. M., Binom. Lab. Knowledge, 2010.

domestic demand. The region specializes in the production of products that are less expensive for it. The success of the export sector is critical: the surplus it generates is invested in the region, boosting domestic demand. This achieves a multiplier effect. Economic growth essentially depends on the flexibility and mobility of production factors. In addition to indirect support, analyzed in neoclassical theory, measures of direct state support are taken into account here. The pioneers of the model approach within the framework of the export base theory were R. B. Andrews, J. Duesenberry and D. North.<sup>12</sup>

- placement theory, which explains the spatial features of the formation of industry and infrastructure facilities by differences in the cost of resources and communication costs. The starting point of modern research was the model of an agricultural banner developed by J. von Thünen in 1826. Later, the geographical distribution of economic activity was studied in the works of R. Cantillon, E. B. de Condillac, D. Hume, J. Denham-Stewart, V Christallera, A. Lesha, W. Isard and others.<sup>13</sup>
- the theory of growth poles, developed in the works of F. Perroux and J. Boudeville<sup>14</sup>, connects regional economic development with the creation of a certain industrial framework, which, through the input-output mechanism, causes the development of other industries. Thanks to these theories, an explanation has appeared for the expediency of developing peripheral territories, their relationship with centers of economic growth.<sup>15</sup>
- the theory of cumulative causes, which reveals the possible negative effects of economic growth. According to the statements of G. Myrdal<sup>16</sup> economic development implies a cumulative process in regions with agglomeration advantages, leading to growing disparities and aggravating inequalities between developed and less developed regions. In the theories of poles and cumulative growth, the most important instrument of regional policy is the creation and development of industrial complexes in less developed regions. A small number The successful placement of even a small number of industrial enterprises

<sup>&</sup>lt;sup>12</sup> Models in geography. Collection of articles / Ed. R. J. Chorley and P. Hugget Moscow: Progress, 1971.
13 See, for example, Lesh A. Spatial organization of the economy. M. Nauka, 2007, 664 p.

<sup>&</sup>lt;sup>14</sup> Perroux F. L'économie du XX siecle. Paris. 1961; Boudevill J.-R. Problems of Regional Economic Planning. Edinburgh. 1966. Gugnyak V. Ya. Power as a fundamental principle of economic activity (or a few comments on the economic concept of Francois Perroux) / Economic theory on the threshold of the XXI century. Ed. Yu. M. Osipova, V. T. Pulyaeva. SPb. Petropolis, 1996.

<sup>&</sup>lt;sup>15</sup> See, for example, Pilyasov A.N., Tsukerman V.A. Economic Benefits and Costs of Platform Solutions in the Modern Development of Natural Resources of the Russian Arctic IOP Conference Series: Earth and Environmental Science, IOP Publishing ([Bristol, UK], England), vol. 666, no. 4, p. 042088-042088

<sup>&</sup>lt;sup>16</sup> Myrdal G. Economic Theory and Under-developed Regions. London. 1957.

serves as an incentive for the further organization of relatively small, closely spaced commercial structures, which will inevitably lead to the economic development of the territory.

Thus, the theoretical mechanisms for substantiating large-scale transport and other infrastructure projects that require significant funds and administrative support for government institutions began to be formulated in the 1820s, but they acquired modern outlines only by the middle of the 20th century. Regional policy in its modern sense was born already in the 1920s. in Western European countries. It was a reaction to the emergence of the first problem areas<sup>17</sup>, first of all, the old industrial areas, specializing in coal mining, ferrous metals and textiles. The world economic crisis of 1929-1932, having especially deeply affected the areas of concentration of traditional industries, contributed to the beginning of the formation of a regional policy by developed countries. Governments at that time were engaged in the development and implementation of one-time assistance programs for such territories.<sup>18</sup>, which exacerbated the gap in the economic development of the regions. The efforts of states were aimed at stabilizing the position of old industries, although steps were also taken to develop infrastructure, train and retrain personnel. The first law covering issues of regional policy was adopted during this period in the UK.<sup>19</sup>. There was a gap between theoretical explanations of ongoing processes and practical planning and strategizing. The few successful projects have been noted in cases where scientists acted as consultants to the respective governments. So, as an employee of the SS planning and

<sup>&</sup>lt;sup>17</sup> In the scientific literature, problem areas, or crisis areas, include territories whose development requires state intervention (Korsunsky B.L., Leonov S.N. Management of the development of a problem region, p. 21.). It seems more preferable to define problem regions as "territories with special anomalies, characterized by a special acuteness of social, economic, environmental problems" (Strategic management: region, city, enterprise / Edited by D.S. Lvov, A.G. Granberg, A.P. Egorshina M. Economics, 2004, p. 42). A single criterion for identifying a problem region at the official level was developed in the Decree of the Government of the Russian Federation of July 10, 2001 N 910-r (as amended on June 6, 2002) "On the program of socio-economic development of the Russian Federation for the medium term (2002 - 2004)". Clause 4.1. defines problem regions as territories with anomalies. These include:

<sup>&</sup>quot;crisis regions affected by natural or man-made disasters, large-scale socio-political conflicts, extreme declines in production and living standards;

backward (underdeveloped) regions, whose economy, due to historical reasons, is in a state of prolonged stagnation and is characterized by a poorly diversified industrial structure, underdeveloped infrastructure and social sphere;

depressed regions, characterized by a steady and deep decline in economic activity and a sharp decline in the standard of living of the population. These include local zones of industrial and agro-industrial and some other extractive regions;

northern territories where negative factors (unfavorable climate, high cost of living, increased production and transport costs, environmental vulnerability) are not compensated by strong competitive resource advantages (oil, gas,diamonds)".

<sup>(</sup>http://www.consultant.ru/document/cons\_doc\_LAW\_32708/3b3b53006caa0494391f22e898ffba8e1a78716b/).

<sup>&</sup>lt;sup>18</sup> Temple M. Regional Economics. London: St. Martin's Press. 1994. P.230–239.

<sup>&</sup>lt;sup>19</sup> Special Areas Development Act. Cm. Armstrong H., Taylor J. Regional Economics and Policy. London: Harvester Wheatsheaf. 1993. P.363.

land management bureau, V. Kristaler worked on a project for the reconstruction of the territories occupied by the Nazi army: Czechoslovakia and Poland and the Soviet Union, in order to settle them with German farmers.<sup>20</sup>

In most European countries, although separate targeted programs were implemented, regional policy took shape only in the 1950s. 20th century In the 1950s - 60s. the most problematic areas were identified, on whose territory an additional gradation of subterritories was carried out, in accordance with which regional policy measures of particular intensity were applied. For example, in the UK by the end of the 60s. allocated, depending on the amount of state aid, "special areas of development", "areas of development", "areas of intermediate level of development"<sup>21</sup>.

As early as at the first stages of the implementation of regional policy, a number of contradictions appear. Helping troubled regions, the states sought to solve primarily social problems. However, economic benefits were provided not to the population, but to individual firms focused on achieving commercial goals. Those, decisions were made on the basis of profit maximization, commercial gain, and not utility. As a result, enterprises receiving benefits strove to optimize the resources used, rather than develop the territory. Thus, the regional policy began to be carried out both at the micro- and macroeconomic levels. The problems described above intensified in the 1970s and 1980s, in connection with the reduction of financial opportunities of states. As a result, during this period, there has been a tendency to reduce the number and territorial size of problem regions. To manage regional development in difficult conditions in the 1980s. most developed countries focused on the use of their internal resources. Regional policy is starting to focus heavily on supporting small businesses, as local firms have a higher regional multiplier effect. However, in many problem areas, domestic development resources are limited. In addition, the history of their economic development serves as a powerful constraint. Thus, an internal sociopsychological barrier of development also appears. Therefore, regardless of the degree of problematic development of the region, at present, the universal way of developing the territories is the formation of the economic policy of the region on the basis of increasing its competitiveness.

However, there were no unified recommendations for achieving regional competitiveness at the end of the 20th century.<sup>22</sup>. The works of M. Stolper, published in the second half of the 1990s, formed a new direction of research: he proposed to combine macro and micro approaches

<sup>&</sup>lt;sup>20</sup> Science in the Third Reich M. Szöllösi-Janze (ed.). Oxford and New York: Berg Publishers. 2001. 289 p., pp. 59-79

<sup>&</sup>lt;sup>21</sup> Regional Problems and Policies in the United Kindom. OECD. Paris. 1994. P.90.

<sup>&</sup>lt;sup>22</sup> See, for example, Erasova E.A. Competitiveness of the economy of modern Russia: indicators and expert assessments // Bulletin of St. Petersburg State University. Series Economics. 2002. Issue 2.

to determining the competitive advantages of a region. In his opinion, the competitiveness of the region is expressed in its ability to "engage and retain firms with a stable or increasing share in the local market, maintaining a high standard of living for those who participate in their activities"<sup>23</sup>. In our opinion, this approach makes it possible to determine the economic and institutional aspects of regional competitiveness and policy. The first practical recommendations in academic research appeared at the beginning of the 21st century. Regional competitiveness began to be determined on the basis of the analysis of firms, the results of their production activities and the formed regional business environment<sup>24</sup>.

One cannot but agree with G. Bristow<sup>25</sup> that the passport of regional economic policy should be clearly formed. Politics from the point of view of competitiveness does not imply the mandatory collective territorial economic activity of all interested parties. It includes a list of special actions within the boundaries of the allocated territory. In this case, it is possible to establish the ratio of subregions or different groups of actors. The concept of regional competitiveness is a fundamental element of regional policy. From an economic development perspective, it provides policymakers with an opportunity to explain their choice of specific activities. G. Bristow's proposal proved to be viable. Supported by a powerful business elite, the category of planning and strategizing "regional economic policy, in particular, in the formation of European regional economic policy in the last decade.

Supranational regional policy appeared somewhat later. Its origin is associated with the formation of a new type of international economic relations in Western Europe as a result of the development of integration processes. The 1957 Treaty of Rome proclaimed "unification of national economies and ensuring their harmonious development while reducing the gap in terms of development between individual territories"<sup>26</sup>.

The development of a single internal European market and the external economic expansion of the EU member states turned out to be impossible without the development of a supranational transport policy, the main task of which was the formation of a single transport

<sup>&</sup>lt;sup>23</sup> Storper M. The Regional World. Territorial Development in Global Economy. The Guilford Press. New York;. London. 1997. P. 264.

<sup>&</sup>lt;sup>24</sup> Bristow G. Everyone's a "winner": problematising the discourse of regional competitiveness // Journal of Economic Geography. 2005. Vol. 5 P. 285-304.

<sup>&</sup>lt;sup>25</sup> Bristow G. Everyone's a "winner": problematising the discourse of regional competitiveness // Journal of Economic Geography. 2005. Vol. 5 P. 285-304.

<sup>&</sup>lt;sup>26</sup> Quote from: Granberg A.G. Fundamentals of regional economy. M. GUVSHE. 2000, p. 403.

system that provides the best choice for the transportation of passengers and goods. The basic requirements of such a system were the free movement of goods and individuals, the unification of the technological and documentary characteristics of the network and the existence of fair competition, the absence of tax or tariff discrimination. The goal is to create a common transport market. Therefore, the Treaty of Rome formulated provisions on the need to form a common transport policy<sup>27</sup>. Among the reasons for the allocation of transport in a separate section of the Treaty, the amount of investment in this sector, its decisive role in ensuring the economic growth of countries and regions were indicated. Note that the transport industry needs constant investment. The calculations of the Dutch economist S. de Wolf proved "the need for constant renewal of transport infrastructure facilities, calculating their 40-50-year service cycle"<sup>28</sup>.

The signing of the Maastricht Treaty revived scientific interest in the study of the institutional environment of the EU regional policy. Institutionalization of regions in the 1990s proceeded relatively autonomously. Traditionally, researchers attributed regional autonomy to issues of bilateral relations between regions and the state. Subsequently, the situation changed. Firstly, with the emergence of the EU, a "third level" of politics appeared<sup>29</sup> alongside with the associated model of tripartite relations: regions - states - European structures<sup>30</sup>. Regions defended their interests in various ways: pressure on national governments, the creation of inter-regional lobbies or the establishment of business ties with the European Commission<sup>31</sup>. For some time, the regions believed they had the ability to compensate for their exclusive attitude to national politics by establishing direct links with the Commission. First of all, this applies to regions that have weight at the national level and capable of exerting a notable influence in Brussels. Resources of influence remained common. Therefore, the possibility of replacing them was often difficult for the regions. As a result, the EU began to formulate a territorial policy that involves the impact of new factors, primarily external shocks. As a result, regional policy has become more Europeanized, while national policy still has to take into account the forces that advocate both Europeanization and regionalization. As a result, national policy at the regional level is now rarely

<sup>27</sup> CT, Art. 3 and section "Transport", Art. 70-80.

<sup>&</sup>lt;sup>28</sup> URL: http://www.xrh.ru/e107 plugins/content/content.php?content.25

<sup>&</sup>lt;sup>29</sup> Die Politik der dritten Ebene. Regionen im Europa der Union Nomos. Bullman U. (ed.) Baden-Baden. 1994.

<sup>&</sup>lt;sup>30</sup> Regions in the European Community. Jones B. and Keating M. (eds.) Oxford University Press. Oxford. 1995.

 $<sup>^{31}</sup>$  Keating M., Hooghe L. By passing the nation-state? Regions in the EU policy process // J.J. Richardson (ed.) Policy making in the European Union. Routledge. London. 1995.

discussed without taking into account the policy recommendations of the Community and the Common Market.

Secondly, the intensification of relations between the regions of different states has accelerated the formation of regional policy. On the one hand, regions compete for expansion of their market share, investments and innovative technologies; on the other hand, they are looking for opportunities for cooperation. This strategy is called coopetition. Below we consider this phenomenon in more detail. The regions are looking for contacts with external, including foreign, partners, primarily for economic reasons, in order to find investments and sales markets, as well as technology transfer. In some cases, there are also cultural and ethnic prerequisites associated, for example, with the recognition or expansion of the use of less common languages (Basques, Setos, etc.). Finally, there are political motivations. Regional leaders use external protectionism as a means of creating a strong community in the region, which increases the general interest in the region and increases its significance and prestige.<sup>32</sup>

Thirdly, the ratio of the categories "region" and "market" should be taken into account. In an open economy, regions depend on international markets to sell their products, acquire resources, and form strategic alliances. The paradox of decentralization lies in the fact that the greater the autonomy of regions from the state leads to the less protection of the state and, thus, they become more vulnerable to spontaneous market forces and external political decisions. Troubled regions often prefer centralization because it allows them access to centralized funding and regional support funds. Therefore, M. Keating, instead of the term "regional autonomy", introduced the concept of "management ability" into scientific circulation.<sup>33</sup>, which implies the ability of the region to plan development and implement projects.

The result of the process described above has been the development of an institutional framework that seeks to integrate the institutional practices of the Member States with the needs of an integrated EU policy. The final institutional system proposed by the Commission of the European Communities in 1999 (Fig. 1) includes a system of institutions at different levels. This structure takes into account the interactive mode of functioning of markets and generating needs. The system assumes the possibility of direct and indirect impact on the economic development of countries and regions. A direct impact that directly affects economic growth is the establishment

<sup>&</sup>lt;sup>32</sup> Hocking B. Regionalism: an international relations perspective // Keating M., Lounhlin J. (eds) The Political Economy of Regionalism. Frank Cass. London. 1996.

<sup>&</sup>lt;sup>33</sup> Keating M. Comparative Urban Politics: Power and the City in the United States, Canada, Britain and France. Edward Elgar. Aldershort. 1991.

of an agreement between enterprises as the main market actors. Indirect impacts are provided by state structures and social capital, including customs, culture, and national and European institutional and political infrastructures. The creation of the European Regional Development Fund (ERDF) partly falls into the category of indirect influences. It is a way to meet the need of EU member states to compensate for the loss of important, previously controlled at the national level, powers that inevitably appeared in the process of monetary integration.



Fig.1. Institutional framework for the formation of EU policy <sup>34</sup>

In the 21st century, the regional policy of the EU was influenced by new challenges, which, of course, affected the issues of publications. M. Doidge<sup>35</sup> considers the mechanisms of mutual influence and interdependence of the categories "regionalism" and "interregionality", which is interpreted as a separate level in the hierarchy of global governance, within which regional actors operate. Inter-regionality includes a number of functions that, in the global policy making process, operate upwards to the global multilateral level and downwards to the regional level. The degree of implementation of these functions depends on the totality of the regional actors involved. Thus, regionalism and interregionalism are influenced by each other. The researcher emphasizes that the composition of regional players can influence the mechanism of interregional interaction in different ways, forming two of its varieties: the internally oriented type, which involves building up the potential of the region, and the externally oriented, globally active type. In the 2010s interest in the classical theories of integration and regional policy is growing. Thus, T. Borzel and T.

<sup>&</sup>lt;sup>34</sup> Source: Button K., Pentecost E. Regional Economic Performance within European Union. Edward Elgar Publishing Limited. 1999. P. 31.

<sup>&</sup>lt;sup>35</sup>Doidge M. Joined at the Hip: Regionalism and Interregionalism // Journal of European Integration. 2007.

Riess<sup>36</sup> study the extent to which European experience has spread beyond the continent, whether economic interdependence is a key factor in regional integration. Scientists come to the conclusion that the indicators of intra-regional trade and the strength of regionalism in the main regions of the world correlate weakly. Their comparative approach to the study of regionalism includes three blocks:

- 1. functional requirements for regionalism stemming primarily from security interdependence and the desire for regime stability;
- 2. ensuring regional integration through elite efforts to create a regional identity that resonates with mass public opinion;
- 3. dissemination of institutional models across regions.

Questions of inter-regionality have found development in the concept of multi-level management. L. Hooghe and G. Marx<sup>37</sup> note that the redistribution of power in ascending, descending or horizontal from the national government attracts the attention of an increasing number of political scientists. However, in addition to the general opinion that management should be multi-level, there is no unanimity of views on how it should be organized. Researchers highlight the differences and advantages of the two types of multilevel management. One type involves the distribution of powers between jurisdictions of general purpose, functionally non-overlapping and long-term. The second type of governance involves task-specific, overlapping and flexible jurisdictions.

L. Van den Brande<sup>38</sup> explains the importance of multi-level governance and strengthening partnerships for regional policymaking in the European Union in the context of the EU's cohesion policy. This approach gives the EU the opportunity to ensure better coherence within the framework of European regional policy, promoting territorial convergence.

The role and powers of nation-states are the subject of increasing debate. The transfer of power from above to supranational organizations, laterally to quasi-autonomous entities, and downwards to subnational governments has undoubtedly changed both the structure and the capabilities of national governments. It is in this context that the concept of multi-level governance

<sup>&</sup>lt;sup>36</sup> Borzel T. A., Risse T. Grand Theories of Integration and the Challenges of Comparative Regionalism // Journal of European Public Policy. 2019. Vol. 26, No 8. P. 1231—1252.

<sup>&</sup>lt;sup>37</sup> Hooghe L., Marks G. Unraveling the Central State, But How? Types of Multi-level Governance. Vienna, 2003. URL: ali.pitt.edu/530/2/pw 87.pdf

<sup>&</sup>lt;sup>38</sup> Multilevel Governance and Partnership. The Van den Brande Report. Prepared at the request of the Commissioner for Regional and Urban Policy Johannes Hahn. October 2014. P. 10. URL:URL:https://ec.europa.eu/regional\_policy/sources/informing/dialog/2014/5\_vandenbrande\_report.pdf

emerged as an approach to understanding the dynamic relationships within and between different levels of governance and government. Moreover, multilevel management is often interpreted as a new analytical framework capable of challenging and improving traditionally dominant approaches. Multilevel governance analyzes the ways in which this concept can be applied in various academic and political fields. The future of nation-states in relation to subnational and supranational organizations and the growing fluidity of political power is a major challenge for researchers of politics and public administration. Understanding the changing nature of governance requires new analytical frameworks that break away from traditional disciplinary boundaries.

In regional studies in that period the study of transregionalism<sup>39</sup> and integration experience of the EU, were especially popular, especially in the context of global governance.<sup>40</sup> I. Bache er al<sup>41</sup> emphasize that the transfer of power upwards to supranational organizations, horizontally to quasi-autonomous entities, and downwards to subnational governments has changed the structure and capabilities of national governments. It is in this context that the concept of multi-level governance emerged as an approach to understanding the dynamic relationships within and between different levels of governance. Moreover, multilevel governance is often interpreted as a new analytical framework capable of challenging and improving traditionally dominant approaches. Multilevel governance analyzes the ways in which this concept can be applied in various academic and political fields. The future of nation-states in relation to subnational and supranational organizations and the growing fluidity of political power is undoubtedly a fundamental problem for researchers of politics and public administration. Understanding the changing nature of governance requires new analytical frameworks that break away from traditional disciplinary boundaries. I. Busygina and M. Filippov focus on the study of the behavior of individual national governments in the conditions of multilevel EU governance.<sup>42</sup> The Concept

<sup>&</sup>lt;sup>39</sup> Transregionalism is usually understood as the formation of large functional international clusters, interstate associations created by states located in different regions of the world. The emergence of the phenomenon is associated with research in the field of new regionalism in response to the emergence of BRICS initiatives, the Belt and Road Initiative (BRI), the Trans-Pacific Partnership (TPP), the Transatlantic Trade and Investment Partnership (TTIP), etc.

<sup>&</sup>lt;sup>40</sup> The European Union in global economic management / Ed. ed. M. V. Strezhneva. M., 2017; Efremova K. A. From regionalism to transregionalism: theoretical understanding of the new reality // Comparative Politics. 2017. V. 8, No 2. S. 58-72; Kuznetsov D. A. The phenomenon of transregionalism: problems of terminology and conceptualization // Comparative Politics. 2016. No 2. P. 14-25.

<sup>&</sup>lt;sup>41</sup> Bache I., Bartle I., Flinders M. Multi-Level Governance. Handbook on Theories of Governance / ed. by C. Ansell, J. Torfing. Cheltenham, United Kingdom, 2016; Bache I., Flinders M. Themes and issues in multi-level governance // Multi-Level Governance in Theory and Practice / ed. by I. Bache, M. Flinders. Oxford, 2004.

<sup>&</sup>lt;sup>42</sup> Busygina I.M., Filippov M.G. Changing the incentives and strategies of national governments under conditions of multilevel governance in the European Union // Polis. Political studies. 2020. No 5. P. 148-163.

of multilevel governance in the EU is able to explain the existing features of the EU structure in the context of mechanisms for making foreign policy and economic decisions. "Leaders joining a supranational association will fear the expansion of the center they are creating. "Leaders joining a supranational association will fear the expansion of the center they are creating. Accordingly, not wanting to be its hostages, they will go only to create an alliance with weak supranational institutions, leaving the key decisions to themselves."<sup>43</sup> I. Busygina and S. Klimovich<sup>44</sup>, having revealed the peculiarities of the historical development of the Baltic states, they showed that small countries are built into alliances formed by more significant players in international relations. However, in order to carry out their own agenda and increase their importance in large groups, they also tend to create intra-alliances. Coalitions within a coalition are being created in order to obtain more substantial funding, freeriding, which involves the transfer of costs and political responsibility for decisions to larger players, and increase economic and political stability. Such a strategy allows the Baltic countries to ensure the successful implementation of their interests in large alliances, while saving resources.

The current state of the Baltic countries is promptly reflected in academic publications. Being members of the EU since 2004, Estonia, Latvia and Lithuania have been pursuing an active foreign policy, in particular, as part of sub-regional groupings (the Baltic Assembly/Baltic Council of Ministers (BA/BCM). Russia and the EU noted an increase in tension, which "did not arise on Russian initiative"<sup>45</sup>. In the position of the Baltic countries, there are no prerequisites for establishing business ties. It is advisable to observe the dynamics and, in the presence of positive trends, consider the possibility of developing relations. Y. Zverev and N. Mezhevich note that "the United States and NATO in 2021 will continue their military activity in Poland and the Baltic countries, strengthen it and try to create the maximum possible difficulties for Russia and Belarus.".<sup>46</sup>

The researchers note that under the influence of European integration and global processes, the Baltic countries are increasingly faced with the need to coordinate national

<sup>&</sup>lt;sup>43</sup> Busygina I., Filipov M. The European Union from particular to general. Limits and perspectives geopolitics of the EU // Russia in global politics. 2010. V. 8, No 1. P.124

<sup>&</sup>lt;sup>44</sup> Busygina I. M., Klimovich S. A. A coalition within a coalition: the Baltic countries in the European Union // Baltic region. 2017. V. 9, No 1. S. 7-26.

<sup>&</sup>lt;sup>45</sup> Olenchenko V. A., Mezhevich N. M. The Visegrad Group and the Baltic Assembly: coalitions within the European Union in the Russian foreign policy perception // Baltiyskiy region. 2021. V. 13, No 3. p. 25.

<sup>&</sup>lt;sup>46</sup> Zverev Yu.M., Mezhevich N.M. Challenges to Regional Security: The Baltic Vector. International life. 2021. No. 1. S. 28.

infrastructure planning among themselves and with neighboring countries. External financing requires an assessment of the potential benefits from the functioning of the infrastructure as a whole, as well as its individual elements.

The anti-Russian sanctions introduced in 2014 quickly found their way into academic publications. So A. Shirov with co-authors revealed the possible macroeconomic consequences of the imposed sanctions for the economic relations of the Russian Federation and the EU in the short, medium and long term. Researchers believe that not only Russia will suffer losses, but also European countries.<sup>47</sup> The issues of sanctions against Russia in 2014 and the prospects for the transition to a new world order are being discussed by representatives of countries not directly involved in the Ukrainian conflict. In this regard, a collective review is of particular interest.<sup>48</sup>, giving, first of all, a political assessment of the Russian-Ukrainian conflict in 2014 by representatives of Brazil, India, China and South Africa. The conclusions indicate that the leaders of the BRICS countries "are guided by political pragmatism" to "balance the apparent dominance of the West in international relations."

An assessment of the sanctions pressure imposed by a number of unfriendly countries against Russia since 2014 is reflected in the latest Russian studies. A. Khlutkov and N. Mezhevich show that "states express themselves in the international arena through their foreign policy, which can take two main forms: diplomacy and strategy."<sup>49</sup> According to the authors, the purpose of both forms is the observance of national interests, the protection of security and sovereignty. In 2022, due to the situational aggravation of the situation, diplomacy was replaced by the strategy of optimizing conditions "to continue internal transformations in the interests of strengthening the state, ensuring the recovery of the country's economy and improving the well-being of its citizens".<sup>50</sup>

It should be noted that sanctions are imposed not only on individual countries and representatives of the business and political elites who support their policies. In world practice, there are situations when, for various reasons, ports stop their activities for transshipment of goods

<sup>&</sup>lt;sup>47</sup> Shirov A. A., Yantovsky A. A., Potapenko V. V. Assessment of the potential impact of sanctions on economic development of Russia and the EU // Problems of Forecasting. 2015. No 4. P. 3–16.

<sup>&</sup>lt;sup>48</sup> Between principles and pragmatism. A look at the Ukrainian crisis from Brazil, India, China, South Africa [Electronic resource] / ed. Felix Hett, Moshe Win. Berlin, 2015. P. 5. URL: URL:https://library.fes.de/pdf-files/id-moe/11511.pdf

<sup>&</sup>lt;sup>49</sup>Khlutkov A. D., Mezhevich N. M. Memories of the future: traditional Russian economic practices in the new foreign policy environment. Article one. Industrial policy // Management consulting. 2022. No 4. p. 11.

in general or any of their individual groups. In the current circumstances, ports that have not been subjected to sanctions pressure get the opportunity to redirect the corresponding flows to themselves. The port business faced a similar situation in December 2019. The Office of Foreign Assets Control of the US Treasury (OFAC), based on the Magnitsky Act, imposed sanctions on December 9, 2019 against Ventspils Mayor A. Lembergs and four associated industry associations<sup>51</sup>. The Parliament of Latvia, having amended the laws, transferred the ports of Ventspils and Riga to the state. On this basis, the government of the country established the company "Ventas osta". On December 18, 2019, after A. Lembergs left the port board, OFAC announced the lifting of sanctions.<sup>52</sup> Despite the short period of sanctions, shippers suffered losses. In this situation, the majority ports of Latvia, Liepaja and Riga, due to their specialization, could not redistribute the obligations of the port of Ventspils among themselves. The restrictions imposed on the port of Ventspils did not last long. However, under other circumstances, in particular, favorable market conditions, the redistribution of the growing flow of cargo may be of interest to the leading ports of the region.

The transit potential of the Baltic States has also become an object of academic research. A number of specialists<sup>53</sup> reasonably assume that the key to the attractiveness of the Baltic States for increasing commodity flows is their efficiency in terms of transport costs. The latter also act as the most important factor in the location of production and logistics infrastructure facilities, and, therefore, determine the initial and final points of transportation, i.e. port gravity zone, or hinterland. Experts also point to the criteria for choosing a transportation route. It is relevant to take into account the operating costs of transportation and the costs of creating transport infrastructure, which will require reimbursement in the future.<sup>54</sup>. Already since the 1990s. identifying the motivation of participants in the transport process is reduced not only to the study of supply and demand in this market, the mobility of factors<sup>55</sup>, but also to the strategic preferences

<sup>&</sup>lt;sup>51</sup> Ventspils Freeport Authority, Ventspils Development Agency, Business Development Association and Latvian Transit Business Association.

<sup>&</sup>lt;sup>52</sup> Antonenko O. Latvian oligarch Aivar Lembergs fell under US sanctions. The work of the port of Ventspils is under threat // BBC Russian Service, Riga. 12/10/2019. URL:URL:https://www.bbc.com/russian/features-50729930. (accessed: 20.04.2020)

<sup>&</sup>lt;sup>53</sup> White H.P. The geographical approach to transport studies. Discussion Paper in Geography N1. Salford University. Salford. 1977; Unified transport system / ed. V.G.Galaburdy. M. Transport. 2001; Foreign trade transport operations and logistics / ed. prof. D.S. Nikolaev. M. ANKIL.1998; Mathieson R.S. The Soviet Union: an Economic Geography. Heinemann Educational Books. London. 1975.

<sup>54</sup> A. Lösch applied this approach in the 1930s, but due to the scientific isolation of Germany, it became widespread only in the second half of the 20th century.

<sup>&</sup>lt;sup>55</sup> Hoyle B.S., Knowles R. Modern Transport Geography In: Modern Transport Geography. Belhaven. London. 1992.

of key players. In the Baltic States, this applies, first of all, to the hub facilities serving international flows for a long time. The port business requires special coordination due to the need to take into account not only regional, but also global transformations.

The activities of ports as economic entities are covered in technical and operational aspects. The choice of seaports is determined in most cases by shippers or, in the case of multimodal or intermodal transport, by specialized operators. The preferred scheme for the delivery of foreign trade goods in a mixed message depends on a whole set of factors. These include the volume of traffic, the distance, the price of transportation, the throughput of main routes and port facilities, the navigation time, the depth of the fairways on the approaches to ports, the forms of payment for carriage charges, the amount of customs and other fees in seaports. Often, the order and duration of customs and certification procedures, interpretation of the provisions and instructions of state services by local tax authorities are taken into account.<sup>56</sup>. Optimization of the processes of interaction between the subjects of the transport system creates additional prospects for reducing costs in the formation of material flows of goods<sup>57</sup>. Zhang and Lam's idea is interesting. They applied the Lotka-Volterra model to the study of the evolution of marine clusters <sup>58</sup>. Jung et al<sup>59</sup> and Lee et al<sup>60</sup> highly appreciated the role of port performance indicators in cargo routing. The issues of competition between ports and their ability to attract and tranship cargo are studied in detail in the works of the Chinese scientific school.<sup>61</sup>. The studies of the ports of the eastern part of the Baltic Sea were mostly concerned with the political and geographical aspects of their functioning. Economic issues and their commercial solutions have found only episodic coverage

<sup>&</sup>lt;sup>56</sup> Kurenkov P., Safronova A., Kakhrimanova D. Logistics of international intermodal freight transportation // Logistics. 2018. No3. pp. 24-27.

<sup>&</sup>lt;sup>57</sup> Demin V., Karelina M., Terentiev A. Methodology for achieving a dynamic balance between the values of throughput capacities of transport and warehouse complexes and cargo flows in logistics systems // Logistics. 2018. №2. pp. 32-36.

<sup>&</sup>lt;sup>58</sup> Zhang W., Lam J.S.L. Maritime cluster evolution based on symbiosis theory and Lotka-Volterra model // Maritime Policy & Management. 2013, Vol. 40, No. 2, P. 161–176,

<sup>&</sup>lt;sup>59</sup> Jung H., Kim J., Shin K.S. Importance Analysis of Decision Making Factors for Selecting International Freight Transportation Mode //The Asian Journal of Shipping and Logistics. 2019. Vol.35(1) P. 055-062.

<sup>&</sup>lt;sup>60</sup> Lee T.-C., Wu C.-H., Lee P.T.W. Developing the fifth generation ports model. Impacts of the ECFA on seaborne trade volume and policy development for shipping and port industry in Taiwan maritime policy & management //Maritime Policy & Management. 2011. Vol. 38, No. 2. P. 1–21.

<sup>&</sup>lt;sup>61</sup>Chen T., Lee P.T.W., Notteboom T. Shipping line dominance and freight rate practices on trade routes: the case of the far east-south Africa Trade, //International Journal of Shipping and Transport Logistics. 2013. Vol. 5. No. 2. P. 155–173. Chang Y.T., Lee P.T.W. Overview of interport competition: issues and methods // Journal of International Logistics and Trade. 2007. Vol. 5. No. 1. P. 99–121. Lee P.T.W., Lam J.S.L. Developing the fifth generation ports model // Dynamic shipping and port developments in the globalized economy. Vol. 2: Emerging Trends in Ports / P.T.W. Lee, Cullinane K. (Eds). Palgrave MacMillan. London. UK. 2015 P. 186–210. *Lee P.T.W., Lam J.S.L* A review of port devolution and governance models with compound eyes approach // Transport Reviews. 2017. Vol. 37. No. 4. P. 507–520.

in the academic literature.<sup>62</sup> Analysis of the competitive advantages of the port, the characteristics of its cargo terminals in dynamics are also important when the shipper makes decisions about the route of transportation<sup>63</sup>.

As a theoretical justification for further scenarios for the development of the Baltic transport infrastructure and further relations between the Russian Federation and the Baltic countries in the transport industry, in our opinion, it is advisable to use the concept of the "rut effect"<sup>64</sup>. Path dependency theory was originally developed by economists to explain the processes of industry innovation. The conclusions and practical application of the theory had a strong influence on the formation of the concept of evolutionary economics.<sup>65</sup> Followers of this school of thought have shown that the predictable amplification of small differences is a disproportionate cause of later circumstances in a stronger form.<sup>66</sup> B. Arthur<sup>67</sup> gave a vivid explanation for the "rut effect": "locked in by historical events"<sup>68</sup>.

Nobel Prize winner D. North<sup>69</sup> interpreted the dependence on the previously chosen path from the standpoint of institutional economics. He believed that even minor events and random circumstances that affect decision making direct development along a certain trajectory. Thus, this theory can be used to test hypotheses and explain the need to apply and use the previous economic and managerial experience that has been practiced for at least the last two centuries. A. Khlutkov and N. Mezhevich emphasize that "in a number of cases, the economic and political practices of the past, which for one reason or another were previously abandoned, become effective again ... The set of decisions of the current moment is limited by decisions that were made earlier"<sup>70</sup>.

<sup>&</sup>lt;sup>62</sup> See, for example, Pavuk O.A. Comparison of port activities of the East Coast of the Baltic Sea: 1996–2016. 2017. Technology Audit and Production Reserves. 4(5(36)):15-19

<sup>&</sup>lt;sup>63</sup> Prokhorov V., Adukonis N. Significance of the complex of cargo terminals in the port of Ust-Luga for the Russian economy // Logistics. 2018. №3. pp.32-38.

<sup>&</sup>lt;sup>64</sup> english Path Dependency

<sup>&</sup>lt;sup>65</sup> Nelson, R; Winter, S. An evolutionary theory of economic change. Harvard University Press. 1982.

<sup>&</sup>lt;sup>66</sup> See, for example, *Liebowitz S.; Margolis S., Bouckaert B., De Geest G. (eds.). Encyclopedia of Law and Economics. Volume I. The History and Methodology of Law and Economics. Cheltenham: Edward Elgar. 2000. p. 985. URL:https://web.archive.org/web/20101206033616/http://encyclo.findlaw.com/0770book.pdf* 

<sup>&</sup>lt;sup>67</sup>Arthur, W. Brian 'Competing Technologies, Increasing Returns, and Lock-In by Historical Events', Economic Journal, (1989), Vol. 97. Pp. 642-665.

<sup>68</sup> eng. 'lock-in by historical events'

<sup>&</sup>lt;sup>69</sup>North D. N. Institutions, Institutional Change and Economic Performance. Cambridge University Press, 1992.; Evtikhova S.A., On the issue of scenarios for the development of the transport infrastructure of the Baltic countries in the XXI century // Problems of modern economics. 2023 No. 2. With. 262-266

<sup>&</sup>lt;sup>70</sup>XLutkov A. D., Mezhevich N. M. Memories of the future: traditional

A special contribution to the study of the role and place of the Baltic countries in European and global integration processes was made by N.M. Mezhevich. In the report «Up the stairs that were not. Thirty years of the post-Soviet Baltic»<sup>71</sup> a detailed analysis of the current state of the economy of the Baltic countries is given. The study of the dynamics of key national indicators allowed the authors to characterize the achievements of post-Soviet development, in particular, in the field of transport and logistics.

The transit potential of the Baltic States until 2020 and during the pandemic has been thoroughly studied by Russian and foreign researchers. They, to a greater extent, focused on the Chinese (Asian) direction of transit<sup>72</sup>, as well as the strategic interests of the Russian government and business circles to use the Baltic port infrastructure. K. Kholopov and P. Rarovsky<sup>73</sup> explore competitive routes of container transit Asia-Europe through the Russian territory. In the media there are business proposals for establishing cooperation between ports.

In the conditions of an open economy, cooperation with foreign countries unlimited by regulatory authorities, routes for the transportation of goods through the ports of neighboring states are being formed. In relation to the Baltic countries, this means that their seaports compete for attracting cargo, both from domestic shippers and from foreign countries. In the process of organizing the transportation of goods, ideas arise to coordinate and cooperate with the activities of ports located at a short distance, while not going beyond the scope of antimonopoly legislation. According to the Governor of the Krasnodar Territory, it is advisable to combine the efforts of the ports of Novorossiysk, Tuapse and Taman, located in the region, in attracting and transshipping cargo, which will make it possible to increase the capacity of the ports by 30%.<sup>74</sup>

Modern practice shows that the market situation can contribute to the establishment of constructive cooperation between potential and real competitors. Traditional approaches that

Russian economic practices in the new foreign policy environment. Article one. Industrial policy // Management consulting. 2022. No 4. P. 13.

<sup>&</sup>lt;sup>71</sup> Mezhevich N.M., Senik N.M. Expert report / St. Petersburg, 2021. Ser. Economy. 37 p.

<sup>&</sup>lt;sup>72</sup> See, for example, Shamakhov V.A., Mezhevich N.M., Guo Shuhun. Some comments on the assessment of the potential role of transit from the PRC through the Baltic States // Management Consulting. 2021. No 12. S. 10–16. Mezhevich N. M., Shamakhov V. A. Belarus and the Baltic states in the system of transport policy of Russia and China: scientific report. SPb. : CPI SZIU RANEPA, 2019. Efimova E. & Vroblevskaya S. Are Eastern Baltic Ports the drivers of Eurasian trade? // International Journal of Management and Economics. 2019 Vol. 55. No 3. P. 1-14. China and Eastern Europe: links of the new Silk Road / otv. ed. V. Mikheev, V. Shvydko. M. : IMEMO RAN, 2016.

<sup>&</sup>lt;sup>73</sup> Kholopov K.V., Rarovsky P.E. Russian market of international container transit in 2019 and prospects for its development // Russian Foreign Economic Bulletin. 2019. No. 9. P. 63.

<sup>&</sup>lt;sup>74</sup> Governor of Kuban: as part of the creation of the Southern Hub, the capacity of the ports of the region will be increased by 30% // Sea ports. 2020. No. 1. URL: http://www.morvesti.ru/news/1679/83085/. (date of access: 20.04.2020)

involve either strengthening the competitive advantages of ports or developing partnerships during periods of global and regional crises can be successfully supplemented by the formation of an intermediate position that involves achieving sustainable competitive advantages through establishing cooperation in certain areas of the parties.<sup>75</sup> The ideas of a possible combination of competition and cooperation, or the strategy of coopetition, that appeared in the second half of the 20th century and were reflected in interdisciplinary studies<sup>76</sup>, explain the behavior of business entities in an unstable economic and geopolitical environment.

Research on cooperation and competition has been carried out for eight decades in various theoretical areas. Traditionally, the relationship between competing companies has been studied in economic theory with a focus on industrial or market structure.<sup>77</sup> In recent years, special attention has been paid to intracompany coopetition, including within conglomerates<sup>78</sup>. Contemporary literature on strategic alliances<sup>79</sup> analyzes relations within the framework of inter-firm associations to a greater extent, rather than their structure. A paradoxical dualistic relationship between firms occurs when firms cooperate in some activities in the context of a strategic alliance and at the same time compete with each other in other activities.<sup>80</sup>. This phenomenon is called coopetition. Coopetition involves two different modes of interaction based, on the one hand, on hostility due to conflicting interests, and on trust and mutual commitment to achieving common goals, on the other. The development of a syncretic model of competition and cooperation is based on the theory of transaction costs, resource-oriented approach and game theory.

The theory of transaction costs is used to substantiate interfirm cooperation. In particular, this approach justifies the existence of cooperation in favor of the transfer of "implicit knowledge"<sup>81</sup> among companies. Traditional market mechanisms do not apply here, because if

<sup>&</sup>lt;sup>75</sup> Efimova E. G., Volovoy V., Vroblevskaya S. A. Sea ports of the Eastern Baltic and the transit policy of the Russian Federation: competition or cooperation? // Baltic region. 2021 Vol. 13, No. 3 S. 125-148.

<sup>&</sup>lt;sup>76</sup> Co-opetition: from co-operation and competition (English).

<sup>&</sup>lt;sup>77</sup> Tyrol J. Markets and market power: the theory of industrial organization. in 2 vols. St. Petersburg: School of Economics 2000. XLII+745 p.

<sup>&</sup>lt;sup>78</sup> Baumann O., Eggers J. P., Stieglitz N. Colleagues and Competitors: How Internal Social Comparisons Shape Organizational Search and Adaptation // Administrative Science Quarterly. 2019. Vol.64, No 2, P. 275-309.
<sup>79</sup> Greve H., Rowley T., Shipilov A. Network advantage: How to unlock value from your alliances and partnerships. New York, NY: John Wiley & Sons. 2014. 320 p.; Managing Multipartner Strategic Alliances. T.K. Das (ed). Charlotte, NC : Information Age Publishing. 2015. 278 p.; *Reuer J. J., Lahiri N.* Searching for alliance partners: Effects of geographic distance on the formation of R&D collaborations //Organization Science. 2014. Vol.25 (1). P. 283–298.; *Chatterjee S., Matzler K.* Simple Rules for a Network Efficiency Business Model: the case of Vizio // California Management Review, 2019. Vol. 61(2). P. 84-103.

<sup>&</sup>lt;sup>80</sup> Strese S., Meuer M.W., Flatten T.C., Brettel M. Examining cross-functional coopetition as a driver of organizational ambidexterity// Industrial Marketing Management. 2016. Vol. 57. P. 4.

<sup>&</sup>lt;sup>81</sup> Tacit knowledge — a kind of knowledge, the transfer of which to another actor causes difficulties.

the potential buyer does not know the true value of this knowledge, its disclosure paradoxically reduces the cost, since then he will have it without paying for it.<sup>82</sup>. Transaction cost theory predicts a higher probability of failure when partners are direct competitors. In this case, competitors seek to maximize their market share. Conflicting goals lead to a decrease in the commercial performance of actors and, ultimately, to their elimination.

The resource approach involves achieving a competitive advantage through the possession of unique capabilities that allow the firm to offer its customers better products and services than competitors.<sup>83</sup> This approach was originally based on two fundamental assumptions: firms are heterogeneous in their resource profile, and resources are absolutely (totally) not mobile between firms. Thus, persistent differences in firm profits can be explained by differences in resources. Tees et al propose a dynamic process and focus on how resources are accumulated and used to create sustainable competitive advantage.<sup>84</sup> According to this approach, the strategy of accumulating valuable technological assets is often insufficient to maintain a significant competitive advantage. Companies need to constantly update their competencies to keep up with the changing business environment. Dynamic analysis underlies the study of resource accumulation as a result of both competition and cooperation.<sup>85</sup>. An organization's competitive advantage may be based on informal collaborative relationships with its supplier partners, customers, and partners with whom it cooperates and competes. Companies often look for coopters to bring in important hard-to-acquire resources (side effects, commercial skills, funding, etc.).

Game theory is formally suited to the analysis of relationships between nearby ports. It allows you to analyze market situations with a small number of players, limited information, covert actions, adverse selection opportunities or incomplete contracts. M. Novak et al<sup>86</sup> applied this theory to study situations in which a cooperative equilibrium arises (or does not arise) as a result

<sup>&</sup>lt;sup>82</sup> Bengtsson M., Kock S. Coopetition—Quo vadis? Past accomplishments and future challenges // Industrial Marketing Management. 2014. Vol.43. P.182.

<sup>&</sup>lt;sup>83</sup> Barney J.B. Firms resources and sustained competitive advantage // Journal of Management. 1991. Vol.17(1). P. 99-120.; Leiblein M.J., Chen J.S., Posen H.E. Resource Allocation in Strategic Factor Markets: A Realistic Real Options Approach to Generating Competitive Advantage // Journal of Management. 2017. Vol. 43 No. 8, P. 2588 – 2608.

<sup>&</sup>lt;sup>84</sup> Teece D.J; Pisano G., Shuen A. Dynamic Capabilities and Strategic Management // Strategic Management Journal. 1997. Vol. 18(7). P. 509-533.

<sup>&</sup>lt;sup>85</sup> Lado A.A., Boyd N.G., Hanlon S.C. Competition, cooperation, and the search for economic rents: A syncretic model // Academy of Management Review. 1997. Vol. 22(1). P.115.

<sup>&</sup>lt;sup>86</sup> Nowak M.A., Sigmund K., Leibowitz M.L. Cooperation versus Competition // Financial Analysts Journal. 2000. Vol. 56(4). P. 13-22

of mutual interactions between participants. A. Brandenburger and B. Nailbuff<sup>87</sup> showed that this theory allows one to explore the possibilities of obtaining benefits through the strategy of coopetition. At the core of their argument is the prisoner's dilemma of avoiding costs and making a profit. In the struggle for its market share, a firm can choose to cooperate with another firm, compete with it, or ignore it. The combination of choice leads to different types of behavior: one-sided cooperation, mutual cooperation, one-sided apostasy, mutual apostasy. A. Brandenburger and B. Neilbuff showed how a firm can use game theory to obtain positive-sum and zero-sum gains, which is especially important for actors in the port industry. The search for win-win relationships with competitors encourages managers to use competitive imitation to gain an advantage and to focus on the strategic moves of other players rather than their own strategic positions. M. Petraite and V. Dlugoborskite<sup>88</sup> argued the possibilities and advantages of using coopetitional strategies by agents from small countries included in global network structures.

Cooperation and competition as alternatives to strategic behavior are widely covered in the scientific literature. Most specialists in the field of strategic management tend to view competition and cooperation as opposite concepts of development. This point of view is unfortunate in that it forces researchers and managers to rank strategic alternatives and choose one of them. As a result of the combination of cooperative and competitive behavior, several options can be distinguished within the framework of a strategic alliance.<sup>89</sup>: relations with the dominance of cooperation, equal relations (coopetition) and relations with the dominance of competition.

Bengtsson and Kock<sup>90</sup> showed that cooperative behavior is a situation where partners seek mutual benefit by pooling complementary resources, skills, and capabilities. In this case, common goals are more important than profit maximization or opposing one actor. Partners contribute to the overall value created in the relationship, and they are content with a smaller share of the profits to maintain the relationship. Arslan<sup>91</sup> emphasizes that the overall benefits of an individual

<sup>&</sup>lt;sup>87</sup> Brandenburger A., Nailbuff B. Co-opetition. Competitive cooperation in business. M. Omega-L. 2012. 352 p.

<sup>&</sup>lt;sup>88</sup> Petraite M., Dlugoborskyte V. Hidden champions from small catching-up country: leveraging entrepreneurial orientation, organizational capabilities and Global networks // Global Opportunities for Entrepreneurial Growth: Coopetition and Knowledge Dynamics within and Across Firms / S. Sindakis, Theodorou P (eds).. UK. Emerald Publishing. 2018. P. 91-123.

<sup>&</sup>lt;sup>89</sup> Lado A.A., Boyd N.G., Hanlon S.C. Competition, cooperation, and the search for economic rents: A syncretic model // Academy of Management Review. 1997. Vol. 22(1). P.120-124.

<sup>&</sup>lt;sup>90</sup> Bengtsson M., Kock S. Coopetition—Quo vadis? Past accomplishments and future challenges // Industrial Marketing Management. 2014. Vol.43. P.180–188.

<sup>&</sup>lt;sup>91</sup> Arslan B. The interplay of competitive and cooperative behavior and differential benefits in alliances // Strategic Management Journal. 2018. Vol. 39. P.3222–3246.

organization constitute a certain proportion of this cost, the size of which depends on its bargaining power.

Chai et al. explored the relationship between cooperation, conflict, trust, and the effectiveness of B2B innovation. Their econometric analysis showed that cooperation is positively related to the effectiveness of technological innovation, and the consequences of conflict depend on the level of trust in cooperative relations.<sup>92</sup> Trust generates economic rent in several ways<sup>93</sup>: reduces uncertainty, serves as a social control mechanism and reduces transaction costs. O. Williamson notes that achieving one's goals, including by fraudulent means, ignoring the interests of partners ultimately leads to an increase in transaction costs.<sup>94</sup>

Competitive behavior, or competitively dominated relationships, reflects a firm's focus on achieving higher productivity and creating a competitive advantage over other firms, or by manipulating the structural parameters of the industry to its advantage.<sup>95</sup>, or by developing hard-to-imitate distinctive competencies.<sup>96</sup> A competitive behavioral strategy can thus help companies achieve greater production efficiency, as well as encourage creativity and innovation. Lado et al.<sup>97</sup> criticized this point of view. In their opinion, rivals tend to structure their relationships according to the rules of the zero-sum game. Competition can encourage firms to create barriers around their competencies, making collaboration difficult in the future. Such behavior helps the organization gain temporary benefits, but makes it difficult to maintain competitive advantage over the long term.

Academic research has noted that it is the interdependence of competitors driven by structural conditions that may explain why competitors cooperate and compete simultaneously. In the works on strategic alliances, it is proved that, despite conflicting and opposing relationships, cooperation between competitors can have many advantages. In addition, the syncretism of competition and cooperation contributes to greater knowledge growth, economic development, technological progress and commercial success than competition or cooperation carried out

<sup>&</sup>lt;sup>92</sup> Chai L., Li J., Tangpong Ch., Clauss Th. The interplays of coopetition, conflicts, trust, and efficiency process innovation in vertical B2B relationships // Industrial Marketing Management. 2020. Vol. 85. P. 269-280.

<sup>&</sup>lt;sup>93</sup> Lado A.A., Boyd N.G., Hanlon S.C. Competition, cooperation, and the search for economic rents: A syncretic model // Academy of Management Review. 1997. Vol. 22(1). P.121.

<sup>&</sup>lt;sup>94</sup> Williamson O. E. Behavioral Assumptions // The Economic Institutions of Capitalism. Firms, Markets, Relational Contracting. O.E.Williamson (ed). N.Y.: The Free Press. 1985. P.44–52.

<sup>&</sup>lt;sup>95</sup> Porter M. Competitive advantage. How to achieve a high result and ensure its sustainability. M. Alpina Publisher. 2019. 716 p.

<sup>&</sup>lt;sup>96</sup> Barney J.B. Firms resources and sustained competitive advantage // Journal of Management. 1991. Vol.17(1). P. 99-120.

<sup>&</sup>lt;sup>97</sup> Lado A.A., Boyd N.G., Hanlon S.C. Competition, cooperation, and the search for economic rents: A syncretic model // Academy of Management Review. 1997. Vol. 22(1). P.119.

separately.98

D. North<sup>99</sup> shows that competition-driven in-house innovation contributes to knowledge generation, economic, technical and market growth, provided that property rights are well protected. Yorde and Teece<sup>100</sup> believe that inter-firm cooperation can also stimulate social and economic progress by enhancing the development and use of knowledge, increasing the volume and quality of goods and services, and expanding markets. Collaboration with competitors is known to provide an opportunity to study rivals closely enough to predict how they will behave when the alliance breaks up. Cozzolino and Rothaermel pay attention to the fact that the discreteness of complementary assets (resources) actualizes the need to build a theoretical model that explains the competition and cooperation of market agents. In particular, company management tends to be more cooperative, particularly in economically and politically unstable periods. Such "faults" also provide an opportunity for existing firms to rethink their competitive and cooperative strategies within individual industries. Consideration of strategic alliances between old market participants and new innovative enterprises showed the possibility of using such cooperation to adapt to radical changes, but also to gain a competitive advantage.<sup>101</sup>

Thanks to this type of ties, you can get other common advantages that are characteristic of a strategic alliance: supplementing and strengthening the positions of the parties in production activities, introducing new products, entering new markets; reducing costs and risks; creation and transfer of technologies and capabilities. A number of researchers recognize that the key limitations of implementing a coopetitional strategy do not always improve a firm's competitive position. This occurs when the costs of maintaining an actor's balance in a new environment, carrying out routine activities, and having organizational resources to develop collaborative relationships are greater than the expected benefits. Problems may also arise due to the possible insensitivity of actors to modern knowledge and technologies, as well as errors in innovation management, which leads to a change in the availability of resources, including information, and the emergence of strong competitors. <sup>102</sup>

<sup>&</sup>lt;sup>98</sup> Lado A.A., Boyd N.G., Hanlon S.C. Competition, cooperation, and the search for economic rents: A syncretic model // Academy of Management Review. 1997. Vol. 22(1). P.118.

<sup>&</sup>lt;sup>99</sup> North D.C. Institutions, institutional change and economic performance. New York: Cambridge University Press. 1990. 164 p.

<sup>&</sup>lt;sup>100</sup> Jorde J.M., Teece D.J. Competition and cooperation: Striking the right balance // California Management Review. 1989. Vol. 31(3). P.25-37.

<sup>&</sup>lt;sup>101</sup> Cozzolino A., Rothaermel F.T. Discontinuities, competition, and cooperation: Coopetitive dynamics between incumbents and entrants // Strategic Management Journal. 2018. Vol. 39. P.3054.

<sup>&</sup>lt;sup>102</sup> Estrada I., Faems D., de Faria P. Coopetition and product innovation performance: The role of internalknowledge sharing mechanisms and formal knowledgeprotection mechanisms // Industrial Marketing

All of the above proves that the transport infrastructure of the Baltic countries is in dire need of thorough interdisciplinary research and modern logistics solutions. In recent decades, new techniques have emerged<sup>103</sup>, which allowed the creation and operation of complex transport networks. Despite the complexity of the implementation of cross-border projects, as well as the difficulties and failures that have befallen some of them<sup>104</sup>, in general, one can state their obvious benefits for the economy of the region. First of all, they help speed up the movement of goods and passengers, and facilitate border procedures. The impossibility of a large-scale allocation of financial resources from the EU budget, which hinders the implementation of large projects, is currently provided for by new European programs, which increase the responsibility of countries and regions for the creation and modernization of infrastructure. The study of the transport infrastructure of the Baltic States in a historical retrospective will allow us to determine the further track of its historical development.

Management. 2016. Vol. 53(2). P.56-65.; Bouncken R.B., Clauß T., Fredrich V. Product innovation through coopetition in alliances: Singular or plural governance? // Industrial Marketing Management. 2016. Vol. 53. P. 77–90.

<sup>&</sup>lt;sup>103</sup> See, for example, Rodrigue J.-P. The Geography of Transport Systems. Fifth Edition. 2020. NY: Routledge. 456p.

<sup>&</sup>lt;sup>104</sup> The disruption of the schedule for the construction of the Rail Baltica railway should be attributed to the difficulties. The EU's most unsuccessful cross-border project is the non-Baltic Eurotunnel.

## **1.2.** Factors in the formation of the transport infrastructure of the Baltic countries. Background

The transport infrastructure of the Baltic countries should be considered systematically, from the standpoint of the main economic and social parameters: macroeconomic indicators, intercompany interaction, innovative technologies, national labor markets, cultural and historical ties. The governments of the Baltic countries rightly proceed from the fact that a developed infrastructure simplifies the exchange of goods and information, ensures the continuity of the processes of material production, and the modern spatial organization of commercial activities requires flexible logistics support. The historically established commercially justified geographic location of enterprises does not guarantee the formation of balanced commodity flows to the ports of foreign countries. In an unstable geopolitical situation, it is difficult to study current and forecast future transportation. This is hindered by a number of reasons. First of all, there are discrepancies in the content of commercial information and the movement of goods in material form in time and geographical direction, even within the same contract. It is difficult to accurately predict the time and direction of cargo movement. Hence, risks increase in the process of creating and modernizing transport infrastructure facilities, even in an economically and politically stable situation.

Commercial and investment relations in the market of transport and logistics services in the Baltic countries are regulated on the basis of the principles of market relations, free movement of capital, goods and labor. In addition, it should be taken into account that the functioning of the national transport infrastructures of the Baltic States, which are members of the EU, is regulated by national regulations, harmonized with the legislation and directives of the European Union. All states take into account the current international norms and standards.

The philosophy of conducting national business, influencing the mechanisms of transportation of goods, differs in the Baltic countries. By adopting international commercial and technical standards, countries, based on their customs, set preferences, choose a model of business relations based on calculation and/or trust. In the case when neighboring countries with a large trade turnover choose different models, transport provision can be significantly hampered. In the case of the Baltic States, it is difficult to achieve a precise agreement on the organization of material flows. In a competitive environment, in the absence of long-term agreements at all levels of production, firms are often forced to accumulate buffer stocks. As a result, the transportation of goods becomes even more irregular.

Relationships of this kind have evolved over the centuries. Therefore, studying the ports of the Baltic countries in a historical perspective will help to update the economic and commercial relations of stevedoring companies and predict further developments. Please note that this part of the work will cover the development of port infrastructure until the 2010s.

Ports form the basis of the transport infrastructure of the Baltic countries. It was they who became the drivers of the development of the regional economy and land infrastructure.

### **Baltic ports**

Countries with access to the sea inevitably build their transport infrastructure based on the location and specialization of ports. It is the ports that are the drivers, sometimes the leaders, of their economic development, taking into account that most of the international trade is provided by maritime transport. On the other hand, historical insight shows that land links with the hinterland are becoming an important factor in attracting cargo and, as a result, commercial success. We should not forget that seaports play a strategic role as a guarantor of national security.

The modern role and economic characteristics of the Baltic ports are predetermined by the trajectories of their historical development. Therefore, we consider it necessary to start the study with their historical retrospective. We will consider the major ports of Estonia, Latvia and Lithuania in succession.

The first evidence of maritime transportation in the region covering modern Estonia dates back to the 8th-7th centuries BC. Since the 9th century, the harbor of Tallinn has been mentioned as a convenient shelter for merchant ships. The first modern fortress was built on Toompea Hill in 1050. The first historical mention of the port city dates back to 1154. In 1219, the Danes captured the port of Tallinn and built a new fortress there.

In the XIII century. Tallinn was alternately part of Denmark and Sweden. Then he entered the sphere of interests of the Teutonic Order. It was at his suggestion that Tallinn was included in the Hanseatic League in 1285, which gave the city and the port even greater commercial significance and significance. The port city passed to Sweden in 1561, when the order was dissolved. During the periods of stay in Sweden, there was an active development of waterways and ports. According to the Estonian National Archives, the Tallinn Port Development Plan was transferred to paper in 1630, during the Swedish rule.

Since 1710, Tallinn became part of the Russian Empire as a result of the Northern War. By decree of Emperor Peter I, the construction of a fortified military port began. Despite the local self-government within the Duchy of Estonia, the further history and development of the city was
closely intertwined with the history of the Russian Empire. During the 200-year period of Russian rule, the port of Tallinn and other structures on the north coast of Estonia were military installations. St. Petersburg and Riga became the main trading ports of the Baltic Sea. Tallinn in the middle of the 19th century was classified only as a trading port of the 2nd category.

However, with the development of the shipping company, in 1837 a regular sea communication was opened from Helsinki, and by 1840 the ferries of the Tallinn-Helsinki line carried 5139 passengers. In the middle of the 19th century, a ferry service was established with Stockholm. The opening in 1880 of a direct railway connection with St. Petersburg contributed to the further development of the seaport of Tallinn. In 1881 - 1904 new embankments with stone parapets were built, breakwaters were built and the Western Pier was completely reconstructed. However, after the end of World War I, the significance of the port was lost. The reason was the destruction of trade ties with Russia.

1920s were a difficult period for Estonian ports, as transit flows from Russia dropped sharply. Port facilities were reconstructed for more stable ferry lines. By 1928, the port of Tallinn served 13 international ferry routes. In the 1930s, with the beginning of the economic recovery and the growth of foreign trade, timber and sawn timber were exported, cotton and ferrous metals were imported. However, in October 1939, after the outbreak of World War II, the port of Tallinn was closed to merchant and fishing vessels. On December 1, the ferry service from Helsinki also stopped.

During the bombings in the Great Patriotic War, most of the buildings and structures of the port were destroyed. Since 1953, a large-scale reconstruction of the port began, new terminals were launched, and transshipment equipment was modernized. By 1975, the port of the city was completely restored and began to operate at full capacity. In the late 1970s a decision was made to build a new commercial port for grain and fruit imports. Muuga Deepwater Port opened in 1986.

Passenger traffic from Helsinki was restored in July 1965. Ferry traffic was mainly used by Finnish citizens. In 1980, on the eve of the sailing regatta of the Moscow Olympics, the ship Georg Ots, built in Poland, began to run between Tallinn and Helsinki.

In the autumn of 1991, the ports of Tallinn, Copenhagen and Rostock initiated the creation of the Baltic Ports Organization (BPO), on the basis of which the largest ports of the Baltic Sea are currently cooperating. In December 1991, the Port of Tallinn and the Port of Muuga were merged into the state enterprise Tallinna Sadam. Since the mid 1990s. the reconstruction of the Vanasadam port was carried out, which was completed in 2018. In 1996, the state enterprise Tallinna Sadam was transformed into a joint-stock company. At the beginning of the 21st century, the key areas of port development were the construction of logistics and industrial parks in the port of Muuga, the opening of a free zone, regular cruise traffic, the emergence of new ships on the Tallinn-Helsinki and Tallinn-Stockholm lines. Much attention is paid to the introduction of information technologies of the "smart port" in order to improve the efficiency of traffic management and the subsequent transfer of the national transport and logistics complex to digital technologies.

Currently AS Tallinna Sadam is a landlord port<sup>105</sup>, which manages the infrastructure and provides navigation services.

The second largest and most important port in Estonia is Sillamäe. Sillamäe, a recreational area on the coast of the Gulf of Finland, belonged to the Stackelberg family until 1917. After Estonia gained independence in 1918, Sillamäe gradually turned into an industrial settlement. In 1928, a plant for the processing of oil shale mined near Sillamäe was built in the village of Viivikonna, a power station and a small port. Until 1940, the plant producing combustible and lubricating oils belonged to the Krenkel-Ramen company.

During the Great Patriotic War, there was a repair tank base in Sillamäe. The plant produced fuel for submarines. Due to its strategic importance, the area was heavily fortified by German troops. In April - September 1944, due to fierce fighting, the city, factory and port were destroyed.

On July 27, 1946, on the site of the destroyed shale distillation plant, it was decided to build a shale chemical plant to extract uranium from local raw materials, dictyonema shale. In the early 70s. the plant began to process the mineral loparite containing rare earth elements. In fact, before the collapse of the USSR, Sillamäe was a closed city. Therefore, port recovery was not attempted. With the acquisition of independence by Estonia in 1991, the Silmet plant was completely redesigned for the production of rare earth metals.<sup>106</sup> In September 2003, construction of the port begins. The port has been open for international navigation since October 14, 2005. The first ship entered the port on October 25, 2005. At present, it is a universal deep-water port. 15 berths with a depth of up to 16 m allow to receive any vessels capable of entering the Baltic Sea through the Danish Straits. The multifunctional port has five terminals: SILSSTEVE, ALEXELA, EUROCHEM, DBT, SILPORT TRUCKSTOP.

<sup>&</sup>lt;sup>105</sup> One of the forms of port management (from the English landlord - the owner of real estate, landowner), in which the owner of the land and water area adjacent to the port leases terminals to stevedoring companies.

<sup>&</sup>lt;sup>106</sup> In 2011, it was acquired by the American corporation Molycorp. Source: Molycorp bought the last shares of Sillamäe plant Silmet URL:https://rus.delfi.ee/statja/60405298/molycorp-kupil-poslednie-akcii-sillamyaeskogozavoda-silmet

The port has an international ISPS security certificate. It is a Free Zone of the First Category of the EU, which allows the transfer of goods at a 0% turnover tax rate, as well as the storage of goods in transit through Estonia without paying taxes, excises and duties<sup>107</sup>. It is a landlord port that owns 750 hectares of land, invests in infrastructure development and leases land to independent operators and manufacturing companies for up to 99 years with development rights. The port is managed by a joint-stock company with 100% private capital. 50% of the shares belong to SILMET Grupp (Estonia) and 50% to Russian entrepreneurs.

Let's start our exploration of Latvian ports with the Freeport of Riga.<sup>108</sup> The Daugava River was part of the trade route "from the Varangians to the Greeks", or the Daugava-Dnepr Amber Route, which connected the Baltic and Black Seas as early as the 5th century. The small settlement of the Livs at the mouth of the Daugava was a convenient natural harbor where ships could take shelter from bad weather and reload goods. The harbor became a convenient place of trade for Scandinavian, German and Russian merchants who arrived here both by sea and along the Daugava River.

At the beginning of the 13th century, a German knightly order led by Bishop Albert arrived in the lower reaches of the Daugava and founded the city of Riga. The city council immediately concluded trade agreements with the eastern lands, then with the Hanseatic cities. Riga became an important international trading port and a member of the Hanseatic League. In the XIV century Riga, with the transition under the rule of the Livonian Order, the influence of the Hanseatic League increased. As a result, trade developed, construction and crafts flourished. Metal products, spices, salt and fabrics were imported through the port of Riga. Exports were mainly wax, flax, hemp, wood and fur.

The great geographical discoveries had a positive impact on the development of trade between European ports. The development of shipbuilding and maritime transportation generated demand for grain and timber. The most valuable material exported From the port of Riga, mast trees were imported. To optimize logistics flows, the port moved upstream of the Daugava. Colonial goods were added to the list of imported goods.

During the 25-year Livonian War, the envoys of the Riga City Council negotiated with the Holy Roman Empire on granting Riga the status of a free city. However, as a result of the redistribution of the lands of the Livonian Order, Riga came under the authority of the

<sup>&</sup>lt;sup>107</sup> Port of Sillamae. Booklet 2018. 4 p. URL:https://www.silport.ee/SILPORT-booklet\_rus.pdf?rand=159

<sup>108</sup> Official website of the Freeport of Riga. URL:URL:https://rop.lv/en/vesture

Commonwealth. King Stefan Batory issued an order to collect the first customs duty in the history of the Port of Riga<sup>109</sup>, amounting to about 2% of the value of all imported and exported goods. Despite the continued demand for the port (according to the documents of the city council in 1591, 391 sailing ships entered the port), during the Polish rule its competitiveness decreased due to high taxes.

During the Polish-Swedish War, in order to increase influence in the Baltic Sea region, Swedish troops blocked the port, which limited trade. In 1621, the Swedes broke the resistance of the townspeople. King Gustav II Adolf of Sweden, understanding the importance of trade for the development of the city, granted Riga a privilege, according to which local merchants could freely maintain trade with the "Russian kingdom and cities with an East Slavic population that were part of the Polish-Lithuanian Commonwealth."<sup>110</sup> Experiencing financial difficulties, in 1629 the king introduced an increased customs duty<sup>111</sup> on goods imported along the Daugava from Russian lands. As a result, despite the increasing cargo flow in the region, cargo was redistributed to the ports of Kurzeme<sup>112</sup> and Prussia. Political conflicts, wars and the ongoing fiscal policy led to a decrease in the number of calls to the port: it did not exceed 300 ships per year.

As a result of the Russo-Swedish war in 1710, an act of capitulation of Riga was signed. In the 18th century, the city management model changed several times. This had a negative impact on its restoration and business activities. The city government of Riga, elected during the reign of Catherine II, began large-scale restoration work. After the end of the Seven Years' War, under the leadership of the hydraulic engineer of the Russian Imperial Army Gustav Emanuel Weisman, the construction of navigation and port facilities at the mouth of the Daugava was carried out, as well as work to deepen the riverbed. However, in 1781, Weisman was released from the leadership of the construction of dams due to violation of the work schedule and exceeding the original estimate by three times. In addition, errors in construction were identified, as a result of which structures were destroyed during ice drift and floods.

Failures in the construction of port facilities were offset by successes in port management. In the second half of the 18th century, Latvian entrepreneurship supported by the Russian

<sup>109</sup> portoria

<sup>&</sup>lt;sup>110</sup> Filey A. It all started with Russian trade: why the Port of Riga is in crisis

URL:https://www.rubaltic.ru/article/kultura-i-istoriya/19022020-vse-nachinalos-s-russkoy-torgovli-pochemurizhskiy-port-perezhivaet-krizis/

<sup>&</sup>lt;sup>111</sup> Licente. Licente was the main source of income for the Swedish treasury, derived from the Riga trade. 112 Historical region of Latvia, location of the modern ports of Ventspils and Liepaja

government was formed in the port of Riga. Thanks to joint efforts, the number of ship calls to the port has grown to 900-1000 per year.

In the first half of the 19th century, the development of the port consisted mainly of dredging works, which were carried out using advanced technologies and financed mainly by trading companies and the Committee of the Riga Stock Exchange. The silting of the fairway caused significant commercial damage to business activities.

In the second half of the 19th century, the modernization of the port infrastructure noticeably intensified. The work was carried out under the guidance of A.A. Suvorov, governor general of the Baltic region and military governor of Riga in 1848-1861, as well as the Committee for the Construction of the Port of Riga, created in 1850 with the blessing of Emperor Alexander II. The ramparts of the Riga fortifications were demolished, the Eastern and Western piers were built, and the sea gates of the port were modernized. In 1861, a gas navigation light was installed on the Eastern Mole. By decision of the Committee of the Riga Stock Exchange in 1877, the steamship Simson was purchased for icebreaking operations in severe winters.

In the 1850s the Riga-Daugavpils railway was built with access to the St. Petersburg-Warsaw highway and an electric telegraph was installed from Riga to Bolderaja, which at that time was an industrial suburb of Riga. After the opening of the Riga-Tsaritsyn railway in 1871, the port of Riga gained access to the main Russian commodity markets. It should be noted that the construction of railways in Russia in the 19th century was carried out either on a concession basis or with full state funding.

By the beginning of the 20th century, Riga became the largest Russian timber export port and ranked third among the ports of the Russian Empire in terms of foreign trade cargo turnover. In 1901, in order to increase the throughput, the Russian government decided to build an export port on the Andreevskaya dam. Already in 1902 the first refrigerator was opened, in 1903 the Riga freight station was put into operation. In 1905, a power station was put into operation in the export port. In 1912, the Peter the Great icebreaker built in Gothenburg began work in the port of Riga. In 1913, the ports of Latvia served 40% of Russian cargo turnover in the Baltic.<sup>113</sup> Shortly before the First World War, a second railway bridge across the Daugava was opened.

<sup>&</sup>lt;sup>113</sup>URL:https://www.rubaltic.ru/article/kultura-i-istoriya/19022020-vse-nachinalos-s-russkoy-torgovlipochemu-rizhskiy-port-perezhivaet-krizis/

During the First World War, Riga was in the status of a front-line city. In 1915, the evacuation of factories, ships and port equipment to Russia began. In 1917, German troops occupied Riga. The outgoing Russian army blew up a number of port infrastructure facilities.

On November 18, 1918, the Republic of Latvia was proclaimed. In 1920, the Russian-Latvian peace treaty was signed, and a period of restoration of activity began in the port of Riga. The repair of hydraulic structures and the deepening of the fairway were carried out. In 1928, the depth of the fairway reached 8.2 meters, and in 1938 it was already 9.0 meters. New warehouses and a refrigerator were built in Exportost. In 1926, the icebreaker "Krišjānis Valdemārs" started working in the port of Riga. Latvia's main foreign trade partners were Great Britain and Germany.

In June 1940, Latvia became part of the USSR. However, already in the summer of 1941, the Second World War began, which brought new destruction in the port of Riga. In the post-war period, the development of the port met the plans of the Soviet government: it specialized in sending export cargo to Western countries. The development of foreign trade relations in the mid-60s - early 70s. required modernization and expansion of the port. In the early 1980s, one of the largest container terminals in the USSR was built at Kundziņsala, a berth and infrastructure for the export of liquefied gas were created, the Riga Sea Passenger Station and the Fishing Port in Rinuzi were put into operation.

With the adoption of the Declaration of Independence by the Supreme Council of the Republic of Latvia, the port of Riga remains the largest port in the country. Thus, in 2019, the last pre-crisis year, 53% of all Latvian maritime cargo was handled.<sup>114</sup> Port terminals transship all main types of cargo, including bulky and non-standard. The list of main types of cargo is preserved: coal, timber, fertilizers, oil products, grain, metals, containers. The Port of Riga retains its role as a transit hub. Despite a significant increase in the share of export and import cargo (by 80% in the 2010s), the volume of transit cargo is estimated at about 70%. The port is the largest cargo supplier for the country's railways, SJSC "Latvijas dzelzceļš". Cargo sent to/from the port of Riga accounted for 47% of the total volume of cargo transported by the state-owned company. In 2019, 3,489 cargo ships entered the port. Prior to the COVID-19 pandemic, the port regularly operated passenger traffic, including cruise ships and ferries. The business cluster of the Port of Riga, which includes the Freeport of Riga Authority and about 200 transport and logistics companies located in the port, provides more than 4,250 jobs. The Port of Riga generates about 10,000 jobs in related industries: road and rail transport, distribution and warehousing. A ton of cargo handled in the

<sup>114</sup> Official website of the Freeport of Riga URL:https://rop.lv/ru/pokazateli-proizvoditelnosti-porta

Freeport of Riga increases Latvia's GDP by  $\notin$ 10.7. In 2019, the contribution of the port of Latvia to GDP amounted to  $\notin$ 350 million.<sup>115</sup> The annual tax contributions of port companies to the state and municipal budgets amount to more than  $\notin$ 30 million.

The functioning of the port of Riga is carried out on the basis of the Law on Ports and the Law on the Freeport of Riga of the Republic of Latvia. The Freeport of Riga Board is the supreme legislative body of the port. Its decisions are implemented by the Freeport of Riga Authority, which is an executive body responsible for the condition and safety of public infrastructure, and also leases the territory and infrastructure facilities of the port to private companies. Thus, the Freeport of Riga is characterized by a landlord management model.

The first documentary mention of the port of Ventspils dates back to 1263, when the Crusaders erected a fortress at the mouth of the Venta (Vindava) River and built a pier to service merchant ships. Later, Ventspils joined the Hanseatic trade union, which gave him the opportunity to acquire monopoly rights in the field of trade. Ventspils reached its peak, becoming the leading industrial and transport hub of the Duchy of Courland, during the reign of Duke Jacob (1642–1682). According to the orders of European shipowners, more than 135 ships (including 44 warships and 79 merchant ships) were built at the shipyards of Ventspils.<sup>116</sup> However, after his death, the port fell into disrepair.

Joining the Russian Empire returned the strategic importance of the port of Ventspils by 1795. The ice-free port allowed year-round import and export of Russian goods to Western Europe, unlike other ports of the Baltic Sea, which at that time froze for almost half a year. At the end of the 19th century, berths, jetties, logistics infrastructure facilities were built in the port, in particular, a unique powerful grain elevator with a grain dryer, equipped with Japanese equipment. Construction of the railway Rybinsk - Moscow - Ventspils in 1887-1904 allowed Ventspils to significantly increase its hinterland. As a result, in 1912, Ventspils was already significantly ahead of Liepaja in terms of cargo turnover.

During the First and Second World Wars, as well as during the interwar period, the port of Ventspils lost its position. During the First World War, the port of Ventspils was badly damaged. Before the retreat in 1915, the High Command of the Russian Army ordered the destruction of the port. Valuable equipment was evacuated to Russia, warehouses were destroyed and burned, railway tracks were dismantled, embankments and overpasses were destroyed, breakwaters and

<sup>&</sup>lt;sup>115</sup> Data of the analytical center CERTUS, quote from: URL:https://rop.lv/en/pokazateli-proizvoditelnosti-porta

<sup>116</sup> URL:https://www.portofventspils.lv/ru/o-svobodnom-porte/istoriceskie-fakti

breakwaters were blown up, cranes were destroyed or damaged. During the hostilities in the port waters, the steamer Russland, the German warship Elbe nr. 2, the river paddle steamer Nikolai, German wooden and metal ferries, etc. The depth of the shipping channel has greatly decreased, since it has not been maintained for several years. Therefore, the independent Latvian government saw the restoration of the port of Ventspils as a priority, in particular, dredging.

Until the second half of the 20s of the 20th century, Ventspils was an outport of Riga, so it was the capital's port that received income from transit traffic. Large maritime steamships with transit cargo began calling at Ventspils in 1921. During the first half of 1922, 220 foreign ships were serviced, which ensured the transit of goods from Soviet Russia. The demand for the port convinced the local authorities to restore the infrastructure as quickly as possible so that it could receive large ships. In 1930, the declared depth of the port of Ventspils was 7.9 m. For comparison: now it reaches 17.5 m.<sup>117</sup>

In the 1920s, three quarters of Latvia's exports were timber products. She was heading mainly to the UK. Grain was another important export product. The main imports were hard coal from Great Britain and Poland and piece goods. The commodity structure predetermined the movement of ships. In 1930, 581 ships entered the port, of which 146 were foreign ships, including 45 German, 41 Danish and 23 Swedish. Cargo was delivered by 395 ships. Cargo was transported by 528 ships, including 96 to England, 19 to France, 15 to Belgium, and 13 each to Germany and Holland.<sup>118</sup> Thus, most of the ships took out cargo from Ventspils. To facilitate the transit of goods from the USSR, the Ventspils-Jelgava railway gauge was in line with the Russian standard. As in the times of the Russian Empire, the transit of Russian cargo was carried out mainly in the winter months, when the ports of St. Petersburg and Tallinn froze.

Between the wars, the maximum volume of timber exports was 226 thousand tons and 21.7 thousand tons of grain (1936). The lack of a cargo base and the backlog in the mechanization of port operations have become the main reasons hindering the growth of its performance. Only by the beginning of World War II, the cargo turnover of the port of Ventspils reached the levels of 1913.

<sup>&</sup>lt;sup>117</sup> Port of Ventspils 100 years ago URL:https://rus.ventasbalss.lv/zinas/vesti-svobodnovo-porta/35307-ventspilsskij-port-100-let-nazad

<sup>&</sup>lt;sup>118</sup>: IA VentasBaltss. URL:https://rus.ventas balss.lv/zinas/vesti-svobodnogo-porta/35307-ventspilsskij-port-100-let-nazad

The entry of Latvia into the USSR revived the port. Already in the 1950s. the manufacturing industry began to develop in the port. Part of the port was redesigned for the needs of the fishing fleet and for the construction of fish processing enterprises. The transit status was restored in the 1960s, after the decision of the USSR Government to develop the port as a leading center for processing and exporting oil and chemical products. In 1961, the largest oil transshipment terminal in the Baltic was built. The diversification of the port's activities required the development of a single project for the development of urban and port infrastructure, including roads, enterprises, cargo warehouses, and an energy supply system. In 1968, the Polotsk-Ventspils oil pipeline was put into operation, which is part of the unified system of oil pipelines of the USSR. It transported oil from the Volga, Ural and Pechora fields through the port of Ventspils to the West. In 1970, a terminal for transshipment of potash fertilizers was put into operation, in 1973 - a terminal for transshipment of liquid chemicals, including ammonia.

After the restoration of the independence of Latvia, 1990s. the restructuring and modernization of the port of Ventspils began. Construction work focused on deepening the water area of the port and the channel of the Venta, the reconstruction of hydraulic structures, and the creation of new berths. The Port of Ventspils Administration (since 1997 – Freeport of Ventspils Authority) is responsible for the development of the port. The creation of a special economic zone in 1997 provides tax incentives and provides favorable opportunities for investors.

The port promptly responds to market needs. In 2000, a multi-purpose Ro-Ro and container terminal began to operate. In 2005, a specialized terminal for transshipment and storage of grain, Ventspils Grain Terminal, was put into operation, in 2008, a specialized terminal for indoor storage and processing of coal Baltic Coal Terminal.

At the beginning of the 21st century, the port of Ventspils transships a wide range of cargo for the EU, CIS and Central Asian regions. On the territory of the port, there are enterprises serving port activities, as well as an industrial zone is being developed, on the territory of which largescale investment projects are being implemented. The port is also assigned the role of a center for the development of the regional economy (Community Manager).

According to the legislation of Latvia, the water area of the port is state property and is in the possession of the Freeport of Ventspils Authority. The land territory of the port may be the property of the state, self-government, legal entities and individuals. The general hydraulic structures of the port (in particular, jetties), fairways, floating navigation equipment are the property of the state or local government. Other hydraulic structures of the port may be the property of individuals or legal entities. The Freeport of Ventspils Authority has the right to lease state or municipal land in its possession, as well as to construct facilities necessary for the functioning of the port.

The port of Liepaja, located at the mouth of the Liva River, was first mentioned in written sources in 1263. It was the property of the bishop. Already in 1300, it became the property of the Livonian port. In 1621-1739. Liepaja maintained trade relations with Lubeck, Amsterdam, Gotland, Kiel, Stockholm, Danzig, Lisbon and other port cities. Trade volumes were limited by high competition from the port of Memel. The main export commodities were grain, corned beef, herring, lime and iron.

In 1625 Duke Friedrich of Courland and Zemgale granted Liepaja city rights. In 1660, as a result of the Treaty of Oliwa, Vidzeme<sup>119</sup> went to Sweden. Therefore, Polish trade flows were redirected to Kurzeme ports, including Liepaja. As a result, the transshipment of grain for export increased, and trade relations with Dutch merchants expanded.

After the Liva and Perkone rivers were clogged in the middle of the 17th century, the mouth port ceased to exist. Transshipment of goods and industrial work was carried out on the sea coast, which was inconvenient and unsafe. So, in 1696, during a storm, 14 anchored ships were broken. To partially solve this problem, Duke Jacob in 1677 ordered the creation of a shipyard. Shipmaster Heinrich Jansen, who arrived from Holland at the invitation of Jacob's eldest son Friedrich Casimir, started building two ships "S. Casimirus" and "S. Sophie." The creation of an artificial port began. In 1682 -1698. in Liepaja there was a boom in shipbuilding: 25 ships were built, including with the involvement of craftsmen from Ventspils. Built here by the order of a local shipowner, the ship Wilhelm Giefenih "Weisses Lamm" delivered imported cargo from Western India. Thus, elements of cooperation in the port industry of the Baltic countries can be found already at the end of the 17th century.

The construction of the port itself began only in 1697 by the decision of the Polish king Sigismund August. The first stage included cleaning and deepening of the port water area. Until the completion of the work, merchant ships stood in the roadstead. The need for priority work was due to the fact that the natural channel of Lake Liepaja into the sea was often clogged. Already in 1700, more than a hundred ships entered the port. From Liepaja exported grain, leather and other agricultural products, timber. The main export items were salt, herring, building materials, metal

<sup>&</sup>lt;sup>119</sup> historical region in central Latvia. Riga is located in this area

products. The completion of the first stage of work in the port water area took place in 1703. The width of the channel was 13 m, the depth was 2.9–3.2 m, and the length was 1800 m.

In 1705 the military history of the port begins. To the south of the new port, the Swedes built a fortress. For the entry of large ships in 1725, the construction of a port channel 43-65 m wide was completed. However, already in 1736, as a result of a devastating storm, the entrance to the port was covered with sand. In some places, its depth was 1 m. The need for protection from the harmful effects of the natural factor became the main impetus for the reconstruction of the port: the northern pier was lengthened, the coast was strengthened, the entrance was fenced off by two parallel dams.

Accession in 1795 of the Duchy of Courland to the Russian Empire did not have a noticeable impact on the functioning of the port. During the Napoleonic wars, trade in the port of Liepaja was unstable, which was caused by the influence of a political factor. Thus, during 1808, only 63 ship calls were recorded in the port of Liepaja. This is explained by the continental blockade, which, after the conclusion of the Tilsit Peace in 1807, was joined by the Russian Empire.

In 1814 - 1839. the maritime sector of Liepaja was going through a difficult period. 19 ships were launched from the shipyard, built mainly on orders from local merchants and fishermen. There was a great demand for the repair of local and overseas ships. It was ship repair work that provided local craftsmen with work and a good reputation in the second half of the 19th century, during the period of rapid development of the city. At this time, the development of the port continues. In 1821 a port pilot tower was built.

The next impact of the political factor was observed in 1853 - 1856. during the Crimean War. The combined fleet of Great Britain and France blocked Russian ports, including Liepaja, paralyzing the movement of ships. Shipowners and captains massively changed the "flag" of ships or sold them. Eight ships that were in the port of Liepaja became the trophy of the British fleet. At the end of the war, in 1858, a plan was developed to modernize the port. In 1861, work began, after which, in 1861, the southern and northern breakwaters were lengthened, the fairway depth was 6.4 m, and a wooden embankment was built. In 1868 Liepaja lighthouse was put into operation, which is still in operation.

An important factor in the development of the port was the construction of railways to ensure the delivery of goods. In 1869, the construction of the Liepaja-Romny railway began. In 1870, the flow of export cargo to the port significantly exceeded Liepaja's capacity. For the storage and transshipment of incoming grain, the reconstruction of logistics and transshipment facilities was required. Opening of the Liepaja-Romny railway connection in 1974, subsequent construction in the 1880s. The Zimny Port and the North and South Freight Stations, which handled up to 300 wagons per day, guaranteed high rates of cargo turnover in the port. As a result of the work carried out, the demand for the port increased: in the 1860s. the annual ship call was about 215 ships<sup>120</sup>. In 1871 - 1875. the port of Liepaja was visited by an average of 460 ships per year. Liepaja became an important export port of the Russian Empire. At the end of the 19th century, 6.7% of Russian exports (grain and other agricultural products, timber) were transshipped through the port of Liepaja.

Strengthening the social status of the city allowed to expand social support to the population. Founded in 1876, the Liepaja Navigation School opened up opportunities for local sailors to develop their professional careers. The Society of Craftsmen and Sailors, formed in 1888, provided assistance to needy sailors and social support to urban workers.

In 1892, the specialization of the port changed: the government of the Russian Empire decided to build a military port and a fortification system to protect Liepaja from land and sea attacks. The military and commercial ports were separated by a specially built pier. It was an autonomous object with its own social infrastructure and communications (a post office independent of the city). After the construction was completed, the depth of the port reached 9-10 m. The St. Nicholas Naval Cathedral was built in the military port in 1903 at the expense of the Russian Emperor Nicholas II and members of his family. The breakwaters and breakwaters function in their original form, with the exception of the South Pier, which was renovated in 1997.

The expansion of the port contributed to the entry of Liepaja into the top five largest ports of the Russian Empire (along with St. Petersburg, Odessa, Riga and Tallinn). In 1903, ship calls to the port of Liepaja amounted to 2279 ships. The list of export goods has been preserved: grain, agricultural products, timber. Import flows were significantly smaller: salt, mineral fertilizers, metal and metal products, cars, coal, cotton, and colonial goods were imported.

In 1907, the "Russian East Asian Shipping Company" began to carry out passenger transportation under the Russian flag along the Liepaja - New York - Halifax route. The line became popular. Already in 1913, 70,732 emigrants left Liepaja. In total, this year the port was visited by 1738 ships, to which / from which 1,548,119 tons of cargo were transshipped.

<sup>120</sup> Official website of the port of Liepaja. URL:https://liepaja-sez.lv/ru/port/history

In May 1915, Liepaja was occupied by German troops. During the First World War, transshipment of foreign trade cargo in the port was not carried out. The port provided military supplies, and also functioned as a fishing port, which allowed the townspeople to survive in the absence of food supplies from the interior. Civil ship calls resumed already in November 1918. During the formation of the Republic of Latvia, until the end of the global economic crisis, Russian transit was sharply reduced. In the 1920s the annual turnover fluctuated around 240 thousand tons, i.e. was 15.5% of the pre-war level. To reanimate the port in 1921, the idea of creating a free port arose. The initiator was the Liepaja Exchange Committee, which sent the project to the government of the Republic of Latvia. In 1931, in the status of a free port, Liepaja received the first goods in transit. As a result of the creation of a free port, the structure of export-import flows of the port has changed. In 1933, in terms of value, imports exceeded exports by 1.9 times; in 1938, exports already exceeded imports by 2.4 times<sup>121</sup>.

After the entry of Latvia into the USSR, the port of Liepaja became the westernmost base of the navy. During the Great Patriotic War, it was an important hub for the German troops. As a result of hostilities, the city and logistics infrastructure suffered to a greater extent, port facilities were slightly damaged. This allowed not to interrupt civil navigation. In 1946, the ship call was 207 ships, 434.6 thousand tons of cargo were transshipped.

Since 1946, fishing enterprises (collective farms) have been created in the port of Liepaja, which since 1959 have been able to acquire ownership of ships, create their own fishing fleet, enterprises for its repair and maintenance. Successful economic activities of the fishermen contributed to obtaining a new status: in 1963, the Liepaja base of the Oceanic Fishing Fleet (LBOF) was transformed into an independent economic unit with its own trawler fleet.

In the 1950s and 1960s the trading port faces frequent reorganizations. In 1951 it closes. In 1956, the work of a commercial port was resumed in a small area, but the right of entry was granted only to ships under the Soviet flag. Despite these restrictions, 1,508 thousand tons of cargo were handled in the port in 1966 (the highest figure)<sup>122</sup>. But in 1967 the trading port was finally closed. The territory and water area are transferred to the jurisdiction of the USSR Navy. For 25 years, the port did not function as a trading port. The port remains the base of the Navy of the Russian

<sup>&</sup>lt;sup>121</sup> Author's calculations based on data from the official website of the port of Liepaja URL:https://liepajasez.lv/ru/port/history

<sup>122</sup> Official website of the port of Liepaja URL:https://liepaja-sez.lv/ru/port/history

Federation until August 31, 1994. A small part of the Trade Canal is provided for civilian activities, on which the Liepaja base of the Oceanic Fishing Fleet and a fishing cooperative are located. After the collapse of the USSR, the Board of the city of Liepaja decides to restore the commercial port. In 1992, for the first time since the end of World War II, a merchant ship under the Polish flag entered the port of Liepaja. It delivered to Denmark an extract of oil meal produced at a local plant. Despite a long break, already in 1992 the port managed to attract civilian vessels: the ship call was 63 units, 100 tons of cargo were handled. Civil shipping in the 1990s was difficult due to the fact that the infrastructure of the port after the transition to civilian use was in poor technical condition. Cleaning of the water area, modernization of roads and railways, and communications networks were required. In order to speed up the reconstruction, a decision is made to lease the berths to entrepreneurs who undertake to carry out construction work with the subsequent provision of activities related to the operation of the port. The rent began to be collected after the entrepreneurs covered the costs of infrastructure modernization.

As a result of the measures taken in 1996, 1.6 million tons of cargo was handled in the port of Liepaja, mainly timber, metal, oil products, various bulk and general cargo. Most of the cargo was transported in auto trailers. For the further development of the region and the port, in 1997 the Liepaja Special Economic Zone began its activity, which took over the functions of the Liepaja Port Authority. The creation of a special economic zone was caused by the need to coordinate the development of the port, airport, industry and trade from a single center controlled by the state. The modern management model of the port of Liepaja is distinguished by its close relationship with manufacturing enterprises. Therefore, the share of local cargo, as well as other regions of Latvia and Lithuania, is noticeable in the port.

Now 43 enterprises operate on the territory of the Zone. Approximately half of them belong to the industrial sector. The other part specializes in providing port and logistics services. They provide almost 2.5 thousand jobs with wages that exceed the average for Latvia. The taxes transferred to the state budget by the residents of the Zone amount to approximately €28 million (2018). Other actors also closely interact with the port and its infrastructure, including large manufacturing companies, for example, the UPB group<sup>123</sup> generating 1.9 thousand jobs.

The Liepaja port management model currently in use was built on the basis of an analysis of the world experience in overcoming the economic depression. As a result, joint management of the

<sup>&</sup>lt;sup>123</sup> Limited Liability Company Arhitekta U.Pīlēna birojs (UPB), Latvian construction company and design bureau. Founded in 1991 Official website. URL:URL:https://www.upb.lv/en/about-us

territory was proposed, including a military base, an industrial zone port and an airport. A unified management, in which government services cooperate with the municipality of the city and entrepreneurs, turned out to be the best solution, which was reflected in the results of the sweat and the Zone. The scheme, when manufacturing enterprises are inseparable from the port and the airport, allows creating prestigious jobs, which ensures stable tax revenues to the state budget. The idea of transforming the ports of Latvia into a company with state capital, promoted by the government of Latvia, is not supported by representatives of the Zone. Thus, Uldis Seska, Chairman of the Board of the Liepaja Special Economic Zone, believes that replacing the unified management of the Zone with a company with state capital will not automatically lead to a more efficient use of port resources. According to him, "the status of an alienated public figure does not preclude the application of mechanisms of transparency, accountability and control."<sup>124</sup>

History of the port of Klaipeda<sup>125</sup> (Memel<sup>126</sup>) originates from 1252, when the Bishop of Curonian and Master of the Order of the Sword Eberhard von Zayn, with the consent of the Lithuanian prince Mindaugas<sup>127</sup>, agreed to build a fortress at the confluence of the Dange River with the Neman River, on the coast of the Baltic Sea, at the junction of three historical regions: Prussia, Samogitia and Courland. The Neman served as a natural border separating Prussia and Samogitia. According to other sources, the laying of the castle by the master of the German (Livonian) order Eberhard von Sayne and the bishop of this order, Heinrich of Courland, Count von Lutzelburg from Luxembourg, took place in 1252. Memel had a strategic position between the Prussian possessions of the Teutonic Order and the Baltic lands of the swordsmen. Therefore, next to the castle, it was supposed to equip a port for merchants from Lübeck and Bremen. Memel was incorporated into Prussia only in 1328.

Unlike other port cities of that time, the responsibilities and interests of the parties were immediately clearly stipulated. According to the concluded agreement, the order of the pope distributed secular and ecclesiastical jurisdiction, the costs of financial resources and human capital, which were borne by the parties, as well as the exact boundaries of the territories belonging to the bishop and the order. In the subsequent treaty, it was envisaged that the joining of efforts

<sup>&</sup>lt;sup>124</sup>URL:https://www.rzd-partner.ru/wate-transport/news/prodolzhaetsya-obsuzhdenie-statusa-liepayskogo-porta/ <sup>125</sup> the name of the Curonian village destroyed by the Livonian Order, meaning "flat place"

<sup>126</sup> from the German name Neman Memel or Mummel

<sup>&</sup>lt;sup>127</sup> Under this agreement, the knights received a small part of the Samogitian territory in the lower reaches of the Neman. Thus, the territory of the future Memel turned out to be in the possession of the Bishop of Courland.

would be undertaken only for the construction of the castle. The parties could carry out the construction of the city and commercial areas independently in their own interests. Coins, however, had to be minted in Memel Castle and circulated throughout the territory. The subjects of the order and the bishop could conduct free trade throughout Courland. The young city became not only a place of settlement for the colonists, but also played the role of a "gateway" to Livonia. The order granted the settlers to the flax land that previously belonged to the Curonians. The role of the main organizer of the colonization process was assigned to Lübeck. participation in the process of colonization gave a chance to raise their class status, approaching the position of the knights.

In 1328, the Livonian Order, unable to protect Memel and its environs from the Samogitians, transferred the castle and the city under the authority of the Teutonic Order in exchange for its possessions in Estonia. The crusaders of Prussia are based on the entire eastern coast of the Curonian Lagoon. In 1525, Memel passes into the possession of the Prussian principality. During the Polish-Swedish war of 1600-1629. the city is occupied by Swedish troops and held until 1635. In 1678, during the first Northern War, Memel was burnt down by the Swedes. Its recovery spanned several decades.

Commercial navigation intensified in the 15th century, when the inhabitants of Memel got the opportunity to privately own ships. In the 1590s the first merchant ships were built. Memel receives the privileges of a free trade city, including holding fairs and guild rights. Since the 16th century, the port of Memel has not been inferior to Koenigsberg in terms of the scale of trade. In 1657, the merchants of Memel received the privilege of free development of maritime trade, which contributed to the rapid development of the city as a port.

However, frequent wars at the end of the 17th-18th centuries hindered the active development of the commercial port. Since 1701, Memel has been part of the Prussian kingdom. After the Seven Years' War (1756-1763) the castle lost its military significance and was gradually abandoned. In 1757-1762. the city was controlled by Russian troops. The capture of Memel made it possible to arrange the supply of troops by sea through Riga, which greatly facilitated the conduct of military operations. Subsequently, from 1762 to 1871, the city was part of Prussia, and then, until 1919, of the German Empire.

In the second half of the 18th century, the trade in timber flourished in Memel, which was rafted along the Neman from Lithuania. Sawmills operated in the city, the products of which were exported to Europe. Memel's largest trading partners were Sweden, Denmark, England and the

Netherlands. According to the documents of 1797, the port of Klaipeda consisted of the Dange river port and the basin in the Curonian Lagoon. In 1770, 500 ships entered the port, in 1792 - more than a thousand.

The institutional and infrastructural port environment began to be created in the last quarter of the 18th century. So, in 1775 the first export exchange was established, in 1796 a lighthouse 54 feet high was built. In 1805, 1078 ships entered the port. According to the Peace of Tilsit signed in 1807, Prussia retained state sovereignty, which helped strengthen the position of the port. Since 1811, a navigator examination point has been operating in Memel. In 1829, a state navigational school was opened in Memel, which made it possible to train its own naval elite. The development of the port led to the fact that the nearest competing companies from Koenigsberg and Danzig constantly blocked the port city, the entrance to the river port was filled with stones. Therefore, until 1820, only small ships could enter the mouth.

In 1830, the first steamboat arrived at the port. The opening of a metalworking enterprise in 1840 accelerated the construction of the first steamboat at the city shipyard. In 1858, one of the most modern navigation schools in Germany was built in Memel, equipped with a meteorological station. An infrastructure approaching the port is being created: the Memel-Tilsit highway (1853) and the Wilhelm Canal<sup>128</sup> (1863-1873 rr.). In 1875, the Memel-Tilsit railway was laid, and a railway station was built. In 1892, the construction of the Memel-Kretinga railway was completed. Thus, by the end of the 19th century, the Memel port was connected by land infrastructure with the industrial zones of East Prussia and Lithuania.

At the end of the 19th century, Memel's trade and shipping fell into decay as a result of external and internal factors. The main external reason was the decline in the role of the Baltic ports in favor of deeper and more convenient ports in the North Sea. In addition, Memel suffered from the customs policy of Russia, which forced the development of its port of Liepaja. The entry of Lithuania into Russia in 1795 after the third partition of the Lithuanian-Polish state narrowed the hinterland of the border port. The entry of Prussia into the German Empire transferred the Memel region to the category of peripheral territories of the country. Although East Prussia retained some independence, the castle and port lost their military significance in the 19th century.

<sup>&</sup>lt;sup>128</sup> The length of the canal is 25.3 km, the depth is 2–3 m. It starts from the lock in the village of Lankupiai and ends in the Malku bay of the port of Klaipeda. Construction work was carried out to collect state taxes.

The German-Russian trade agreement of 1894 was signed after the implementation of the negative scenario for the development of the city and port. Internal reasons were due to the decline in the activity of the commercial structures of the city. In 1876 the last sea sailing ship was built. Sea vessels and ships were not built for almost 50 years, until the mid-1920s. In the 1880s the well-known trading companies of Memel ceased their activities. Political instability and lack of continuity in regional economic policy did not contribute to the formation of dynasties of wealthy industrialists, merchants and shipowners. Financial problems did not allow organizing the construction of large steam-powered iron sea vessels. Only at the end of the 19th century did large-scale industry emerge in Memel: the Union chemical enterprise was founded, which produced superphosphate and other fertilizers. In 1899, a plywood factory began its work, in 1900 a pulp factory, the largest enterprise in the city, was put into operation, the first power plant was put into operation, and a fishing port was being equipped. Thus, at the beginning of the 20th century, Memel was a small port city on the periphery of the German Empire.

During the First World War, the city and the port did not suffer much. For several days in March 1915, the city was occupied by the Russian army. But the German military forces transferred to this region returned the territory of Germany. In 1918, Prussia became an administrative unit of the Weimar Republic. On February 16, 1918, Lithuania was proclaimed an independent state. The redistribution of borders affected the Memel region. Under the Treaty of Versailles, at the request of Lithuania, the territory on the right bank of the Neman was separated from Germany. Formally, this separation is explained by the fact that the majority of the inhabitants, with the exception of the city of Klaipeda, were Lithuanians. 95% of the inhabitants of the region were Protestants, when the religion in Lithuania was Catholic. At the time of the end of the First World War, the region was economically more developed than Lithuania. Lithuania needed a port on the Baltic Sea to carry out foreign trade operations. As a result, the city and the port, by decision of the League of Nations, were under the collective control of the Entente countries. In 1919-1923, the city had the right to conclude trade agreements with foreign states, had its own court, flag and customs sovereignty. Most of the inhabitants of the city had German citizenship. In 1922, a regional referendum was held, as a result of which 90% of the region's population voted for the declaration of Memel, similarly to Danzig, as a "free city". However, the results of the referendum were not taken into account by the international community in the future.

The right to manage the city of France transferred by the Entente had a favorable effect on the economic development of the city and port. The number of enterprises increased, local banks appeared. Foreign capital began to flow into Klaipeda. In 1921, the international air service Danzig-Königsberg-Tilsit-Memel was opened. Shipbuilding revived: in 1922, a sea steamer with a displacement of 1,424 gross register tons (GRT) was built at the Lindenau shipyard. At the same time, however, unemployment increased. Its cause was the crisis of the city-forming industry - the woodworking industry and wood trade.

However, in 1924, the actual transfer of Memel under the sovereignty of Lithuania took place. After the transfer of Memelland to Lithuania, the city was renamed Klaipeda. The transfer of Memel to Lithuania was stipulated by the need for Lithuania to fulfill a number of requirements, including freedom of transit and use of the Memel port by Poland and the equalization of commercial rights of foreigners and residents of the autonomy. In 1923 - 1939 Klaipeda is a port of the Republic of Lithuania. On May 8, 1924, the Klaipeda Convention was signed in Paris, according to which the management of the port of Klaipeda was transferred to the port directory, which included representatives of the State of Lithuania, the Klaipeda region and the League of Nations. Under an international treaty, on January 28, 1928, Germany once again recognized the Klaipeda region as part of Lithuania.

The port of Klaipeda has acquired an economic hinterland. Period 1924-1939 is considered the heyday of the port of Klaipeda. At that time, up to 80% of the country's foreign trade was carried out through the port. New berths were built, various societies were organized that contributed to the development of maritime trade, and Lithuanian shipping appeared. The Government of Lithuania has invested 42 million litas in the development of the port of Klaipeda.<sup>129</sup>

On March 22, 1939, the Ministers of Foreign Affairs of Lithuania and Germany signed an agreement on the transfer of the Klaipeda region to Germany. After joining the city, the name Memel was returned. By order of Reich Chancellor Adolf Hitler, the port of Memel became the base of the German fleet and a naval fortress. Already in April 1939, the construction of a military airfield, fortifications and an underground fuel storage began in the city. De jure, Lithuania was left with a free trade zone and the right to free movement within the territory of the region for 99 years.

In Memel, practically, only enterprises that produced military products worked. The Lindenau shipyard, which built minesweepers during the war years, even increased its staff. Regional industry and trade fell into decline. First of all, enterprises that used imported raw

<sup>129</sup> URL:https://www.portofklaipeda.lt/istoriya-porta

materials were closed, in particular, the Union factory. During the battles for the liberation of Memel, the city and port were badly damaged.

The Potsdam Conference transferred part of East Prussia to the Soviet Union. The Memel region de facto became part of the USSR. The Lithuanian name of Klaipeda was returned to the city. In April 1948, the Klaipeda region became de jure part of the Lithuanian SSR under the Law on the Administrative-Territorial Division of Lithuania.

During the Soviet period (1945-1990) the port was repeatedly reconstructed. His specialization was determined by the decisions of the government of the USSR. At first it became the base of the Baltic fishing fleet. In 1945, the Progress container plant and a fish cannery were opened; in 1952, the Baltiya ship repair plant was built. Subsequently (in 1952-1970) a fishing port was created. For its operation, a five-kilometer fairway and berths were built, on which five fishing enterprises were located.<sup>130</sup> In 1965 they were in charge of 275 vessels.

Ancillary infrastructure was created to serve the fishing fleet: the shipbuilding plant "Baltija",<sup>131</sup> enterprises that provide fish processing and produce fishing equipment. In 1969, the Western Shipyard was built, the largest enterprise of this type in the southeastern Baltic, which later became the largest industrial enterprise in Klaipeda.

Later, as Soviet exports to the West increased, by decision of the USSR government, the old part of the port, the current Trade Port, was expanded and reconstructed. The main goods were oil products, coal (until 1980), metal, and grain. Since the mid 1950s. By 1988, the export of oil products through the port of Klaipeda increased from 4.5 million tons to 11 million tons per year. In 1988, oil products, metal and grain accounted for 86% of the port's total cargo turnover.

Changes in the geopolitical situation in the mid-1980s. contributed to the implementation of the military-strategic project in the southern part of the port of Klaipeda. In 1986, the world's largest sea crossing of railway trains Klaipeda - Mukran (Rügen Island, GDR) was built. The double-deck ferry could accommodate 103 railroad cars. In the late 1980s There were five ferries on the route.

The State Enterprise "Lithuanian Sea Ports Authority" was established in 1991 to manage the port infrastructure by merging separate commercial and fishing ports on the basis of a decree

<sup>130</sup> bases of the Baltic fishing fleet, ocean fishing fleet, refrigerated fleet, trawl fleet and fishing collective farm "Baltija"

<sup>&</sup>lt;sup>131</sup> first he specialized in the construction of medium-sized fishing trawlers, then in large refrigerator trawlers, floating docks, and fish processing vessels. In 1988, the enterprise provided over 3.7 thousand jobs

of the Government of the Republic of Lithuania and the Ministry of Transport.<sup>132</sup> In the same year, the Office of the Harbor Master of Klaipeda was established, which is not subordinate to the Port Authority.<sup>133</sup> In 1992, the port of Klaipeda was given the status of a state seaport. According to the Law of the Republic of Lithuania on Klaipeda State Seaport adopted in 1996<sup>134</sup>, land, water area, berths, hydraulic structures, navigation routes, canals and other infrastructure facilities of the port of Klaipeda are state property and cannot be privatized. These objects are managed and developed by the Port Authority on trust rights. Klaipeda belongs to the group of landlord ports. Transport and logistics companies, ship repair and shipbuilding companies, other companies involved in the port's shipping activities, having concluded a lease agreement with the Klaipeda State Sea Port Authority SE, carry out independent commercial activities in the port.

From July 1993 to December 2018, investments in the development of port infrastructure amounted to about €757 million, including about 2 billion litas<sup>135</sup> within 1993 - 2006 <sup>136</sup> Thus, 76.6% of the funds were disbursed during the period of preparation for joining the EU and the first two years of being in the integration group. In the late 1990s - early 2000s, the entrance channel 150 m wide was modernized, a cargo terminal and a terminal for servicing cruise ships were built. In the early 2010s a new cargo-passenger terminal was built. The port allows to receive vessels with a carrying capacity of 160 thousand tons, with a draft of more than 15 m and a length of more than 300 m. At present, the port area is 415 hectares, the water area is 623 hectares, and the depth of the water area is 14 m.

The port of Klaipeda is entrusted with the mission of ensuring the energy security of

Lithuania. As part of the Klaipeda regasification terminal, there is a floating unit "Independence", owned by the company "Höegh LNG" and leased in November 2014 for a period of 10 years by AB "Klaipedos Nafta".

Thus, two common factors contributed to the development and prosperity of the ports of the Baltic States: political stability and the availability of land infrastructure linking them to the vast hinterlands of Eurasia. The status of a military port, on the one hand, created favorable

<sup>&</sup>lt;sup>132</sup> In 1993, the State Enterprise Lithuanian Seaport Authority was renamed into the State Enterprise Klaipeda State Seaport Authority on the basis of a decree of the Government of the Republic of Lithuania.

<sup>&</sup>lt;sup>133</sup> The Klaipeda Harbor Master's Office was attached to the SE Klaipeda State Seaport Authority in 1993.

<sup>&</sup>lt;sup>134</sup> LIETUVOS RESPUBLIKOS KLAIPĖDOS VALSTYBINIO JŪRŲ UOSTO ĮSTATYMAS 1996 m. gegužės 16 d. Nr. I-1340 Vilnius / Law of the Republic of Lithuania "On Klaipeda State Seaport" No. I-1340 dated May 16, 1996 Vilnius URL:URL:https://rudocs.exdat.com/docs2/index-602953.html

<sup>&</sup>lt;sup>135</sup> About €580 000. Курс на 01.01.2015 г. 1 EUR=3,4528 LTL

<sup>&</sup>lt;sup>136</sup> URL:https://www.portofklaipeda.lt/uploads/Investiciju%20plakatas%202018%20rusu%20kalba.pdf

conditions for the technical modernization of the water area and coastal areas, but on the other hand, it led to the loss of partners and shippers. A generalization of the historical digression is shown in Table 1. The modern characteristics of the commercial activities of the ports of the Baltic countries will be presented in Chapter 3.

Port	Year of foundation	Year of construction of the railway to the port	Military purpose	Availability of fishing terminals	Control type	Cargo turnover (2020, mln tones)*
Tallinn	1154	1881	yes	no	landlord	21.227
Sillamäe	1928	before 1940 (narrow gauge)	no	no	landlord	9.488
Riga	V century	1850-s	no	yes	landlord	23.687
Ventspils	1263	1871	n/a	yes	landlord	12.902
Liepaja	1253	1887-1904	yes	yes	landlord as part of FEZ	6.603
Klaipeda	1252	1875	yes	yes	landlord	47.449

Table 1 - The main characteristics of the majority ports of the Baltic States.

Source: compiled by the author based on paragraph 1.2; \*national statistical services

# Land infrastructure of the Baltic States

The land infrastructure of the Baltic States includes projects of particular importance for the EU and facilities that contribute to the solution of regional and national problems (fig. 2). The projects supervised by the EU are aimed at supporting and sustainable development of land



infrastructure. Currently, the Baltic countries are united by a common European project - Rail Baltica.

Figure 2 - Land transport infrastructure of Baltic States<sup>137</sup>

Despite European financial support for individual facilities, countries solve national problems on their own, sometimes to the detriment of the interests of their neighbors. Let's consider the state of national land networks in more detail.

# Estonian land infrastructure

<sup>137</sup> Source: URL:http://www.bueker.net/trainspotting/map.php?file=maps/baltic-states/baltic-states.gif

The first railway in Estonia, Paldiski - Tallinn - Narva - Gatchina, was opened on November 5, 1870. In the same year, the railway connected St. Petersburg with Warsaw. In 1870, the Baltic Railway Society extended the route from Gatchina to Tosno, resulting in a connection with the current Oktyabrskaya Railway. As noted above, the commissioning of this road began to rapidly develop the practically ice-free port of Tallinn, where a large grain elevator for that time was built. Eesti Raudtee, a state-owned company operating since 1870, ensures the management of the railway infrastructure, its maintenance and traffic control. Eesti Raudtee serves 1214 km of railways and 60 stations.<sup>138</sup> Through three border stations: Narva, Koidula, Valga, Estonian railways are connected to the railway networks of Russia and Latvia. Eesti Raudtee provides 758 jobs.<sup>139</sup> The economic performance of Eesti Raudtee is shown in Table 2. In 2018, Estonian Railways transported 13.5 million tons of cargo, of which 9.1 million tons were transit traffic (67.4%), 0.28 million tons were exports and 1.35 million tons. The volume of container traffic reached 52.4 thousand TEU, mineral fertilizers amounted to 5.4 million tons, oil and oil products - 2.8 million tons, oil shale - 1.7 million tons.<sup>140</sup>

Table 2 - Eesti Raudtee: per	formance results	2015-2019
------------------------------	------------------	-----------

Results	2015	2016	2017	2018	2019					
Volume of local transportation, million tons	2,5	2,9	3,2	2,8	2,1					
Volume of international traffic	12,6	9,6	9,2	10,8	11,1					
Number of passengers in local communications,	5,4	5,8	6,2	6,4	7,0					
million people										
Number of passengers in international traffic, million	0,05	0,10	0,11	0,11	0,11					
people										
Financial performance										
Sales revenue, million euros	43,9	33,0	32,9	41,5	39,5					
Net profit	-6,3	-10,8	-7,6	8,6	8,9					
Equity	161,1	149,1	141,5	150,1	159,0					
Investments	13,1	15,4	14,0	26,4	31,5					
Total assets	302,7	301,4	304,2	334,1	342,6					
Profit before expenses (EBITDA)	13,8	9,8	11,9	29,3	29,7					

Source: Official website Eesti Raudtee https://www.evr.ee/ru/o-predpriyatii

<sup>138</sup> Official site Eesti Raudtee URL:URL:https://www.evr.ee/ru/o-predpriyatii

<sup>139</sup> Eesti Raudtee. In constant motion 2019

URL:URL:https://www.evr.ee/images/Files/ER2019\_kataloog\_RU.pdf

<sup>&</sup>lt;sup>140</sup> Eesti Raudtee. In constant motion 2019

URL:URL:https://www.evr.ee/images/Files/ER2019\_kataloog\_RU.pdf

Most of the rail network was built back in the 1960s. Its modernization is carried out mainly at the expense of subsidies received from the Cohesion Fund. The Fund's priorities are projects that support environmentally friendly transport facilities with low noise and CO2 emissions. Eesti Raudtee is engaged in the electrification of linear sections of the national network in order to reduce the harmful impact of railway transport on the environment. The government of the country has set the goal of providing about 14% of the energy needs of the transport sector from renewable sources by 2030, mainly through the electrification of railways (expansion of the contact network). The project is planned for the period 2020-2028.

Of the road projects, major highways Tallinn-Tartu, Tallinn-Pärnu-Ikla (Via Baltica project) and Tallinn-Narva receive European funding. Investments also touched on the construction of transport interchanges in cities and rural roads. In 2004, the EU allocated 1 billion crowns to equip road border crossings.

EU funding for the Estonian railway infrastructure is aimed at the construction of the Estonian section of the trans-Baltic narrow-gauge railway line Tallinn-Berlin (Rail Baltica project).

## Transport infrastructure of Latvia

The transport industry is the main one in the Latvian economy. In 2020, it accounted for 6.4% of the country's GDP<sup>141</sup>.Rail transportation mainly serves export-import and transit cargo flows. In 2004, they accounted for 90.54% of the freight turnover of this type of transport.<sup>142</sup> In order to improve performance indicators, SJSC Latvian Railways (Latvijas dzelzcel) was restructured. Three independent enterprises have been created dealing with the issues of freight, passenger transportation and infrastructure. The reform carried out made it possible to avoid subsidizing the Latvian Railways at the expense of freight transportation.

In 2005, the Cohesion Fund allocated 89 million euros to Latvia for the modernization of the East-West railway corridor connecting the border crossings with Russia and the Republic of Belarus and the port of Ventspils. This project helped to attract large cargo flows from the post-Soviet space to the port, which allowed it to become in the early 2010s. the largest port in Latvia. This money should be used to completely dismantle worn-out rails and replace them with new ones, as well as repair engineering structures (drains, small bridges) on sections of the road with

<sup>&</sup>lt;sup>141</sup> Author's calculations based on the information Transport in Latvia. Central Statistical Bureau of Latvia. Riga. 2021. URL:https://admin.stat.gov.lv/system/files/publication/2021-09/bt.17\_Transport Latvia. 02029 (2020) 2001 UK\_EN\_46

<sup>08/</sup>Nr\_17\_Transports\_Latvija\_2021\_%2821\_00%29\_LV\_EN.pdf <sup>142</sup> Author's calculations based on the information:

URL:https://www.transport.polpred.ru/news.html?country=85

a total length of 260 km. The implementation of the plans took 4 years. Another 1.5 million euros has been allocated by the European Union for the development of new projects for 2007-2013. The European Regional Development Fund (ERDF) finances the replacement of electric trains<sup>143</sup>.

In motor transport, the situation is reversed. 91.3% of the transportation carried out is domestic. This is primarily due to the structure of the national economy, exports, imports and attracted transit cargo. For their overland movement of transit cargo, the use of road transport seems to be irrational. Therefore, it is mainly used for domestic transportation. The national road infrastructure is seen as a catalyst for the country's economic development, and extensive road reconstruction is under way. The largest investment was made in the Via Baltica<sup>144</sup> highway. Considerable sums were spent directly on the repair of road sections Riga-Liepaja (\$5.8 million), Riga-Sigulda - Estonian border (\$2.4 million). In total, more than 600 million dollars are needed to bring all the tracks in Latvia into proper condition. Of these, \$107.4 million has already been received from the EU Cohesion Fund, and \$58.2 million. - from the Regional Development Fund.

The Latvian government experienced difficulties with the development of subsidies allocated by the European Union for the construction and reconstruction of roads due to a shortage of road construction specialists. According to the national Ministry of Transport, in the 2000s. there were 150 vacancies for civil engineers in the country. Usually 1-2 applicant enterprises took part in competitive procedures for the construction of tracks. There were cases of failed tenders, when not a single enterprise showed interest in the project. One of the ways to solve this problem was the use of private investment along with state and international sources of funding. The Latvian government also intends to grant concessions to some of the badly maintained highways. The first project was the connection Riga - Jelgava.

Latvia has an extensive network of pipelines, which, for political and economic reasons, are not fully utilized.

#### Land transport infrastructure of Lithuania

The long-term strategy for the development of transport and transit in Lithuania, adopted in 2006, provides for the creation of a modern multimodal transport system in the country, which, in terms of its technical parameters and quality of services, will correspond to the European level. By the time of Lithuania's accession to the EU, land modes of transport had already been

<sup>143</sup> IA Rosbalt. 27.1.2005.

<sup>&</sup>lt;sup>144</sup> \$15.8 million invested in the construction of a bypass road around Saulkrasti, other sections of Via Baltica were also reconstructed: Kekava-Iecava, Bauska-Grenctale and Baltezers-Ainazi.

developed, and prerequisites had been created for the creation of a multimodal system. The quantitative backlog of maritime transport was explained by the country's geographical position and long borders with neighboring countries. The organization of intermodal transport required large investments.

Lithuania, using internal and external sources, focused on the construction and reconstruction of roads, road infrastructure, the construction and renovation of border crossings, as well as the organization of high-speed traffic. For these purposes in 2004-2006. 600 million euros were received, of which 172 million euros (136 million euros from the Cohesion Fund, 36 million euros from the Regional Development Fund). In 2005, the development and modernization of the automotive sector (5 projects) received 60 million euros from the Cohesion Fund and 20 million euros from the national budget<sup>145</sup>. In 2007-2013 for the modernization of roads (1200 km) the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). In 2007–2013 the country received 2.5 billion litas (735 million euros). The modernization of roads. 1200 km were reconstructed with these funds. roads. The main attention is paid to Vilnius-Kaunas-Klaipeda expressways, Via Baltica motorways, Vilnius-Panevėžys, Panevėžys-Kaunas, Kaunas-Jonava-Ukmergė-Zarasai roads.

According to the strategic plan for the improvement of the railway infrastructure approved by the Government of Lithuania, SJSC "Lietuvos gelezinkeliai" (Lithuanian Railways) is organizing transportation<sup>146</sup>. She also deals with the issues of railway infrastructure, technical and information support of transportation. Transportation by rail through the territory of Lithuania, including transit, is regulated by the national tariff policy, which also provides for the introduction of discounts. So, in 2008, they, in particular, were provided to cargoes following from the stations of the Belarusian railway to the Kaliningrad region and to the port of Klaipeda<sup>147</sup>. The discounts were provided due to the fact that the Belarusian transit in 2007 made it possible to significantly increase the cargo turnover of the Lithuanian transport system: 10.78 million tons in total, including 6.3 million tons through the port of Klaipeda<sup>148</sup>. Until 2021, according to experts, Belarusian transit provided about 1/3 of the loading of the port of Klaipeda. Most of the cargo comes by rail.

<sup>145</sup> URL:https://www.polpred.com/country/lt/free.html?book=798&country=90&id=1719&

<sup>146</sup> URL:http://www.litrail.lt/wps/portal

<sup>&</sup>lt;sup>147</sup> Chemical fertilizers, salt, timber products, fuel oil - 10%, crude oil - 15%. Source: BIKI, 27.5.2008

<sup>148</sup> BIKI, 26.3.2008

In Lithuania, pipeline transport has been developed, linking large industrial facilities and key elements of the transport infrastructure.

#### **Civil airports of the Baltic States**

Currently, there are two international airports in Estonia (Tallinn and Tartu) and three regional ones (Kuressaare, Kärdla, Pärnu). Tartu Airport, owned by the state-owned company Tallinn Airport Ltd, has a runway of 1,799 m. Training flights from the Estonian Aviation Academy located near the airport account for up to 90% of takeoff and landing operations. The remaining 10% is carried out by Finnair, which operates regular flights to Helsinki.

The main international airport in Estonia is the Lennart Meri Tallinn International Airport. Its runway has the technical characteristics (strip length over 3047 m and hard surface) that allow to receive large airliners. This is the base airport of the national airline Nordica, an additional hub of the Latvian airline airBaltic.

Nordic Aviation Group (since March 30, 2016 "Nordica") was founded on September 25, 2015 by the decision of the Government of Estonia. Flights are carried out from November 8, 2015<sup>149</sup>. In 2016, the company operated under the "wet leasing" scheme: the Slovenian airline Adria Airways leased its aircraft along with crews. On November 19, 2016, Nordica entered into a strategic partnership with LOT Polish Airlines, which allowed it to use the Polish carrier's commercial platform, the and flight code. Part of Star Alliance. LOT Polish Airlines owns a 49% stake in Nordica. In June 2019, Nordica said key routes were being transferred to its partner LOT Polish Airlines. The company itself will focus its services on leasing operations with other airlines.

Seven civil airports have been announced in Latvia, three of which have international status (Riga, Liepaja and Ventspils). Most Latvian airports were designed as military ones. International airports have a paved runway and sufficient length (in particular, at Liepaja Airport it is 2,002 m). However, the lack of a cargo and passenger base does not allow them to constantly provide regular flights. At the same time, Riga International Airport is the largest in the Baltic States, acting as a regional hub. The expansion of the EU in May 2004 had a decisive influence on the formation of the regional hub<sup>150</sup>, as well as the arrival of discount airlines in the Baltics.

<sup>&</sup>lt;sup>149</sup> The previous Estonian national airline Estonian Air ceased operations on 11/08/2015. The reason for the termination of operations was the decision of the European Commission, which considered that the Estonian government provided the company with illegal advantages over other air carriers. Source: Estonian national airline "Estonian Air" ceased operations <u>URL:https://www.rbc.ru/business/08/11/2015/563e72a79a79470a747747ef</u> (accessed: 19.08.2022)

<sup>&</sup>lt;sup>150</sup> Accession to the EU required compliance with the aviation policies of the member countries, which, in particular, contributed to the reduction of fees for landing and taking off aircraft at the airport.

Riga Airport is the largest airport in the Baltic countries in terms of cargo and passenger traffic. The runway length of 3,200 m allows to receive almost all types of aircraft JSC "Riga International Airport" is owned by the Ministry of Transport of the Republic of Latvia. The airport operator is the airport itself (RIX GH) and the Turkish holding TAV Airports (Havas Latvia). The airport is a hub for the Latvian national airline airBaltic, as well as for the Latvian charter airline SmartLynx Airlines and the low-cost carrier Ryanair (since 2022).

AirBaltic is the largest Latvian national airline operating passenger and cargo transportation. The headquarters is located in Riga. It has four base airports in Riga, Vilnius, Tallinn and Tampere. The air fleet currently has 36 A220 aircraft, with an average age of 2.8 years as of May 2022. The largest shareholder of the airline is the Republic of Latvia. Currently, the government of Latvia owns 80.05% of airBaltic shares, the remaining 19.95% of the shares belong to Aircraft Leasing 1 SIA (Denmark), owned by Lars Tuesen.

The charter airline SmartLynx Airlines, formerly known as LatCharter, is based in Mārupe, Latvia. It operates wet lease (ACMI) charter flights to public holiday destinations, as well as special passenger charter flights.

There are four permanent airports in Lithuania: in Vilnius, Kaunas, Palanga (international) and Siauliai. The development of airports takes place within the framework of a comprehensive program for the development of the national transport system. Vilnius Airport is the largest in the country, providing 80% of passenger traffic, and the second busiest airport in the Baltic States. At the end of 2019, the airport served over 5 million people. However, it is also not suitable for receiving large civil aircraft, since the runway is 2,500 meters long.

Formed on the basis of the Vilnius OJSC Lithuanian CAA of the Soviet Aeroflot, flyLAL Lithuanian Airlines in 1991-2009. based at the airports of Vilnius and Palanga. Initially, the airline was wholly owned by the state. After privatization in 2005, the national air carrier became the property of LAL Investicijų Valdymas. In January 2009, the airline filed for bankruptcy. Currently, the airport is the base for the Lithuanian charter airlines GetJet Airlines, which operates flights to the Baltic countries on order from travel companies and provides ships on wet lease, and Avion Express, which specializes in aviation leasing of narrow-body aircraft, low-cost Ryanair and Wizz Air, as well as airBaltic . The airport operator is the state company Lithuanian Airports.

Kaunas International Airport is the second in terms of passenger traffic and the first in cargo traffic in Lithuania. Technical characteristics (runway length 3,250 m and width 45 m) allow servicing large-bodied cargo ships. The airport is under the jurisdiction of the Ministry of

Transport of the Republic of Lithuania. The Lithuanian airline Transaviabaltika, founded in 1998, is based at Kaunas International Airport. Since 2016, the company has been operating passenger flights subsidized by the Estonian government between Tallinn and the islands of Saaremaa and Hiiumaa. In addition, the company provides charter cargo transportation to European airports for UPS, TNT and DHL.

Comparative characteristics of the national transport infrastructures of the Baltic countries are given in table 3. In these countries, the infrastructure of water (especially maritime) transport has received the greatest development. Land infrastructure is less developed. Table 3 contains information on the density of land infrastructure in the Baltic States. It is low, especially when compared with Poland (0.069 km/km2 and 1.343 km/km2 of rail and road network, respectively). We also note the low degree of electrification of the railway network of the Baltic countries. In Estonia, the share of electrified roads is 14.8%, in Latvia - 11.4%, in Lithuania - 6.8%. For comparison, in Poland this figure is 61.5%. Of course, this affects the transit potential of the Baltic countries. Even with the commissioning of the Rail Baltica railway, the main transit routes will retain their routes through the seaports. ()

	Civil		Pipeline		Length of public		Length of roads (km)					als	
	airports				railways (km)****						ys	nin	
Country	Total	Bincluding	Gas pipelines (km)	Oil pipelines (oil product pipelines)	Total	electrified	Density of public railways	Total	Paved	high speed	Density of public roads (km/km2)	Length of waterwa	Civil ports and terr
Estonia	n/a	12	859*	0	900	133	0,020	16608	12926	0	0,367	320	45
Latvia	10	n/a	1097**	833**	2263	259	0,035	20061	9304	0	0,311	300	8
Lithuania	4	4	760***	105***	1807	122	0,028	21320	n/a	366	0,326	n/a	2

Table 3 - Quantitative characteristics national transport infrastructures of the Baltic States (2019)

Source:National statistical offices of Estonia, Latvia and Lithuania

\*as of 2007

\*\*for 2003

\*\*\*for 2000.

\*\*\*\*excluding completed sections of Rail Baltica

Thus, seaports form the basis of the transport infrastructure of the Baltic countries. Their successful work generates commodity flows served by national land transport arteries. At the same

time, the critical dependence of the national economy of the Baltic countries on the transport sector makes the workload of the latter dependent on transit cargo. As a result, the ports of the Baltic countries enter into contradictory relationships of simultaneous cooperation and competition with each other and with neighboring ports, primarily in the Baltic basin of Russia. The third chapter of the study will be devoted to the study of the nature of relations between the ports of the Eastern Baltic region.

#### Chapter 2. Transport infrastructure of the Baltic States in the EU regional policy

As noted above, the admission of geographically distant countries to the EU is always associated with additional costs for the reconstruction and construction of transport infrastructure facilities. This is due to two reasons: the need to bring transport facilities in line with EU standards, the emergence of new border areas in connection with the expansion of the EU borders, which are subject to a special regime of financing and technical support from the EU.

The accession of new territories is associated with the solution of a number of strategic problems. Taking into account previous experience, the European Union seeks, if not to avoid them, then at least smooth them out. First of all, there is an obvious conflict of interests between the EU and member countries of certain regions in raising funds for the construction and modernization of transport infrastructure. The Baltic countries are trying to actively attract funding from the EU for these purposes. The EU is interested in co-financing of facilities by local authorities and businesses while reducing the costs of the participating countries. An equally important problem is to "revitalize" the transport infrastructure, ensuring its congestion with passengers and cargo. In search of effective solutions, European functionaries have chosen a gradual model of liberalization of the transport system, abolishing the state monopoly and harmonizing trade between member countries. Assessing the US experience<sup>151</sup>, the EU seeks to avoid shock effects in transport deregulation.

## 2.1. The Baltic States in the EU Regional Policy

Regional issues received modest attention in the European Community until the 1970s. The main reason for this was the relative economic and social spatial homogeneity of the territory of Belgium, Germany, Italy, Luxembourg, the Netherlands and France (with the exception of southern Italy). Accordingly, the formation of a unified European transport policy remained on paper. In Western European countries, the impact of transport and its costs on the course of integration processes and vice versa is far from unambiguous. A lot of time had to be spent on the implementation of the common transport policy provided for by the EEC Treaty.

<sup>&</sup>lt;sup>151</sup> Spens K.M., Kovács G., Vellenga D.B. 2004.Transportation and Logistics Networks in the Baltic States: Keys for Succesful Economic Development and Integration into the EU P.126.

The actual regional economic policy of the Community began to take shape at the EU Summit in Paris in 1972.<sup>152</sup> The idea of developing a European regional policy was as follows: the EU is impossible without an economic and monetary union, and an economic and monetary union, in turn, is impossible without an adequate and effective regional policy. Structural and regional imbalances may affect the implementation of economic and monetary union. Economic arguments in terms of overall economic growth: regional economic imbalances will lead to higher unemployment rates; inflation will contribute to the spread and intensification of regional economic imbalances; regional economic imbalance will lead to irrational use of national infrastructure. The summit decided to establish the European Regional Development Fund (ERDF)<sup>153</sup>, which was established in 1975. At the same time, the regional focus of the activities of other funds increased - the European Social Fund (ESF)<sup>154</sup>, the European Agricultural Support and Guarantee Fund<sup>155</sup>. Through the structural funds listed above, which provide assistance in the form of subsidies, the EU regional policy is currently being implemented. In addition, to solve regional problems, it became possible to obtain preferential loans from the European Investment Bank.

The first stage of real implementation of the EU regional policy began in 1975. The problems of overcrowded and overpopulated regions in the EU were recorded in the Thompson Report. The essence of the publications was that a strong regional policy was necessary for social and environmental reasons, which were clearly identified outside geographic areas traditionally overcoming economic difficulties. The MacDougal Report (1977) aimed to strengthen the empirical and intellectual foundations of the EU's regional policy. It reiterated arguments about the imbalance that will result from closer economic integration within the EU borders and liberalization, as well as the need for major changes in the scale and structure of the EU budget. In particular, it has been argued that greater integration will increase overall welfare in the EU and,

<sup>&</sup>lt;sup>152</sup> Button K., Pentecost E. Regional Economic Performance within European Union. Edward Elgar Publishing Limited. 1999. P.30.

<sup>&</sup>lt;sup>153</sup>European Regional Development Fund (ERDF)

<sup>&</sup>lt;sup>154</sup> European Social Fund (ESF). Founded in 1960, the Fund began its regional activities in 1971. Approximately half of its funds go to help problem regions of the EU. The rest are distributed according to nonregional criteria, mainly to solve employment problems. About 75% of the Fund's funds go to the elimination of youth unemployment. Further actions of the Fund are aimed at creating equal opportunities, helping employees adapt to technological and industrial changes. http://ec.europa.eu/regional\_policy/glossary/glos3\_en.htm#esf

<sup>&</sup>lt;sup>155</sup> The European Agricultural Guidance & Guarantee Fund (EAGGF) is engaged in financing the development of crisis agricultural areas. The fund is divided into two sections. The Guarantee Section finances price support and export refunds to ensure stable prices for farmers. The Recommendations section provides subsidies for the rationalization, modernization and structural reforms of agriculture. http://ec.europa.eu/regional policy/glossary/glos3 en.htm#esf

in accordance with the Kaldor-Hicks criterion<sup>156</sup>, to maintain stability, it is necessary to ensure the movement of resources from beneficiaries to outsiders<sup>157</sup>.

In the 1980s EU regional policy did not apply active financial measures, moving, for example, from tax breaks to loans. J. Delors, former president of the EU, recommended measures that should not distort the action of market forces. He offered to help build the physical infrastructure and support local entrepreneurship through the development of local integrated business systems. Highlighting the differences between the market and non-market forces, in his opinion, will achieve optimal market management. In fact, he rejected one form of distortion in favor of another.

In subsequent years, the emerging supranational regional policy of the EU, in particular regional planning, underwent changes. The first stage ended with the implementation of two reforms - 1985. (replacement of disparate regional projects with integrated programs) and 1988. (reform of structural funds, expressed, in particular, in the creation of a new system of "program approach"<sup>158</sup> to their development). Since then, the activities of the Structural Funds have been based on three major principles: partnership between the CES, national governments and regional local authorities; subsidiarity, expressed in the fact that functions should be transferred to the level where they can be performed in the best way; complementarity of EU funding bodies to national investments.

The system of structural funds programs is represented by joint development programs and initiative programs of the EU. Joint development programs, being the main form of EU regional policy, require significant financial resources and are aimed at solving problems identified as priorities at the EU level. These programs are based on six main goals of the EU structural policy, five of which were identified back in 1987. Each separate goal is aimed at supporting and developing certain regions:

<sup>&</sup>lt;sup>156</sup>The Kaldor-Hicks criteria is a criterion according to which the transition from one state of the economic system to another increases the overall welfare if those members of society who gain from this transition are able to compensate for the loss of those whose situation deteriorates. Source: http://dic.academic.ru/dic/ncf/business/6963

<sup>&</sup>lt;sup>157</sup> For a more detailed analysis of MacDougal's report, see L. Tsoukalis, The New European Economy: An Attempt at Rethinking. SPb. Petropolis. 2001. p.310.

<sup>&</sup>lt;sup>158</sup>The officially proclaimed principles of the activity of structural funds are: territorial concentration of funds:

emphasis on funding integrated programs rather than individual projects;

cooperation with the authorities of individual countries of all territorial levels with the financial participation of the latter in the implementation of projects and programs;

transfer of management decisions to the territorial level.

structurally backward regions, the list of which is reviewed every five years (goal 1); industrially depressed regions, the list of which is reviewed every three years (goal 2); rural areas (goal 5b);

Northern (Arctic) regions with low population density (Goal 6)<sup>159</sup>;

and the solution of specific regional problems:

fight against long-term unemployment<sup>160</sup>, assistance in finding employment for young people (goal 3);

help workers adapt to the new industrial production system (goal 4);

intensify structural transformation in agriculture and fisheries (goal 5a)<sup>161</sup>.

The process of drawing up and developing joint development programs included four stages: drawing up project programs, direct development of joint development programs, program implementation, monitoring and control over the implementation of the program. If during the control of the EU authorities it turned out that the program did not meet certain requirements, then funding could be reduced up to its complete termination.

The end of the first stage of the European regional policy was marked by the statement in 1985 by the European Court of the fact that the Council did not implement the relevant provisions of the Treaty of Rome, and the member states must comply with the regulations adopted by the Community. In 1985, in response to the ruling of the European Court of Justice, the EU Commission published a communication "Toward a common EU policy in the field of transport." As a result, in 1985, the European Court of Justice ruled that the degree of implementation of the regional transport policy was due to the inaction of the Council, which led to a violation of the Treaty. Since that time, European transport policy has been developing intensively.

In December 1987, the Council of the EU adopted several decisions on air transport, called the "Luxembourg Package" (effective from 01.01.1988). At the same time, the Inland Transport Committee of the United Nations Economic Commission for Europe initiated the issue of organizing international transport corridors to ensure cooperation between European countries.

During the second and third program periods (1989-1993 and 1994-1999) about 300 longterm programs were implemented. According to the EU-15 statistics, 40% of the resources

<sup>&</sup>lt;sup>159</sup>This goal appeared in the third period (1994-1999). It is provided for by the accession agreement between Sweden and Finland and applies to regions where 0.4% of the EU population lives (regions with a population density of less than 8 people per 1 km2).

<sup>&</sup>lt;sup>160</sup>The criterion here is the number of persons over 25 years of age who are looking for a job and have been unemployed for more than 12 months.

<sup>&</sup>lt;sup>161</sup> URL:http://ec.europa.eu/regional\_policy/glossary/glos7\_en.htm#tep

provided by the structural funds for the implementation of these programs were spent on productive investments (stimulating small and medium-sized businesses, developing infrastructure (30%), education and implementing employment policies, including retraining)<sup>162</sup>. В 1993 г. были созданы структурный фонд для поддержки рыболовства (Секция руководства и финансирования в рыболовной отрасли)<sup>163</sup>, as well as the Rapprochement Fund<sup>164</sup>, which was originally focused on the development of relatively "backward" EU countries - Greece, Portugal, Spain and Ireland<sup>165</sup>. There are 13 other smaller initiatives in the EU, financed by Structural Funds, that address problems in specific areas and sectors of the economy that are considered underserved by other programmes.

It was at this time that EU sub-regional transport projects began to appear. They were aimed at solving intercountry transport problems, and also stimulated the development of transport infrastructure in the least developed or extremely demanded regions, as well as candidate countries for EU membership.

The first international conference on pan-European transport was held in Prague in October 1991. In its final declaration, it was noted that it is necessary to have accurate information about the state of transport infrastructure and continue to develop the most important transport routes for the EU, taking into account the possibilities for their improvement and modernization. Building on the results of the Prague Conference, the European Commission's DG Transport has developed guidelines for the development of pan-European transport infrastructure.

In 1992, the Maastricht Treaty on the European Union introduced two new questions in the "Transport" section. They concerned measures to improve transport safety and decision-making procedures on transport issues. Decision-making on issues of the Common Transport Policy<sup>166</sup> did not require unanimity, only a qualified majority. The results of the vote in December 2000 on the opening of the freight rail transport market by 2008 showed the far-sightedness of such a decision.

<sup>166</sup> Common Transport Policy (CTP)

<sup>&</sup>lt;sup>162</sup> Baklanova M.P. Regional planning in Japan. Vladivostok, Dalnauka, 2003, p.38.

<sup>&</sup>lt;sup>163</sup>The Guidance Section and the Financial Instrument for Fisheries (FIFG) promotes structural transformation in the fishing industry, including the modernization of the fleet and fish farming organizations. <sup>164</sup>Cohesion Fund. Not included in structural funds.

<sup>&</sup>lt;sup>165</sup>The Cohesion Fund contributes to leveling the level of development of the EU countries by stimulating the creation of transport infrastructure, as well as improving the environment in these countries (Art. 130d of the EU Treaty). The fund can finance up to 85% of the cost of projects, which is higher than the maximum level of support provided by other funds for any type of problem regions. In 1994, 51 projects were financed, Between 1993 and 1999 annual funding ranged from ECU 1.5 billion to ECU 2.6 billion, in addition to the total funding of ECU 15.1 billion. URL:http://ec.europa.eu/regional policy/glossary/glos2 en.htm#fund
The overwhelming majority of countries were in favor of a positive solution to this issue. The new section of the agreement, the section "Trans-European networks" (CT, art. 154-156), reflects the concept of Trans-European transport networks. In December 1992, the first white paper on transport was published.

On the basis of the Treaty establishing the EU, the Commission in 1994<sup>167</sup> approved the proposal for Directives for the development of trans-European transport. Directives outline the contours of an integrated multimodal transport network<sup>168</sup>, designed to unite Europe by 2010. According to the Commission, a single network will create synergies and provide consumers with a wider choice of vehicles, improving the quality of services, guaranteeing safety and ensuring environmental friendliness. The role of the Directives was reduced to fulfilling the requirements for transport infrastructure put forward by the Maastricht Treaty.

In order to create an integrated multimodal transport network in 1994 on the island of Crete, the second Pan-European Conference on Transport identified priority areas for the development of transport links. 9 pan-European transport corridors were named<sup>169</sup> (the so-called Cretan corridors). The national budgets of the EU member states, loans from international financial institutions, attracted investments were named as sources of financing for the trans-European transport network.

In December 1994 in Essen, the Christophersen Intergovernmental Group<sup>170</sup> identified 14 priority projects and 21 "forward-looking" projects with a total estimated cost of ECU 49,368 – 50,968 million<sup>171</sup>. Priority projects must meet the following requirements:

<sup>&</sup>lt;sup>167</sup>This document was amended at the beginning of 1995 to take into account the EU accession of Austria, Sweden and Finland.

<sup>&</sup>lt;sup>168</sup> Multimodal (intermodal) transportation, as an important component of the intermodal approach, makes it possible to achieve optimal use of the capabilities of individual modes of transport in order to increase the efficiency of the entire transport system. In accordance with this concept, goals and objectives are set for the transport network as a whole, and not for its individual types. The cross-modal approach refers to the simultaneous consideration of all modes of transport in case of changes in the infrastructure or the legal or economic status of any mode of transport.

<sup>&</sup>lt;sup>169</sup> There are several definitions of international transport corridors (ITCs).

UNECE Expert Group: "This is a part of a national or international transport system that provides significant international freight and passenger traffic between certain geographical areas, includes rolling stock and stationary devices of all modes of transport operating in this direction, as well as a set of technological, organizational and legal conditions for the implementation of these transportations". Source: European Transport Policy: Trends and Priorities // Transit Business Bulletin. 1998. No. 41. pp. 6–8.

Russian sources consider the ITC as a set of main communications with the appropriate arrangement of various modes of transport, functioning in a coordinated manner in a certain direction and meeting international standards. Source: Unified Transport System / ed. V.G.Galaburdy. M. Transport. 2001. p.288.

The unification of requirements for transport infrastructure and parameters of vehicles is entrusted to the international organizations of UNECE and UNESCAP. The parameters of the transport infrastructure that forms the ITC can also be determined by regional legislation, for example, the EU.

<sup>170</sup> Christophersen Group

<sup>&</sup>lt;sup>171</sup> Johnson D. Turner C. Strategy for Trans-European Networks. Palgrave MacMillan. 2007.P. 60-61.

- be an object of common interest;
- large-scale, economically in demand;
- ensure attraction of private investments;

• support the objectives of the EU: economic unity, environmental protection, be at the development stage.

The transport infrastructure facilities of the Baltic countries were not included in this list, which can be explained by their relatively small scale and, as a result, low economic efficiency, and the difficulty of attracting private investment.

The resources of structural funds served as a source of financing for these programs. During the third program period (1994-1999) 13 EU initiatives were implemented, which found expression in the adoption of more than 500 specific programs implemented in all EU countries<sup>172</sup>. The most famous initiatives are Interreg (development of border regions of two or more neighboring countries), Rechar (revival of crisis areas in the coal mining industry), Regis (accelerated diversification of ultra-peripheral territories).

In the third period, the EU provides assistance to the population and entrepreneurship in the regions through subsidies and loans. Subsidies are provided mainly by three structural funds: ERDF, ESF, management unit of the European Agricultural Guarantee and Guarantee Fund<sup>173</sup>. The sources of loans are the European Investment Bank<sup>174</sup>, New Community Toolkit<sup>175</sup>, European Coal and Steel Society<sup>176</sup> and the European Atomic Society<sup>177</sup>. Other sources may also be involved.

For investments in infrastructure projects, the combination of subsidies and loans is determined depending on the profitability of the project. For investments that are expected to generate significant returns, there are upper limits on community subsidies. These are, for example, projects in the fields of telecommunications, energy, main road and railway infrastructure, carried out in the interests of the entire community or the national interests of states. The upper limit depends on the state of the territory falling under objectives 1, 2 and 5b. Thus, investments in public infrastructure, including roads, airports, ports, shipping lines, telecommunications, training, etc., are provided through operational programs, global grants, large

<sup>172</sup> Baklanova M.P. Decree. op. P.39.

<sup>173</sup>Guidance Section of the European Agricultural and Guarantee Fund - EAGGF

<sup>&</sup>lt;sup>174</sup> European Investment Bank - EIB

<sup>175</sup>New Community Instrument - NCI

<sup>176</sup>European Cool and Steel Community - ECSC

<sup>177</sup> Euroatom

ERDF projects and loans provided by the EIB and ECSC. At the same time, investments in fisheries and aquaculture, which include the construction of shipping lanes, are not subject to structural funds under two specific EU regulations. For investments in infrastructure projects with low returns, such as inland water transport, local road and rail infrastructure, as well as non-profit projects (health, culture, etc.), upper limits other than those established by the general rules of the community within the framework of structural funds , were not determined.

During this period, the foundations for financing the EU's regional policy were laid. The redistribution of funds in this area does not face criticism from individual countries. At the same time, the transition of part of state initiatives to supranational bodies is painful. The EU Commission has the right to limit the intensity of the regional policy of individual countries, clarify the boundaries of problem areas<sup>178</sup> and so on. Article 93 of the Treaty of Rome states: "If ... the Commission decides that assistance provided directly by the state or on the basis of its resources is incompatible with the principles of the common market ... it takes a decision obliging the state to stop providing this assistance or suspend it"<sup>179</sup>. If any government disagrees with the decision of the Commission, the dispute may be resolved by the European Court of Justice. The Commission also applies to it in cases of refusal to comply with its decision.<sup>180</sup>.

The fourth period (2000-2006) was characterized by a significant adjustment of the objectives of the EU regional policy. At that time, the resources of the structural funds were distributed more concentratedly throughout the EU. The scale of the funds remained the same, but they were distributed over the territory where 35-40% of the EU population lives (in the previous

<sup>&</sup>lt;sup>178</sup> With regard to this period in the EU in the field of regional policy, the total state assistance from all sources in any of their problem areas should not exceed 75% of the total cost of the project (including assistance under the unified EU regional policy). Certain limits have been set for assistance for each of the categories of problem areas, as well as certain areas of each type. The attestation of the districts takes place in two stages: first, its position in the country is assessed, and then within the EU as a whole. The establishment of the marginal rates of assistance to the districts is carried out by a special body of the Commission - DG-4 (Directorate General for Competition Policy of the European Commission) in accordance with Article 92 (a) or Article 92 (c) of the EU Treaty. The main purpose of such regulation is to prevent violation of the principle of free competition, since national policy remains one of the few channels for providing assistance to domestic companies. The allocation of problem areas in individual EU countries is carried out according to two criteria: GRP per capita and unemployment rate. The baseline is GRP per capita below 85% and above 110% unemployment of the national average levels. Then, these criteria are refined based on the position of the country in terms of these indicators in the EU (Yuill D., Bachtler J., Wishlade F. European Regional Incentives 1997-1998. London. Bowker Saur. 1998.). The EU Commission can take its own initiative in "limiting" cases.

<sup>&</sup>lt;sup>179</sup> Cit. Quoted from: Regional Development: The Experience of Russia and the European Union / Ruk. ed. coll. and resp. ed. A.G. Granberg, M.: Economics. 2000, p. 155.

<sup>&</sup>lt;sup>180</sup> The described scheme has two exceptions. The decisions of the Commission are not binding on the EU countries in the event that emergency circumstances, political factors turn out to be more important than economic ones and require massive state intervention. The grouping countries use this opportunity infrequently, taking care of the integrity of the EU.

period, more than 50% of the population was covered by regional policy). Instead of acting six goals, only three are indicated:

Goal 1 - development and restructuring of backward regions (combines former goals 1 and 6);

Goal 2 - economic and social conversion of areas with structural problems (combines former goals 2 and 5b);

Goal 3 – Support and modernize education, training and employment policies and systems (combines former Goals 3 and 4). It applies to the entire EU territory, with the exception of the regions covered by objective 1.

In the fourth period, only four initiative programs of a regional orientation were left: Interreg (combining the efforts of border areas in the formation of a common market), Urbanization (ensuring the sustainable development of crisis settlements), Leader + (development of rural areas based on the initiatives of local authorities), Equal (transnational cooperation aimed at combating discrimination in the labor market).

It was during this period that the Baltic countries gained access to European funds. EU Structural Funds have been opened for Estonia since the country's accession to the European Union on May 1, 2004. Already in 2004, the country received 121.4 million euros for the implementation of 1,580 projects, in particular - "Support for the development of enterprises." Total in 2004-2006. The European Union has allocated 371 million euros from structural funds for the development of Estonia. Applications for financing projects in the field of education, agriculture and starting your own business were mostly satisfied<sup>181</sup>.

The insufficiently high level of Lithuania's economic development also allowed it to receive assistance from EU structural funds. For 2004-2006 Lithuania received 3,091 million litas (909.1 million euros), of which 2,198 million litas (646.4 million euros) were disbursed on time. During the specified period, 2,266 various projects were implemented, another 1,264 were unfinished<sup>182</sup>. Therefore, the European Commission of the EU in 2007 issued a warning about the unsatisfactory use of EU funds.

Despite the financing of projects for the development of agriculture and the restructuring of the economy of the new EU member states, the fourth period increased the attention of the EU to solving transport issues.

<sup>&</sup>lt;sup>181</sup> http://www.polpred.com/country/ee/free.html?book=1354&country=182

<sup>&</sup>lt;sup>182</sup>Lithuania received another 100 million litas from the European Regional Development Fund. Lithuanian courier - <u>URL:https://www.kurier.lt/litva-poluchila-eshhe-100-mln-litov-iz-evrop/</u> (accessed 15.03.2018)

During the fourth phase, in 2001, the Transport Infrastructure Directives were extended to include sea and river ports and intermodal terminals<sup>183</sup>. In the same year, a new White Paper "European transport policy up to 2010: time for decisions" was published. It defines the scope of the EU transport sector and its importance for the region's economy. It was especially noted that the transport system needs to be optimized. Therefore, much attention was paid to the construction of the trans-European transport network. The White Paper set 5 main objectives:

- As regards the construction of the trans-European transport infrastructure, the need to complete the approved projects has been established; the maximum share of the Commission's participation in financing projects has been increased to 20% of their total amount; and developed proposals for the development of motorways of the sea and improved connectivity between the candidate countries and the EU-15.
- Railway 'survival': Policy focus should be on changing the transport sector balance towards a cleaner rail sector. The Commission proposed to liberalize the rail market while making it more flexible and safer for traffic.
- Promotion of maritime and inland water transport in order to reduce the intensity of road transport.
- Technical harmonization of various modes of transport and the interaction of systems, especially container ones; development of intermodalism as an alternative to road transport.
- Establishment of an efficient system of payment for the use of transport services. Formation of the price of transportation on the basis of costs, which contributes to fair competition between individual modes of transport.

2002 marked the formation of the High Level Group (HLG), led by former Transport Commissioner Karel Van Miert. and drawn up on the principle of one representative from each EU country. It initially worked in parallel with the Christophersen Group to address two priorities: the selection of a limited number of priority sites and the study of the financial, legal and administrative circumstances for the construction of these projects. The first HLG reports contained an important conclusion: the designation of a site as a "priority project" should guarantee the concentration and coordination of financial resources from the Community and from national sources on them and serve as an indicator of the borrowing policy of the European Investment

<sup>&</sup>lt;sup>183</sup> Official Journal Directive 2001/16/EC of the European Parliament and European Council of 19 March 2001 on the interoperability of the trans-European conventional rail system, OJL 110 of 20 April 2001, pp.1-27.

Bank. It was stated that out of 14 priority Essen projects, only 3 have been completed and another 5 will be commissioned by 2010. For the rest of the projects, significant progress was expected on key issues only by 2010.

HLG prepared an overview of EU candidate countries from 2004 to 2007. The representative of the European Investment Bank was authorized to determine by the summer of 2003 a list of priority projects for the development of transport infrastructure by 2020. HLG, which initially worked in parallel with the Christophersen group, took into account and included reviews of the Directives of the latter. The HLG acknowledged the need for reviews due to increasing traffic congestion (resulting from lack of interoperability and persistent and growing bottlenecks)<sup>184</sup>, missing links and the need to incorporate countries in the forthcoming enlargement of the EU into the European transport infrastructure. In particular, HLG noted the need to support the expansion of the single market and the strengthening of economic and social cohesion.

The HLG was given two priorities:

· allocation of a limited number of priority objects,

• studying the financial, legal and administrative characteristics of the construction of these projects.

According to the HLG report, the definition of the term "priority project" should guarantee the concentration and coordination of financial resources for them from the Community and from national sources and serve as an indicator of the borrowing policy of the European Investment Bank.

Karel Van Mierthom's findings<sup>185</sup> are reflected in the revised Transport Infrastructure Directives, which came into force in 2004. The outstanding projects were included in a list of 100 new priority projects with a completion date of 2020, which HLG has divided into four lists.

List 0: Priority projects in progress. The HLG recommended that they be included in the EU budgetary financing plan up to 2010.

List 1: Priority projects with implementation before 2010 These projects are already clearly identified with high European added value. The countries involved have given clear guidance to the implementing firms on all issues with the goal of starting work by 2010. These projects were

<sup>&</sup>lt;sup>184</sup> Increasing traffic congestion arose as a result of insufficient functional compatibility of key and linear infrastructure facilities, as well as an increase in the number of "bottlenecks" due to the growth of cargo and passenger flows

<sup>&</sup>lt;sup>185</sup> High level group. Report on the Trans-European Transport Network 2003 (also known as the Van-Miert Report). URL:https://ec.europa.eu/ten/transport/revision/hlg/2003\_report\_kvm\_en.pdf

considered a priority in 2007-2020. and should be addressed in the forthcoming Transport Infrastructure Directives.

List 2: Long-term priority projects. This list includes other projects with high European added value. But in this case, there are no statements by the implementing firms designated by the countries involved that construction will begin before 2010.

List 3. Other important projects for the territorial association. This list has been compiled in order to identify projects that could contribute to economic and social integration, in particular to improve the access of new member countries to transport axes.

HLG recommended that the lists of priority projects be reviewed at least once every 10 years. To this end, it would be expedient to establish such groups by at least 2010, which will give time to prepare proposals for new Directives within the next budgetary perspective.

With regard to the second task (exploring the characteristics of projects), HLG recommended operational coordination between countries in the field of projects within the same axis. Thus, HLG anticipated the proposals made by the EU in 2005 and proposed the development of joint action on international projects.

The HLG report was published in June 2003. The new Trans-European Transport Infrastructure Directives were formally approved in April 2004<sup>186</sup>. The final list of priority sites is in fact the same as the list proposed by HLG. Even before the official accession of the Baltic States to the EU, the Rail Baltica railway project Warsaw-Riga-Tallinn-Helsinki with a total estimated cost of 2.7 billion euros (at the end of 2004) was among the priority projects.<sup>187</sup> The support of this project secured the transit role of the Baltic States in the EU.<sup>188</sup>

In November 2005, an EU document of particular importance for the development of the transport sector was adopted: "Transport networks for peace and development. Extension of the main trans-European networks towards neighboring countries and regions"<sup>189</sup>. A fundamentally new concept appears in it: "transport axis". An axis is understood as "a set of transport infrastructure facilities that ensure the transportation of goods in one direction." The document

<sup>&</sup>lt;sup>186</sup> Official Journal. Corrigendum to Decision No 884/2004/EC of the European Parliament and of the Council of 29 April 2004 amending Decision No 169/96/EC on Community guidelines for the development of the trans-European transport network // OJL 201. P. 1–55.

<sup>&</sup>lt;sup>187</sup> Commission of the European Communities (CEC) Trans-European Transport Network: TEN-T priority axes and projects. 2005. Brussels: DG Tren. Цитата по: Johnson D., Turner C. Strategy and Policy for Trans-European Networks. Palgrave MacMillan. 2007. P. 65–66.

<sup>&</sup>lt;sup>188</sup> More details in: Vroblevskaya S.A. European Regional Policy as a Factor of Foreign Economic Relations Between Russia and the Baltic States. Economics and Management. 2017. No2, .pp.12-19.

<sup>&</sup>lt;sup>189</sup> «Networks for Peace and Development. Extension of the major trans-European transport axes to the neighbouring countries and regions»

notes the successful functioning of transport corridors using the synonymous term - "multimodal route". The main reason for abandoning the use of the term "international transport corridor" was the constant lack of funding, which worsened in 2004 with the admission of new member countries whose transport infrastructure required investments on an especially large scale. Therefore, a new concept of financing mechanisms for transport and transport infrastructure was required. Particular attention was also paid to the elimination of "bottlenecks" in the transportation of goods and passengers, both in the EU and in the border regions and the solution of environmental and social issues of the functioning of the transport industry.

The implementation of the EU regional policy at the fourth stage was mainly occupied by the EU Commission, despite the existence of a special commission on regional policy in the European Parliament. Within the framework of the EU Commission, there were more than 20 general directorates, performing the functions of ministries, one of which, DG-16, is occupied exclusively with regional policy. DG-16 included subject (functional) and country structural units. She was responsible for underdeveloped, crisis industrial and sparsely populated areas. The activities of DG-16 are coordinated with other general directorates whose area of responsibility included social and agricultural issues.

During this period, the main EU funds that ensure regional development were involved in the implementation of three key goals: convergence, regional competitiveness and employment, European territorial competition. No innovations have been made in understanding the concepts of "regional competitiveness" and "territorial competition". Despite the fact that the activities of all EU financial institutions involved in regional politics have a social and political focus, they are engaged in stimulating economic activity, sometimes taking the form of direct subsidies to firms. The EU Commission categorically opposed the use of resources for consumption. They must be invested in human and material capital in order to increase productive capacity, output and income levels. Stimulating the development of problem areas that quickly get used to help and are reluctant to part with it, according to European experts, should not be accompanied by an increase in dependency.

The realization of conditions conducive to economic growth and the stimulation of factors leading to a real convergence of all member countries and regions lead to the achievement of the goal of European convergence. Most of the support was provided to the regions as part of the implementation of the goal of convergence of territories. These are regions whose GRP per inhabitant is less than 75% of the EU average. More than 80% of the funds of the European

Regional Development Fund and 69% of the funds of the European Social Fund were allocated to these regions. In addition, the Cohesion Fund (allocated at the national, not regional level) was directed mainly to support regions requiring convergence. European territorial cooperation programs<sup>190</sup> accounted for 4% of the European Regional Development Fund and 2.5% of total funding. Note that the terms of the agreement, which involve the elimination of "Differences in levels of development" and "Economic, social and territorial cohesion" imply a wide range of tasks, including not only issues of transport and other infrastructure, but also support for urban development enterprises and interregional cooperation. In the end, this support was directed to 84 regions in 17 Member States with a total population of 154 million, in which GDP per capita is less than 75% of the EU average, and on the basis of a gradual reduction of 16 more regions (16.4 million inhabitants ), where GDP per capita barely exceeds this figure due to the statistical effect of EU enlargement. 282.8 billion euros were allocated to achieve the convergence goal, which is 81.5% of the total funds allocated for regional purposes. This amount is distributed as follows: 199.3 billion euros for the least developed regions, 14 billion euros reserved for the 16 regions mentioned, and 69.5 billion euros for the Cohesion Fund, to which 15 "old" EU members can apply<sup>191</sup>.

The second economic goal of the European regional policy is aimed at strengthening competitiveness and attractiveness, as well as employment, which is carried out in two ways. First of all, development programs will help the regions to achieve economic reforms through innovation and building a society based on knowledge, entrepreneurship, environmental protection and improved accessibility. Second, more jobs will be provided by an adapted workforce and investment in human resources. In the EU-27, a total of 168 regions from 19 member countries with 314 million inhabitants are eligible to participate in these programs. Of these, 13 regions, with a population of 19 million, represent the so-called "start-up" areas. They are subject to special financial allocation mechanisms due to their former status as "Target 1" regions. €55bn, of which only €11.4bn is dedicated to launch regions, represents less than 16% of regional targets<sup>192</sup>.

The goal of European territorial cooperation is to strengthen international cooperation through joint initiatives at the regional and local levels. It is designed to ensure integrated territorial development, interregional cooperation and exchange of experience. All EU regions are involved in one of the existing 13 international areas of cooperation. The population living in the border

<sup>190</sup> European Territorial Cooperation, ETC, "Interreg"

<sup>&</sup>lt;sup>191</sup> http://ec.europa.eu/regional\_policy/policy/object/index\_en.htm

<sup>192</sup> http://ec.europa.eu/regional\_policy/policy/object/index\_en.htm

areas is 181.7 million inhabitants (37.5% of the total EU population). The 8.7 billion euros (2.5% of the total) available for this purpose are distributed as follows: 6.44 billion euros for cross-border, 1.83 billion euros for international and 445 billion euros for interregional cooperation<sup>193</sup>.

In the fifth period, 2007-2013, the results of the previous stages of regional development were taken into account, and two "cross-cutting" lessons for the future were learned. First of all, in comparison with the previous period of 2000-2006, control over the implementation of projects has been strengthened. Particular attention was paid to investing funds, implementing projects and getting results. It should be noted that at the fifth stage perestroika proceeded slowly. The effect, and only for individual projects, was obtained only in 2014-2020, at the sixth stage. The main obstacle was the cultural rejection of systematization<sup>194</sup>. The second lesson was the need for the scale of financing (11.5 billion euros, compared to 1 billion euros in the previous period) and the use of more diverse financial instruments. In 2007-2013 the legal provisions were not detailed enough. This, together with the inexperience of many implementing bodies, has led to delays in project implementation. Another challenge is the spread of financial instruments beyond enterprise support, where more than 90% of financial instrument funding was concentrated in 2007-13.

General situation for the period 2007-2013 requires the Commission to conduct an expost evaluation that will: "examine the extent to which resources are being used, the effectiveness and efficiency of the Fund's programs and the socio-economic impacts. It will be carried out for each of the goals and will aim to draw conclusions for the policy of economic and social cohesion. It will identify factors that contribute to the success or failure of operational programs and identify best practices."<sup>195</sup>

During this period, the methodological support of the promoted programs has intensified. In particular, the long-term impact of investments on regional income and GDP was shown. EU experts believe that 1 euro of investment in the programs of the Cohesion Fund in the period 2007-13. generates 2.74 euros of GDP by 2023. Thus, almost 1 trillion will be provided. euro additional GDP<sup>196</sup>. The methodology for calculating the effect takes into account funding through the EU

<sup>193</sup> http://ec.europa.eu/regional policy/policy/object/index en.htm

<sup>&</sup>lt;sup>194</sup> Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final P.5.

URL:https://www.espa.gr/elibrary/expost\_ERDF\_CF\_report\_en\_en.pdf.

<sup>&</sup>lt;sup>195</sup> Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final P.5.

URL:https://www.espa.gr/elibrary/expost ERDF CF report en en.pdf.

<sup>&</sup>lt;sup>196</sup> Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final P.3.

URL:https://www.espa.gr/elibrary/expost\_ERDF\_CF\_report\_en\_en.pdf.

budget and is the sum of direct effects (through investments) and indirect effects (through increased trade) minus the actual contribution.

The financial crisis of 2007-2008 came at the start of the planning period and created an unfavorable climate for investment and convergence. To assess the convergence of individual regions of the EU, the quantitative indicator "regional GDP per capita" is used. Other indicators are the number of firms that received financial support (in this period, 15% of small and more than a third of medium-sized firms, as well as 2% of strategic enterprises). This support to enterprises has directly led to the creation of 1 million jobs. Total for the period 2007-2013, a total of 3 million jobs were created in the EU economy. An important result of the support was helping SMEs to overcome the consequences of the crisis by providing loans, while obtaining assistance from other sources of financing was not possible. Some programs have used support from the European Regional Development Fund as a testing ground for experimental and innovative policy research and innovation. In relation to the Baltic countries, this refers to the Inno-voucher scheme in Lithuania. Support was also provided to 3,700 large enterprises that introduced new technologies. The cohesion policy has also made a significant contribution to environmental protection. In Lithuania, the share of recycled waste increased by more than 10%. In addition, in Lithuania, energy efficiency measures in 864 public buildings reduced consumption by 236 GWh per year by the end of 2014, representing a reduction of almost 3% of the country's total annual energy consumption.197.

Thematic and aggregate approaches were used to provide targeted support for projects and ensure transparency of assessments. Under the thematic approach, ten work packages assessed the impact and achievements in the thematic areas and implementation system, drawing lessons for further policy development. The aggregated approach involved collecting data on the combined performance of all funds (4 work packages), assessing the macroeconomic impact and summarizing the indicators of the thematic work packages. Thematic packages indicating the amount of funding through European funds are presented in Table. 4.

Table 4 - Expenditures of the European Regional Development Fund and the Cohesion Fund by area and working group (2014-2020)

Scope of activities of the ERDF	Work package coverage	Funding	(EUR
and the Cohesion Fund		billion)	

<sup>&</sup>lt;sup>197</sup> Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final URL:https://www.espa.gr/elibrary/expost\_ERDF\_CF\_report\_en\_en.pdf

SME, innovative business	WP 2 - SMEs, innovation WP 3 - Financial Instruments	32,3
	wi 5 - i manetar mstruments	
General enterprise support	WP 3 - Financial Instruments	21,4
	WP 4 - Large Enterprisesя	
Infrastructure "Research and	-	17,5
Technologies for Development" <sup>198</sup>		
(broadband, e-government)	-	11,3
Investment in transport	WP 5 – Transport	82,2
Investments in energy	WP 8 – Energy efficiency	11,8
Investment in the environment	WP 6 – Environment	41,9
Culture and tourism	WP 9 – Culture and tourism	12,2
Urban and social infrastructure	WP 10 – Urban infrastructure	28,8
Other areas	-	2,2
Technical assistance, capacity building	WP 12 – Delivery systems	8,4

Source:Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final. P.10-11. https://www.espa.gr/elibrary/expost\_ERDF\_CF\_report\_en\_en.pdf.

The importance of financing transport projects is obvious. 30.46% of the investments of these funds were directed to solve transport problems. Considering that 72.63% of the Cohesion Fund's funds are the contribution of the EU (22.07% - national governments, 5.30 - private sources), the European institutions in this period paid considerable attention to the development of the transport sector.<sup>199</sup> The real results of the regional policy pursued by the EU are shown in table 5.

Table 5 - Results of the implementation of transport programs co-financed by ERDF and the Cohesion Fund under the fifth stage at the end of 2014

Indicator (unit)	Value at end-2014
New highways (km)	4900

<sup>&</sup>lt;sup>198</sup> Research and Technology for Development

<sup>&</sup>lt;sup>199</sup> Author's calculations based on Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final P.9. URL:https://www.espa.gr/elibrary/expost\_ERDF\_CF\_report\_en\_en.pdf.

New highways included in TEN (km)	2400
Reconstructed roads (km)	28600
Reconstructed roads (km)	1 050
Railways included in TEN (km)	2 600
Reconstructed railways (km)	3900

Source: DG Regional and Urban Policy

The statistics refer to the end of 2014, and the final results are announced only after the official closing of the programs. As a result, the closing documents were published in 2017.

After a series of crises, EU funds were called upon to play a counter-cyclical role. The effect of the crisis on reducing public funding available for public investment has led the EU to increase co-financing rates (and therefore reduce national co-financing) for cohesion policy programs in member states where the problems were most severe. The increase was intended to help interested countries cover their share of the funding required for the implementation of the programs, which would enable them to take advantage of available EU financial support. This highlighted the role of the EU as a stabilizing factor in times of crisis. The funding provided in 2007-2013 was especially important for the regions included in the convergence program. The significance of the financial support of the European Regional Development Fund and the Cohesion Fund for the Baltic countries is shown in Table. 6. It should be noted that financing from these European funds amounted to 2.6-2.7% of national GDP, as well as more than half of public investment in Lithuania and Latvia and about 40% in Estonia. For comparison, the EU-27 averages were 0.3% and 6.5%, respectively.<sup>200</sup>

	Amount	% of total	<b>%</b>	%	nublic	% from	the
for the countries of th	e Baltic Sea	Region (BSF	R), 2007	-2013			
1	1	1	0	1			

Table 6 - S	Support from the European I	Regional Development	Fund and the	Cohesion I	Fund
for the countries o	of the Baltic Sea Region (BS	SR), 2007-2013			

	Amount of support (EUR million)	% of total fund support	% GDP	% public investment	% from the support of the BSR
EC-27	261 236		0,3	6,5	
Lithuania	5 747	2,20	2,7	52,1	6,52

<sup>&</sup>lt;sup>200</sup> More details in: Vroblevskaya S.A. European Regional Policy as a Factor of Foreign Economic Relations Between Russia and the Baltic States. Economics and Management. 2017, No2, pp.12-19.

Latvia	3 947	1,51	2,7	50,5	4,48
Poland	57 178	21,89	2,3	40,9	64,86
Estonia	3 012	1,15	2,6	39,4	3,42
Germany	16 100	6,16	0,1	2,5	18,26
Finland	977	0,37	0,1	1,7	1,11
Sweden	935	0,36	0,04	0,8	1,06
Denmark	255	0,10	0,01	0,4	0,29
BSR	88 151	33,74	0,35	8,41	

Source: Author's calculations based on Eurostat, Government statistics

Calculations have shown that a third of the financial support of the European Regional Development Fund and the Cohesion Fund in 2007-2013. allocated to the countries of the Baltic Sea region. Considering the size of Estonia, Latvia and Lithuania and the size of their economies, the assistance of these funds is very tangible for the countries themselves.

During the fifth period (2007-2013), the EU paid special attention to the Baltic Sea region within the framework of the European Territorial Cooperation projects. The Baltic Sea Region Interreg Program 2007-2013 received special funding from the EU Structural Funds. It united the principles of territorial unity, socio-economic competitiveness and sustainable management of natural resources designated by the EU for this period. The priorities of the Program are shown schematically in Table 7.

№	A priority	Purpose(s)	Key areas of support
1.	Supporting Innovation in	Strengthening the	1. creation of transnational
	the Baltic Sea Region	innovative regional	innovative structures (platforms,
		development of the BSR	networks);
			2. development of international
			infrastructure for technology
			transfer
			3. Strengthening the cooperation
			of educational structures for the
			effective dissemination of
			knowledge in the BSR.
2.	Improving internal and	1. uninterrupted	Promotion of measures in the field
	external accessibility in	transportation of passengers	of transport and ICT that increase
	the Baltic Sea Region	and goods	accessibility and sustainable socio-

Table 7 - Priorities of the Baltic Sea Region Development Program 2007-2013

		2. improvement of transport	economic development of
		and communication links	territories
		with the underdeveloped	
		territories of the region	
		3. ensuring the sustainable	
		development of transport	
		4. providing transnational	
		development zones along	
		transport corridors	
3.	Management of the	1. Ensuring effective water	1. water resources management:
	Baltic Sea as a shared	management	ecological aspect;
	resource	2. use of resources without	2.sustainable use of marine
		damaging the marine	resources: a commercial aspect
		ecosystem	3.Strengthening maritime security.
		3. preparation for global	
		climate change	
4.	Increasing the	Ensuring cooperation	1.Strengthening the capital
	competitiveness of cities	between metropolitan	regions. Big cities are seen as
	and other settlements	regions, cities and	centers of economic development
		individual territories, using	2. strategic support for the socio-
		the common potential in	economic alignment of individual
		order to increase its	territories of the BSR
		attractiveness for citizens	3. strengthening the effect of the
		and investors	development of regions and cities

Source: compiled by the author based on materials from the site eu.baltic.net.

Within the framework of this program, for successful regional integration in the EU, the "Strategy of Latvia for the development of financing from EU funds for 2007-2013" was approved. It provides for the allocation of EU regional development co-financing to the republic in the total amount of 4.53 billion euros for the development and efficient use of human resources; increase of competitiveness and production of science-intensive products.

Since 2007, a new rural development program for 2007-2013 has been launched in Lithuania. It has fundamentally changed the management of the EU's structural support for these purposes. EU funds will be channeled through the European Agricultural Fund for Rural Development (ERFRD). The Ministry of Agriculture of Lithuania has established 4 main directions for the use of ESFRS funds: increasing the competitiveness of the agricultural, food and forestry sectors (43% of the fund's funds); nature protection and landscape (40%), improving the

quality of life and ensuring the diversity of economic activities (13%) and technical assistance (4%).

The development of the Lithuanian transport sector in the fifth period depended on EU financial assistance. Most of the investments were intended for transport infrastructure projects of international importance (from the Integration Fund<sup>201</sup> or the ISPA Foundation<sup>202</sup>). National projects were financed from one of the EU structural funds - the Regional Development Fund. Local governments, state, public and municipal enterprises, as well as private entrepreneurs can receive financial assistance from the Regional Development Fund. Up to 75% of the cost of national transport projects is reimbursed from this fund.

In the sixth period (2014-2020), the regional policy was aimed at creating jobs, increasing the competitiveness of businesses, supporting economic growth, sustainable development and improving the quality of life of citizens in all regions of the EU. To achieve these goals and to meet the diverse development needs of all regions of the EU, €485 billion has been allocated for the implementation of the cohesion policy for 2014-2020 from the European Regional Policy Fund, the European Social Fund (ESF) and the Cohesion Fund, with EU budget funding will amount to 355.1 billion euros.<sup>203</sup> The objectives of the EU investment policy at this stage are being addressed in three areas:

· Smart Europe: research and innovation, digital economy, SMEs

• Sustainable Europe: low carbon economy, environmental and climate action, network infrastructures

• European integration: labor market, social inclusion and human capital

As part of the cohesion policy, 11 thematic goals have been set to support economic growth for the period 2014-2020. (Table 8).

<sup>&</sup>lt;sup>201</sup> The Fund finances large projects of international importance worth at least 10 million euros (85% of the cost of the object is covered). Assistance from the Integration Fund is subject to approval by the European Commission. From this fund, the Lithuanian transport sector can annually receive financial resources for the modernization of the Klaipeda seaport, the railway, the transport infrastructure management system, strengthening the coverage of the Vilnius-Klaipeda motorway, improving traffic conditions, building access roads to important facilities, etc.

<sup>&</sup>lt;sup>202</sup> The ISPA Fund (The Instrument for Structural Policy for pre-Accession) was established to assist EU candidate countries and states that joined this organization in 2004. Funds were received from this fund for the modernization of the Vilnius-Klaipeda, Via Baltica, signal railway systems, replacement of track electrical equipment and obsolete rails, etc.

	Thematic goal	Sources of funding from the EU
1	Strengthening scientific research, technological development and innovation	ERDF (top priority), ESF
2	Expansion of access to information and communication technologies, their use and improvement of quality	ERDF (top priority), ESF
3	Increasing the competitiveness of SMEs	ERDF (top priority), ESF
4	Supporting the transition to a low-carbon economy	ERDF (main priority), Cohesion Fund, ESF
5	Promote climate change adaptation, risk prevention and management	ERDF, Cohesion Fund
6	Preserving and protecting the environment and improving the efficiency of resource use	ERDF, Cohesion Fund
7	Promoting sustainable transport and improving the Network Cohesion Fund	ERDF, Cohesion Fund
8	Promoting sustainable and quality employment and supporting labor mobility	ERDF, ESF
9	Promoting social inclusion, combating poverty and any discrimination	ERDF, ESF
10	Investing in education, training and lifelong learning	ERDF, ESF
11	Improving the efficiency of public administration	ERDF, Cohesion Fund, ESF

Table 8 - European Cohesion Policy Goals 2014-2020 and sources of their financing

Source: compiled by the author based on: https://ec.europa.eu/regional\_policy/en/policy/how/priorities/2014-2020/

At the sixth stage, the EU continued the reform of the methodological support of regional policy initiated at the previous stage: increased attention to results, simplified and unified set of rules for funds involved in the implementation of regional policy, introduced specific preconditions that must be met for the allocation of funds. In order to strengthen the urban direction and fight for social inclusion, a minimum amount of funding has been established from the ERDF for integrated projects in cities and the ESF to support marginalized communities. Funding decisions are based on the results of ongoing economic reforms: the Commission may suspend funding to a Member State that does not comply with EU economic rules. Note that the lack of published official statistics for 2020 does not allow us to calculate the significance of support from EU regional funds for the national economy at the sixth stage.

During this period, active financing of the Baltic States by European funds continued (Table 9). EU financial support amounted to about 25% of national GDP. Due to the small

population, more tangible support was in Estonia, less tangible in Latvia, especially considering that the population of Latvia is smaller than the population of Lithuania.

Country	Total budget,	EU funding		National Funding		EU funding per capita*, €	EU funding to GDP*, %
	€min	€mln	% of total budget	€mln	% of total budget		
Estonia	6 307,5	4 855,3	76,98	1 452,2	23,02	3 720	23,29
Latvia	7 641,2	6 208,1	81,25	1 433,1	18,75	3 100	26,28
Lithuania	10 940,8	9 284, 2	84,86	1 656,6	15,14	3 170	25,38

Table 9	- Financi	ing of natic	nal programs	s in the Bal	tic States	(2014 - 2020)
14010 /		ing or meete	nai program			(=01: =0=0)

Source: https://cohesiondata.ec.europa.eu/regional\_policy/en/atlas/estonia/, https://cohesiondata.ec.europa.eu/countries/LV, https://cohesiondata.ec.europa.eu/countries/LT,

https://ec.europa.eu/eurostat/databrowser/view/nama\_10\_gdp/default/table?lang=en

\*Population in 2014

The largest share of EU financial support and the absolute size of the contribution is observed in Lithuania. Taking into account the data presented in table 10, we believe that this is due to the implementation of EU-supported projects to modernize energy systems, reduce carbon emissions in various sectors of the economy, as well as the development of projects for the processing of solid waste.

Table 10 - Proceeds from European structural and investment funds (2014-2020),%

Country	European Marine and Fisheries Fund	European Agricultural Rural Development Fund	Cohesion Fund	European Social Fund	European Regional Development Fund	Youth Employment Initiative
Estonia	2,0	20,6	24,2	11,0	42,1	-
Latvia	3,0	40,4	15,4	8,2	32,6	0,8
Lithuania	1,2	27,6	21,7	12,8	36,3	0,3

Source: https://cohesiondata.ec.europa.eu/regional\_policy/en/atlas/estonia/, https://cohesiondata.ec.europa.eu/countries/LV, https://cohesiondata.ec.europa.eu/countries/LT

Table 11 shows the areas of EU funding for the Baltic countries from ERDF, ESF, the Cohesion Fund and the Youth Employment Initiative in 2014-2020.

Table 11 - The main directions of financing of regional programs of the Baltic countries in 2014-2020 from four EU funds

			% of the	% of total
			total EU	EU funding
			funding of	for the
		Funding	the	respective
		(million	respective	item
Country	Fund	€)	country	
Estonia	Total.	3590.0	100	1.02
	including			-,
	European territorial cooperation			
	(interreg): transnational			
	cooperation	5.5	0.15	0.27
	European territorial cooperation	- ,-		•,_,
	(interreg): cross-border cooperation	49.9	1.39	0.66
	Cohesion Fund	1073 3	29.90	1.69
		1075,5	29,90	1,09
	Less developed regions	2461,2	68,56	1,35
	Youth Employment Initiative			
	(additional funding)	No data	No data	No data
Latvia	Total,	4511,8		1,28
	including			
	European territorial cooperation			
	(interreg): transnational			
	cooperation	9,3	0,21	0,45
	European territorial cooperation			
	(interreg): cross-border cooperation	84,3	1,87	1,12
	Cohesion Fund	1349,4	29,91	2,13
	Less developed regions	3039,8	67,37	1,67
	Youth Employment Initiative			
	(additional funding)	29	0,64	0,90
Lithuania	Total,	6823,1		1,94
	including			
	European territorial cooperation			
	(interreg): transnational			
	cooperation	13,9	0,20	0,67
	European territorial cooperation			
	(interreg): cross-border cooperation	99,9	1,46	1,32
	Cohesion Fund	2048,9	30,03	3,23
	Less developed regions	4628,7	67,84	2,54

Youth Employment Initiative			
(additional funding)	31,8	0,47	0,99

Source: https://cohesiondata.ec.europa.eu/2014-2020/Total-EU-Allocations-Per-MS-Transposed-2014-2020/ncu7-hucf/data, https://databank.worldbank.org/source/world-development-indicators#, author/

The data presented above show that in the case of the Baltic States, the total amount of funding for regional programs depends on the size of the national economy. Most funding is directed to solving the problems of the least developed regions and equalizing their levels of economic development.

In 2014-2020 the Baltic Sea region is still in the focus of EU interests. At this stage, special attention is paid not only to financial support, but to the creation of a favorable environment for achieving effective results. Table 12 provides an overview of the progress achieved by transnational projects within the thematic priority of the Interreg Baltic Sea Region Program 2014-2020 "Sustainable transport" and the goals "compatibility", "accessibility" and "urban mobility".

A priority	Purpose(s)	Key areas of support*
Potential for	1. implementation of smart	1. intellectual specialization
innovation	specialization strategies;	initiatives for better investment
	2.development of non-	management;
	technological инноваций.	2.access to advanced
		development tools продуктов;
		3. exchange of best practices of
		research and academic
		communities, industrial and
		government structures;
		4. development of an innovative
		model of preventive measures in
		the field of public health;
		5. development of a business
		model for the distribution of B2B
		SMEs in the local food sector
Efficient management	1.resource efficient blue	1. Rational use of organic
of natural resources	growth <sup>204</sup> ;	fertilizers to reduce nutrient
	2.renewable energy sources;	losses in the Baltic Sea Region;

Table 12 - Priorities of the Baltic Sea Region Development Program 2014-2020

<sup>204</sup> Blue Growth - A long-term strategy to support the sustainable growth of the maritime and maritime sectors, applied by the European Commission to better exploit the potential of the oceans, seas and coasts around the EU. One

	3.energy efficiency; 4.pure water	<ol> <li>Strengthening the capacity of interested SMEs;</li> <li>intersectoral cooperation in the field of sound water resources management;</li> <li>reduction of greenhouse gas emissions;</li> <li>development of national marine plans for decision-making in the field of sustainable use of marine resources;</li> </ol>
Sustainable transport	1.interoperability; 2.accessibility to remote areas; 3.Safety at sea; 4.environmentally friendly shipping; 5.urban mobility	<ol> <li>preparedness and coordination of rescue operations;</li> <li>platform of the project "Clean Shipping"</li> <li>reducing the impact of the maritime industry on the environment and increasing its competitiveness;</li> </ol>
Institutional potential for macro-regional cooperation	<ol> <li>(co-)financing of projects within the framework of the EU Strategy – start-up capital;</li> <li>coordinating the actions of stakeholders in the process of implementing the EU Strategy for the Baltic Sea Region.</li> </ol>	starting capital of projects: 1. on age management (creation of conditions tore, taking into account age, continuous education); 2. to improve the quality of diagnosis, treatment and the creation of a monitoring system for invasive pneumococcal infection in the North-West России; 3.Seeking high quality food sources rich in protein.

Source: compiled by the author from: https://interreg-baltic.eu/ongoing-projects/programme-2014-2020/ \* the most significant, according to the author, areas of support are indicated

The main achievements of the Baltic States that received EU funding in the period 2013-2020 include<sup>205</sup>:

1. Competitiveness Recommendations for the Development of Inland and River-Sea Navigation Based on a Thorough Analysis of the Situations in Lithuania. Establishment of the ELIAS

of the driving forces behind the European Green Economy to promote innovation, competitiveness and job creation, in line with the European Strategy 2020's objective of "smart, sustainable and inclusive growth". URL:https://s3platform.jrc.ec.europa.eu/blue-growth <sup>205</sup> URL:https://interreg-baltic.eu/ongoing-projects/programme-2014-2020/

inland waterway information system providing information on inland waterways in the Baltic Sea region, including vessel position, real-time water level, traffic density and flow.

- Development of a policy document for the North Sea-Baltic Sea Corridor covering Estonia, Finland, Germany, Latvia, Lithuania, Poland and Sweden, including logistics business requirements, hubs, infrastructure analysis and ICT solutions for intermodal transport.
- 3. Mitigation of risks in seaports of the Baltic Sea. Development of a risk assessment toolkit in seaports containing standards and methods for identifying, assessing and standardizing risk management in seaports (leakage of hazardous materials, fires on passenger ships in port, oil spills in ports and explosions of gases or chemicals). Creation of national/regional legal framework and communication between different rescue services and seaports. Foresight study providing a forecast for the development of transport and logistics in the Baltic Sea region by 2030. It identifies factors such as the importance of environmental aspects in doing business, technological progress, increased taxation and regulation, the prevalence of cyber threats, and a shortage of skilled labor.
- 4. Development of a program to improve the accessibility of remote rural areas, involving the transition from traditional to modern sustainable mobility planning system. Implementation of the "Transport-on-demand" (ToD) service in the Vidzeme region (Latvia) as an alternative to traditional public transport to increase mobility in remote rural areas. ToD vehicles adjust their routes based on demand rather than sticking to a fixed route or schedule.
- 5. As part of urban mobility improvement programs, preparation of a review of the experience of using automated electric vehicles (Sohjoa Baltic) in the form of a series of publications "Roadmap for automated electric shuttles in public transport" on the rules and technologies of self-driving public transport in eight countries of the Baltic Sea region. It includes hands-on piloting and user experience of six robot bus trials in Gdansk (Poland), Helsinki (Finland), Kongsberg (Norway), Tallinn (Estonia), Jelgava and Aizkraukle (Latvia).

As part of urban mobility improvement programs, preparation of a review of the experience of using automated electric vehicles (Sohjoa Baltic) in the form of a series of publications "Roadmap for automated electric shuttles in public transport" on the rules and technologies of selfdriving public transport in eight countries of the Baltic Sea region. It includes hands-on piloting and user experience of six robot bus trials in Gdansk (Poland), Helsinki (Finland), Kongsberg (Norway), Tallinn (Estonia), Jelgava and Aizkraukle (Latvia). The seventh stage of the EU regional policy is currently being implemented. Its main priorities and sources of financial support are shown in table 13.

Growth-enhancing policy goals	Sources of funding from the EU
A more competitive and intelligent Europe	ERDF (top priority), ESF, FSPP*
Greener Europe, transition to a low-carbon, carbon- neutral clean economy	ERDF (top priority), FSPP*
A more connected Europe through increased mobility	ERDF, FSPP*
A more social and inclusive Europe	ERDF, ESF Plus <sup>206</sup> , FSPP*
A Europe closer to citizens through sustainable and integrated development of all types of territories	ERDF, FSPP*
Better Collaboration Management**	Interreg
A safer and more reliable Europe**	Interreg

Table 13 - European Cohesion Policy Goals 2021-2027 and sources of their financing

Source: compiled by the author from: https://ec.europa.eu/regional policy/en/policy/how/priorities

\*The Just Transition Fund (FTTF)<sup>207</sup> provides support for certain specific purposes (article 8 of the JTF regulation). \*\* 2 additional regional policy objectives in the Interreg area of responsibility (Article 14 of the Interreg regulation)

Thus, the EU reduced the number of targets from 11 to 5 (plus two additional ones). In addition, the transition from the strategy of strengthening the institutional capacity of government bodies and stakeholders and effective public administration to capacity building and cooperation

<sup>&</sup>lt;sup>206</sup> European Social Fund Plus. ESF+ combines four funding instruments that were divided in the 2014-20 programming period: the European Social Fund (ESF), the Fund for European Aid (FEAD), the Youth Employment Initiative and the European Program for Employment and Social Innovation (European Program for Employment and Social Innovation, EaSI). The European Social Fund Plus (ESF+) is the European Union's (EU) main instrument for investing in human capital. With a budget of almost 99.3 billion euros for the period 2021-2027, ESF+ makes an important contribution to EU policies in the areas of employment, social security, education and skills, including structural reforms in these areas. URL:https://ec.europa.eu/european-social-fund-plus/en/what-esf

<sup>&</sup>lt;sup>207</sup>The Just Transition Fund (JTF) is one of the elements of the transition mechanism for the transition to climate neutrality. The Commission provides grants to Member States that have identified areas that are expected to be most adversely affected by the transition to a green economy. The Just Transition Fund supports the economic diversification and transformation of the respective territories. The period of its functioning coincides with the seventh program period of the European regional economic policy.

with partners inside and outside the Member States on the basis of horizontal interactions is announced.

Other innovations include more stringent criteria for classifying regions as relevant groups (see Table 14).

Table 14 - Regional Classification Criteria and Co-financing Requirements: A Comparative Analysis of the Sixth and Seventh Programming Periods

Region type	Program period 2014-2020	Program period 2021-2027
Most developed regions	GRP per capita over 90% of the EU-27 average Co-financing: 50%	GRP per capita over 100% of the EU-27 average Co-financing: 40% or 50%
Transition regions	GDP per capita between 75% and 90% of the EU-27 average Co-financing: 60% or 80% (excluding least developed regions)	GDP per capita between or 75% and 100% of EU-27 average Co-financing: 60% or 70% (excluding least developed regions)
Least Developed Regions	GDP per capita less than 75% of the EU-27 average Co-financing: 80% or 85% (crisis impact)	GDP per capita less than 75% of the EU-27 average Co-financing: 85%

Source: https://ec.europa.eu/regional\_policy/en/2021\_2027/#3

Thus, the EU is gradually freeing itself from the obligation to finance regional programs in more economically developed regions, while maintaining support for weaker territories at the same level. In addition, support for the least developed regions is increasing in times of crisis. The cohesion policy focuses on four types of regions: border regions and cross-border cooperation (Interreg), urban areas, remote, insular, mountainous or sparsely populated areas, and the most remote regions. The total financial resources of the cohesion policy amount to 392 billion euros. All indicators are expressed in current prices (ie, taking into account annual indexation). In table. 15. presents the financing structure of cohesion policies in Estonia, Latvia, Lithuania and the EU-27 as a whole.

Table 15 - Financing the Cohesion Policy: Overview of the Baltic States and the EU-27, 2022-2027

	For purposes	all	Investmen create job achieve goal of gro	ts to s and the owth	Technic: assistanc	al ce	EU tool		Interreg: Purpose European Territoria Cooperati	of l on	Fair Transitior Fund (JTI	ı F)
	€mln.	%	€mln .	%	€mln .	%	€mln .	%	€mln .	%	€mln .	%
EU-27	391879,0		361056,8	92	1332,1	0	1211,6	0	9041,6	2	19236,9	5
Estonia	3680,3	0,94	3268,3	89	0	-	0	-	58,1	2	353,9	10
Latvia	4804,2	1,23	4562,8	95	0	-	0	-	49,8	1	191,6	4
Lithuania	6813,3	1,74	6457,1	95	0	-	0	-	83,0	1	273,2	4

Source: https://cohesiondata.ec.europa.eu/stories/s/2021-2027-EU-allocations-available-for-programming/2w8s-ci3y/

The share of the Baltic countries in the total volume of European funding in the current period is insignificant (from 0.94% in Estonia to 1.74% in Lithuania), which is explained by the small scale of the economy. However, EU financial support is important for Estonia, Latvia and Lithuania. 89% of the funds allocated by the EU in Estonia, 95% each in Latvia and Lithuania are directed to job creation, including in the transport sector. Funds for this purpose are allocated from the ERDF, CAP+ and the Cohesion Fund.

An analysis of the EU's regional policy shows that conflicts between countries and EU authorities are based on the problem of the correlation of national and supranational rights and interests on vital issues. Since the 1990s EU regional policy is based on closer contacts with regional and local authorities<sup>208</sup>. Brussels seeks to go directly to the regions. In the 2000s a new mechanism for launching regional initiatives in the EU has been put in place. The regions got the opportunity to initiate projects that, in their opinion, can accelerate their socio-economic development. Proposals

<sup>&</sup>lt;sup>208</sup> Dunford M., Kafkalas G. Cities and Regions in the New Europe. London. Belhaven Press. 1992.

from the field are aggregated at the national level and transferred to supranational institutions. The latter conduct an examination of submitted applications, identify the most needy areas and send funding there. The formation of international regions within the EU also contributes to effective work. The creation of supranational bodies will make it possible to get away from increased interregional competition and lead to sustainable integration of regions<sup>209</sup>.

In the EU countries, a qualitatively new type of interstate production and economic relations required the reorganization of the transport system. Since the 1990s European institutions pay special attention to the formation of regional transport infrastructure in the following areas:

• development of missing links in the network;

• increasing the capacity of border transport crossings and junctions;

• changes in the ratio of modes of transport in transportation, associated with the composition of the cargo mass by type of cargo and distance of transportation;

• improving the coordination of transport operations and the development of a common transport policy.

## 2.2. Transport infrastructure of the Baltic States in the European transport infrastructure

Due to the advantages of geographical location and historical path, the transport complex of the Baltic States is a factor in the development of regional and transit foreign economic relations. The Baltic States are often seen as the "Eastern gate of the European Union". The transit attractiveness of the region is highly appreciated by representatives of business circles in many countries of the world. Therefore, it is logical to assume that the EU is interested in the development of the transport infrastructure of the Baltic countries as members of the integration group, the fundamental documents of which highlight transport as a priority issue.

The EU considers regional transport infrastructure as a factor in the development of entrepreneurial activity and the strengthening of geopolitical interests. Infrastructure determines the potential of the territory as a participant in the market and socio-political relations. N.N. Baransky noted: "The position in relation to the means of communication has to be taken into account most often, it is of great and at the same time clearly clear significance. Therefore, one

<sup>&</sup>lt;sup>209</sup> Dunford M. Winners and Losers: the New Map of Economic Inequality in the European Union // European Urban and Regional Studies. 1994. Vol. 1. P. 95–114.

should not be surprised that the term "transport position" is used instead of the term "economic and geographical position ..."<sup>210</sup>. The economic and structural features of the region's transport system determine its economic specialization.

Due to the peculiarities of the spatial organization of production, the development of the territorial transport infrastructure proceeds according to different scenarios. Transport accumulates multi-vector impact of location factors. When choosing a scenario, it should be taken into account that the infrastructure, as a subsystem of the territorial structure of the economy, carries a margin of inertia.

Unlike Western European regions saturated with transport infrastructure, where its qualitative change is associated with further modernization, in the Baltic countries, along with technical re-equipment, the spatial development of the transport network is necessary. As shown in paragraph 1.1., the existing infrastructure has historically been built around port cities and in border regions to ensure foreign trade relations.

The transport infrastructure not only ensures the operation of transport and the economy as a whole, it has a certain independence in its development. It is as if they are already imposing a further path of development from themselves, at the same time resisting attempts at any serious change. The large investments already made in infrastructure should pay for themselves. In addition, any, especially radical changes, require significant investment. Meanwhile, the slow turnover of funds invested in transport facilities does not contribute to attracting private capital and, therefore, raises the question of state intervention, and in a market economy this is associated with a number of difficulties.

In ensuring the transport accessibility of the region and the development of infrastructure, the main attention in the EU is paid to intra-regional flows. Transportation providing flows of this type guarantees constant loading of transport infrastructure facilities. At the same time, a changing competitive environment, an ever-increasing number of countries actively participating in the world economy, offer products and services of high value and low productivity, and fast delivery of goods at competitive prices. In this regard, there is an increase in transit and interregional traffic. These flows are characterized by the multivariance of delivery routes. Therefore, in this case, it is impossible to guarantee the loading of specific transport infrastructure facilities.

Separate objects of transport infrastructure cannot specialize in servicing certain resource flows. Cargoes compete for the right to use the available capacities at the international, national,

<sup>&</sup>lt;sup>210</sup> Baransky N.N. Selected works. Formation of Soviet economic geography. M. Thought. 1980. P.133.

regional and local levels. Their relative balance will differ according to the geographic location of the region. Thus, a remote peripheral region will have a greater emphasis on local and regional flows that serve the interests of local business. A large region located in the center of Europe, in addition to its own, will serve a large share of international flows. Here, the costs of flows of one type will be shifted to another. Therefore, the provision of international transport places an environmental and financial burden on a large region. Bottlenecks caused by inadequate bandwidth impose additional costs on local infrastructure users. They affect remote regions indirectly, through the difficult delivery of goods along transit routes, which leads to additional costs for their national and international flows.

In general, it can be noted that a modern quantitative assessment of the transport infrastructure should be carried out not so much on the basis of identifying the maximum permissible parameters, but rather by determining a certain corridor of acceptable values for the functioning of the system.

The Baltic States, as members of the EU since 2004, have been participating in the formation and implementation of European transport policy. Along with other member countries, they solve diverse tasks of regional integration of transport networks. The complexity of this process is explained as follows. Investments in transport infrastructure are the largest compared to other infrastructure sectors. Moreover, large-scale investments in transport infrastructure often go beyond predetermined limits. The size of investment can be overly burdensome for the public sector, especially in the case of strict budgetary discipline, and not attractive enough or too risky for the private sector. Therefore, public-private partnerships are emerging in this area.

With regard to cross-border infrastructure, the EU's possibilities are clearly regulated. Under the Maastricht Treaty, the role of the EU is limited. This means that a top-down approach to cross-border infrastructure design (ie a European initiative) is practically impossible. Rather, transport planning was and remains a national activity carried out by national authorities in accordance with national policies and priorities and limited by national boundaries. Essentially, the infrastructure in the European Union is built within national borders and basically does not take into account the international dimension. For example, the determination of the cost (expertise) of a national project will be carried out by national planning authorities in terms of costs and benefits for the country. But national infrastructure plays an important role in eliminating bottlenecks for trans-European traffic, in particular if it is a transit country. The national nature of transport planning means that there is a variety of planning operations and planning tools that make it difficult in practice to plan cross-border projects, even if there is political will and commitment to implement them. This can lead to delays and even duplication of funding.

Border crossing problems are exacerbated by sectoral inconsistencies in infrastructure. An important feature of the transport network of the Western European region is that it is a complex interweaving of networks of various modes of transport. This led to the formation of a number of large transport hubs.

The coexistence of different modes of transport in the EU, as well as in other regions of the world, is explained by interregional price differences due to the specifics of trading countries. The choice of the route of movement and the corresponding modes of transport is carried out by calculating the total costs of a participant in foreign economic activity. It takes into account transport tariffs, the volume of cargo transported, the frequency of departure, the distance and duration of transportation, the carrier's capabilities, risks and other factors. The share of raw materials in the commercial price of goods accepted for transportation is decreasing. Therefore, longer-distance transportation of cheap goods became possible. At the same time, the relocation of industrial production, its distance from the main sales markets, sharply increases the distance between the places of production and consumption. The choice of the final option, ceteris paribus, is determined by finding the least total distribution costs, in the business literature called the criterion "Least Total Distribution Costs".

The main load in Europe currently falls on roads, they are the main obstacle to European mobility. Roads also do not dominate European programs for the development of transport infrastructure. Only three out of 30 priority European programs included only roads. Their main goal is to improve communication between the periphery and the center of the EU. Another 4 projects are intermodal in nature. They are designed to facilitate the movement of passengers and goods from one vehicle to another.

European initiatives for the development of road transport seem modest, which is primarily due to the dominant position of this mode of transport. The high congestion of the network, environmental pollution, the need to allocate significant areas for road construction have led to the fact that road projects occupy a modest place on the list. However, given the advantages of road transport - flexibility, the ability to transport passengers and goods on a door-to-door basis, it is almost impossible to persuade users to abandon this type of transport. There are two main areas of EU policy in the field of road transport, which are in line with the policies pursued in other transport sectors: the construction of new infrastructure and the renewal of the existing network. Carrying out measures to guarantee the efficient and high-quality provision of consumers with road infrastructure services. They assume the existence of a single competitive European market for passenger and freight road transport and, at the same time, the formation of common markets for other modes of transport.

The construction of the trans-European road infrastructure has faced a number of challenges. The trans-European transport network implies the unification and development of international routes. Local or regional roads are not part of this plan. However, the improvement of local systems can partially solve the problem of congestion on highways, attracting vehicles that carry out transportation over short and medium distances. In addition, the construction of local roads can improve links with other modes of transport and thus reduce the burden on the road infrastructure.

In order to create a single European area for the transport of passengers and goods by road, the EU has adopted a number of measures in the following categories:

Access to the profession: any freight or passenger transport company registered in the EU countries has the right to offer services under the same conditions as local firms.

Freedom of movement: any operator can freely carry out commercial freight and passenger transport in all EU countries, provided that he has a license issued by the competent authority of the country where the operator is registered and renewed every five years.

Social and safety aspects: In order to prevent unfair competition in an open market environment where operators skimp on safety, common standards should be established regarding driving time and rest periods for drivers.

Taxes and fees for the use of infrastructure: taxes on buses and trucks, taxes on fuel and fees for the use of infrastructure, collected by the relevant services on highways, etc. constitute a complex set of complex contributions across the EU, which leads to reduced transparency and may reduce competition. A key objective of the White Paper on Transport is to develop a system to fairly reflect infrastructure costs.

The road infrastructure demonstrates that the process of infrastructure development is not only physical construction, but also agreements on common standards and liberalization of services, including on access to services. Thus, the assessment of infrastructure extends beyond physical provision to measures to improve the efficiency of its use. <u>Railway infrastructure</u> is rightly placed at the center of the EU transport initiative. Railway projects accounted for 69% of the total investment in the original Infrastructure Directives<sup>211</sup>. 8 out of 14 Essen projects included the development of a railway connection. Of the 30 projects proposed by HLG, led by Karel Van Miert, 18 were broadly focused on the development of a trans-European rail network. Subsequently, three of them were divided into road and rail components, others became intermodal with a rail shoulder. It is planned that by 2020 the transnational railway network will have 94,000 km, of which 20,000 will be allowed speeds of at least 200 km/h<sup>212</sup>. Particular attention should be paid to road transport hubs in order to increase the attractiveness of rail transport through the concept of intermodalism.

Using the full potential of rail transport will reduce congestion on European roads, reduce air pollution from exhaust gases (carbon dioxide), which is the lowest per passenger-kilometer of transport by rail compared to others. Rail infrastructure also contributes to a more sustainable use of land compared to road infrastructure. All this leads to the establishment of the necessary balance between rail, road and inland water transport, as well as, if possible, feeder shipping.

The introduction of high-speed rail is not possible within the traditional infrastructure. To solve this problem, free market access and interoperability are needed. However, for a long time the railway sector was not considered among the priority areas of the regional transport policy. This state of affairs remained until the end of the 1980s. of the 20th century, when the Community for European Railways, together with the association of European railway operators, presented plans for a European railway network<sup>213</sup>. The European Commission has developed its first comprehensive railway policy document<sup>214</sup>. The directive developed from it came into force on January 1, 1993. This attempt to open up the railway market seemed significant at the time. But in the long term, it could hardly change the established status quo. With its demands for a change in the status of infrastructure, it laid the foundation for future initiatives.

For a long time, attempts to liberalize the railway infrastructure failed. In 2000, for example, the Commission estimated government subsidies for rail infrastructure at €25 billion.

<sup>&</sup>lt;sup>211</sup> Commission of European Communities (CEC) Amended Proposal for a European Parliament and Council Decision on Community guidelines for the development of trans-European transport network, COM (95) 48.

<sup>&</sup>lt;sup>212</sup> Commission of European Communities (CEC) Trans-European Transport Network: TEN-T priority axes and projects. 2005. Brussels: DG Tren.

<sup>&</sup>lt;sup>213</sup> Community of European Railways (CER) Proposals for a European High-Speed Network, Brussels: CER. 1989

<sup>&</sup>lt;sup>214</sup> Official Journal Council Directive of 29 July 1991 on the development of the Community's Railways (91/440/EC), OJL 237 of 24 August 1991, pp. 25-8

Compensation of public sector liabilities cost another 10 billion euros<sup>215</sup>. With this amount of financial support needed, liberalization would mean the collapse of the industry.

In 1998, the Commission adopted three proposals for the development of railway infrastructure (the so-called "first railway package" or "rail infrastructure package"). In effect, this package opened up the international freight transport market to competition in large parts of the EU. This made it possible to provide transparent access to the infrastructure. These Directives entered into force on 15 March 2003.

In 2002, the Commission put forward a second rail package aimed at creating an integrated rail space. The package contained five proposals aimed at improving transport safety, interoperability and opening up the national freight transport market, including cabotage. In addition, he envisaged the creation of a European Railway Agency, the main issues of which would be the safety and interoperability of transportation. The second package came into effect in April 2004.

In 2004, the Commission thought about the advisability of developing a third package, including 4 legislative proposals and a working paper on opening the international passenger transportation market by 2010. In addition, the document planned to consider quality conditions in contracts for rail freight transportation, certification of driver qualifications locomotives.

The issue of interoperability was introduced by the Maastricht Treaty. Directive 96/48/EC articulates the concept of high-speed rail infrastructure and defines it as "the ability of the trans-European high-speed rail system to carry out the safe and uninterrupted movement of high-speed trains that achieve a particular level of performance. This ability relies on all administrative, legal, technical and operational conditions that must be met to meet the necessary needs. Interoperability specifications are presented by big barriers in the rail sector, including rail gauge, electric current, maximum axle load of wagons and locomotives, traffic control system, personnel requirements.

To date, the liberalization of the European rail transport market has been carried out. Now the main focus is on increasing the interoperability of its individual segments. Without this, it is impossible to create a single European railway network. The problems of the development of material infrastructure are being solved both by improving the system of payment for the use of infrastructure facilities and by developing new financial initiatives.

<sup>&</sup>lt;sup>215</sup> Vinois J.-A. Creation of a European railway area against the background of the White Paper on European Transport Policy. 2002. URL: http://europa.eu.int/comm/transport/rail/overview/doc/ri-5jav-en.pdf.

In 2004, <u>maritime transport</u> accounted for more than 70% of EU-25 foreign trade and about 20% of intra-regional trade<sup>216</sup>. Maritime transport, like inland water transport, is the most energy efficient and least environmentally friendly.

It is sea transport that provides cheap delivery of goods. Hence, a key role in modern transport infrastructure belongs to seaports, which now represent not only transport hubs, but also centers for the distribution and industrial processing of goods, forming a port community (the concept of ports of the 3rd generation).

Seaports occupy a special place in Western Europe. Thanks to the wide estuaries of canalized rivers, seaports have penetrated hundreds of kilometers deep into the European continent and, in their connections with the hinterland, rely on powerful river arteries interconnected by a system of canals. Thus, at many points on the coast, the combination of sea and river transport creates a single water transport system, elongated in the meridian direction.

The seaports of Western Europe are the sea gates not only for their countries, but also have international significance. They are characterized by a constant desire to expand their sphere of attraction, to improve and strengthen ties with the hinterland.

Despite its potential as an alternative to land transport corridors, transport policy in general and the Infrastructure Development Initiative in particular do not yet provide financial support for this mode of transport. Moreover, none of the Christophersen Group's projects is related to shipping or ports.

One of the reasons for the absence of the maritime sector in the Initiatives is the high degree of competition that has existed between ports for a long time. Ports have developed under the influence of different traditions within the EU, but competition still acts as an important costbenefit and efficiency factor and is more intense in this mode of transport than in others. Therefore, EU intervention in the promotion of individual ports as key nodes of European transport infrastructure can destroy this competition and undermine the basic principles of infrastructure policy and European single market policy. Policies for other components of the maritime sector - short haul shipping - were more active in the 1990s. 20th century In the original single European market campaign, short distance maritime transport, like other modes of transport, was heavily protected, especially in southern Europe. However, as in other transport sectors, the most pronounced restrictions were lifted in the 1990s.

<sup>&</sup>lt;sup>216</sup> Commission of the European Communities (CEC) Energy and Transport in Figures – 2005. - accessed May 2005. URL: http://ec.europa.eu/dgs/energy\_transport/figures/pocketbook/doc/2005/etif\_2005\_transport\_en.pdf

At present, attitudes towards the maritime sector have changed significantly compared to the 1990s. It took center stage in European transport projects. Drivers for increasing attention to maritime transport include:

environmental interests. Carriage of goods by sea is more fuel efficient and free from congestion of vehicles compared to other modes of transport.

Recognition of the untapped potential of maritime transport and the prospects for its development. The quantitative growth of goods transported by sea at present has reached the level of road transport in the 1990s. Now 41% of goods are transported within the EU by sea, 45% by road<sup>217</sup>.

Need for intermodalism: Roads have great potential for door-to-door services. The combination of sea and road components in such transport will facilitate the emergence of intermodal supply chains, in which maritime transport plays a key role.

In 2001, the Transport White Paper first expressed the change in official attitude by introducing the concept of "sea highways"<sup>218</sup>. The Commission has defined Sea Highways as "regular, high-potential ferry routes between key EU ports"<sup>219</sup>. In particular, initiatives to establish new regular sea routes that will have to attract large volumes of cargo will lead to the concentration of traffic in certain ports and regions, contributing to the growth of intermodalism. In 2006, the approval of some offshore highways passed at the highest level. Four sea corridors, or "freeways", were included among the 30 priority projects:

• The Baltic Sea Corridor, which connects the Baltic Sea Member States of the EU with the EU countries of Central and Western Europe.

• Western European motorway connecting the Iberian Peninsula through the Atlantic arc with the ports of the Irish and North Seas.

• Southwest European Corridor aimed at improving connectivity in the western Mediterranean, in particular Spain, France, Italy and Malta.

• Southeast European Corridor linking the Adriatic and Ionian Seas with the eastern Mediterranean.

The implementation of sea highway projects provides for two development paths. The first is to improve the infrastructure, not only the port itself, but also the one that will allow transshipment

<sup>&</sup>lt;sup>217</sup> Johnson D., Turner C. Strategy and Policy for Trans-European Networks. Palgrave MacMillan. 2007. P. 81.

<sup>&</sup>lt;sup>218</sup> Commission of European Communities (CEC) White Paper – European Transport Policy for 2010: time to decide, COM (2001) 370.

<sup>&</sup>lt;sup>219</sup> Commission of the European Communities (CEC) Trans-European Transport Network: TEN-T priority axes and projects. 2005. Brussels: DG Tren.

of goods from sea transport to land or inland waterways. The second is the development of related services that facilitate cargo transportation: e-logistics management systems, security, security, administrative and customs procedures, icebreaking services and deepening of the through channel (dredging works). These projects are designed to reduce barriers to the development of maritime transport for a short distance<sup>220</sup>, identified by the Commission as impediments to the further development of the sector<sup>221</sup> and require the involvement of all stakeholders. For the real functioning of offshore highways, key complex decisions must be made. In particular, maritime lines that are aspiring to become maritime highways should be assessed from the point of view of the possible attraction of commodity flows by analyzing the demand for regular and private freight services. The port selection process raises very sensitive issues that affect local, regional and national politics (in the latter case, when the issue concerns the choice between two ports or a national border). The preference of one port over another is likely to redirect traffic flows from one port to another and affect the economic development patterns of the region. The designation of ports within the freeways represents a direct intervention in the market and will change the competitive forces within the region (the main reason why ports were not included in the TEN programs). The determination of individual motorways must therefore be based on a pure criterion and carried out according to a clear and transparent process. It is likely that ports will fight furiously for the right to become an element of the motorway. The final choice will be the result of lengthy political negotiations. It may happen that the choice will be made between ports located in different countries, as countries will presumably lobby to promote their ports.

The concept of offshore highways is to break down barriers between individual modes of transport and make better use of existing transport resources. This does not necessarily require large investments. Here we are talking more about using a variety of investors. As is the case with other TEN initiatives, the projects involve PPPs that require partners to work collaboratively to improve key ports where value chains will be integrated. services that are expected to attract investment within and outside the freeways.

<sup>&</sup>lt;sup>220</sup> They include outdated ideas about maritime transport; the complexity of administrative procedures, including support for the passage of cargo through the port; lack of an effective element of sea transportation: door-to-door delivery; the need to improve and reduce the cost of port services, such as pilotage, towing, transshipment and passenger services; as well as questions specific to each country. In 2001, the Commission proposed a directive on access to port services in order to increase their efficiency and reduce their cost, but due to opposition in the European Parliament, this initiative failed.

<sup>&</sup>lt;sup>221</sup> Commission of the European Communities (CEC) Commission Staff Working Paper: Trans-European Transport Network – Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on Implementation of Guidelines for the Period 1998 -2001, SEC (2004) 220 0f 19 February 2004.

<u>Airports</u> play an important role as hubs for European transport infrastructure. However, despite the high potential of the leading European airports and the ongoing fragmentation of European airspace, they occupy an insignificant place in the list of priority projects for trans-European transport infrastructure. Only 2 out of 30 priority axes and projects directly concern the airports of Lisbon and Malpensa (Milan).

Although the EU generally recognizes the importance of civil aviation in the development of European transport networks and partly emphasizes the importance of airports in the development of intermodalism and transport hubs that support regional logistics networks, financial support for this type of infrastructure is not considered by the EU as a primary goal of EU action. One of the reasons for the exclusion of airports from infrastructure initiatives is that experts believe that the development of airports is primarily a matter for private investors. The European Parliament initially opposed the inclusion of Malpensa Airport in the list of priority projects. Moreover, there is an argument, along the lines of seaports, that the designation of specific airports as Community airports may lead to a change in the balance of competitive forces.

The organization and configuration of the European transport system is influenced by many factors at various levels. Its integration and efficiency, in turn, has important implications for organizing European business and maintaining a high level of competitiveness. European transport has changed significantly in the last 20 years. And this was a response not only to increased cargo and passenger traffic, but also to changes in the business environment. The transformation of the European transport and logistics industries has been reflected in the application of a flexible policy of change, the development of infrastructure and new commercial conditions for interaction between stakeholders. The process of change in the transport industry is constantly ongoing. This concerns issues of regulation, technologies and traffic control systems.

The evolution of European transport infrastructure is driven by three factors. Firstly, the creation of a single market, the reduction and elimination of barriers and, as a result, the growth of intra-regional transportation required an increase in transport capacity. The single market also led to a restructuring of warehousing, distribution and logistics. Second, the 2004 enlargement of the EU led to a sharp expansion of markets and the location of enterprises in new member countries in order to reduce costs. Thirdly, globalization contributes not only to an increase in commodity flows, but also to the strengthening of supply chains between countries, regions and continents.
In order to comply with the ongoing regional policy and corporate interests, the transport sector must determine the list of its interested groups of persons, which has recently changed. The main actors are:

- The EU, ensuring that conditions are created under which international transport infrastructure and services can function;
- Nation states that continue to take responsibility for the construction of transport infrastructure, although to a lesser extent than before. Governments understand the importance of transport in improving public welfare, so they will continue to control transport, while maintaining strategic interests in its development;
- regional and local authorities considering transport as the basis for achieving the development goals of the region;
- owners and operators of transport infrastructure;
- transport and logistics companies;
- buyers and citizens.

The sectoral composition of the transport infrastructure corresponds to the production and political and social needs of the region. There is a constant increase in the competitiveness of various modes of transport, an increase in the potential for their interchangeability, and the development of intermodal communications. The greatest competition in the EU is subject to continental modes of transport - road, rail, river and pipeline, especially when they ensure the delivery of goods to seaports. Market liberalization only intensifies competition. The competitiveness of the transport infrastructure, as well as the transport system as a whole, is influenced by factors such as accuracy, reliability, compactness, security, access to information systems on any segment of the transport network, flexibility and responsibility of transport services, optimization of delivery time, frequency of departures, often pushing secondary to the role of production costs.

Of course, the considerations outlined above apply to a greater extent to the Baltic Sea region. However, the peculiarities of the geographical location, economic development, as well as the presence of two countries that are not members of the EU, have a significant impact on the formation of its transport infrastructure.

The report on the implementation of the directives for the period 1998-2001.<sup>222</sup> marked "solid progress" although much remains to be done. One positive characteristic of this period was noted - an increase in the share of investments going to the railway sector compared to the road sector.

Thus, by the time the Baltic States joined the EU, the member countries not only created a technically modern transport infrastructure, but also regulated the basic principles and mechanisms of its functioning. The candidate countries for accession in 2004 were given tasks aimed at bringing the transport sector in line with the requirements of the European Union. Among these tasks were the technical parameters (in absolute and relative terms) of the nodal and linear transport infrastructure, for example, the share of paved roads, the qualifications of those employed in the transport industry, the digitalization of the transport sector, etc.

By the beginning of the 2020s the transport infrastructure of Estonia, Latvia and Lithuania turned out to be fairly well integrated into the European network. At the same time, the historically formed routes of cargo transportation have mostly been preserved, which, first of all, proves the stability and intensity of commodity flows in the Eurasian space. Seaports remain the backbone of national transport networks. They are connected by land roads and railways with their hinterlands and sea routes by European ports-hubs.

The intensity of shipping in the Baltic Sea, the introduction of strict environmental requirements for ships plying between EU ports, the desire of cargo owners to reduce the number of cargo transshipments led to the search for alternative routes for the transportation of goods in European and Eurasian directions. To solve these strategic and geopolitical tasks, the idea of building a new European railway corridor arose. It was the large-scale Rail Baltica project, which is designed to improve communication between Eastern Europe and the "old" EU member states. This double-track electrified railway line with European gauge (1435 mm) will connect Tallinn, Riga, Kaunas (with a branch to Vilnius), Warsaw and Berlin. The maximum design speed for passenger traffic is 249 km/h, for freight traffic - 120 km/h. Traffic control will be carried out via a two-way digital radio channel GSM-R. The route includes seven railway stations: Tallinn, Pärnu, Riga-Central, Riga-Airport, Panevezys, Kaunas, Vilnius and three multimodal cargo hubs in

<sup>&</sup>lt;sup>222</sup> Commission of the European Communities (CEC) Commission Staff Working Paper: Trans-European Transport Network – Report from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of Regions on Implementation of Guidelines for the Period 1998-2001, SEC (2004) 220 0f 19 February 2004

Muuga, Salaspils and Kaunas. The total length of the Baltic route is 870 km, of which 213 km in Estonia, 265 km in Latvia, and 392 km in Lithuania.

The idea of the project arose during the first pan-European transport conferences in Prague (1991), Crete (1994) and Helsinki (1997), when discussing pan-European transport corridors. Already in 2001 in Pärnu, the Ministers of Transport of the Baltic States signed an agreement on cooperation and the beginning of preparatory work on the corridor. In 2004, the Rail Baltica project was included in the list of corridors of the European transport network TEN-T as the North Sea-Baltic Sea corridor, connecting Rotterdam with the capitals of the Baltic countries.

The scope of the Rail Baltica project and its goal of integrating the Baltic States into the European rail network require close cooperation between many parties. In order to coordinate the overall project and achieve sustainable financing, the company RB Rail AS, registered in Riga, was established. Its successful applications for funding from the EU Connecting Europe Fund (CEF) have contributed to the progress of the Rail Baltica project.

The cost of the project was initially estimated at  $\notin 5.8$  billion, which does not include the purchase and operation of rolling stock, the purchase of land for the construction of the route. The project is financed with the participation of Connecting Europe Facility (CEF) funds. By 2022, six grant agreements were signed with a total value of more than  $\notin 1$  billion with the maximum possible share of co-financing from the EU - 85% (see Table 16). The cost of the Estonian part of the project is  $\notin 1$  billion, the Polish part is  $\notin 0.8$  billion, of which  $\notin 0.668$  billion is from CEF, the Lithuanian part is  $\notin 2.088$  billion.<sup>223</sup>

№ grant agreement	date of signing	General allowable expenses, €	CEF co- financing, €	Co-financing of national governments, €
2014 Action INEA/CEF/Tran/M2014/1045990	24.11.2015	536 720 094	442 230 615	94 489 479
2015 Action INEA/CEF/Tran/M2015/1129482	18.11.2016	153 168 872	130 193 541	22 975 331
2016 Action INEA/CEF/Tran/M2016/1360716	13.06.2018	129 966 867	110 471 838	19 495 029

	Table 16 -	Grant support	for the project	t Rail Baltica E0	С (2015-2021 гг.)
--	------------	---------------	-----------------	-------------------	-------------------

<sup>223</sup> Rail Baltica Global Project Cost Benefit Analysis Final Report. Ernst & Young. 2017. P.133

2019 Action S INEA/CEF/Tran/M2019/2098304	16.11.2020	86 145 749	73 223 887	12 921 862
2019 Action W INEA/CEF/Tran/M2019/2098073	16.11.2020	128 119 171	108 901 296	19 217 875
2020 Action INEA/CEF/Tran/M2020/2429001	19.10.2021	19 645 555	16 699 572	2 946 983
Total		1 053 767 308	881 720 749	172 046 559

Source: JSC RB Rail. Annual Report for the year ending 31.12.2021. Riga. 2022. URL: https://www.railbaltica.org/wp-content/uploads/2022/05/RB-rail-AS-Annual-report-2021.pdf

As a result of the active work of RB Rail, an additional 19.7 million euros were received from CEF and the governments of the Baltic States. Within the framework of the EU Multiannual Financial Framework Period 2014-2020, the Baltic governments and RB Rail AS have signed seven grants under the CEF instrument for the construction of the conventional rail infrastructure of Rail Baltica. Together with previously signed grant agreements, Rail Baltica has thus already received about 1.2 billion euros from the EU and national funds.

By the end of 2021, among the main achievements of the project were design and construction works on sections with a length of more than 640 km (out of a total length of 870 km) in all the Baltic countries. The energy subsystem of Rail Baltica will be supervised by the engineering company ENE Engineer, whose main task will be to prepare a tender for the design and construction of electrification. Together with the national project executors SIA Eiropas dzelzceļa līnijas, Rail Baltic Estonia OÜ and AB LTG Infra, contracts were signed with Certifier SA for the supply of security services (AsBo) throughout the entire length of the highway. The methodological basis for making strategic decisions is CBA.<sup>224</sup>

In the nearest plans of the project (for 2022) to begin the completion of the design of highways in accordance with the program of priority sections. In a functional aspect, this implies further work on the development of the railway energy subsystem and subsystems of control and signaling, the successful implementation of consolidated purchases of building materials. The construction itself includes the design of the two remaining sections of the highway Kaunas - Vilnius and Kaunas - the Lithuanian-Polish border, the construction of a border crossing between Lithuania and Latvia, as well as the provision of large-scale construction work on the highway and at local facilities, involving, in particular, the equipment of stations.

<sup>224</sup> Cost Benefit Analysis

To achieve the set goals, an application was submitted in January 2022 for participation in the CEF 2021 competition. In the coming years, in order to strengthen the financial security of the project, this practice of attracting investments is expected to continue.

In February 2022, the geopolitical significance of the project increased. However, problems arising at the national levels hinder its accelerated implementation. Thus, the design work and land allocation necessary for the construction of the route are included in the area of responsibility of the governments of the Baltic countries. The redemption of land plots is extremely slow due to legal and financial delays. Compared to the original schedule, the delay in design and survey is at least 5 years, in this regard, experts call 2030 the most likely start of the project. In addition, the report of the Estonian National Audit Office indicated that financial issues also remained unresolved. In particular, it is not possible to assess whether the planned budget was exceeded, since the Estonian part of it was not planned by year until the end of the project.<sup>225</sup>. Therefore, in the near future, the ports will retain the status of the basis of the transport systems of the Baltic countries, remain the leading enterprises of the countries and, accordingly, will be involved in solving the priority goals of the EU regional development.

<sup>&</sup>lt;sup>225</sup> Estonia says Rail Baltica project is several years behind schedule URL:https://tass.ru/ekonomika/12671889

### Chapter 3. Port Infrastructure of the Baltic States: Development Strategies at the Beginning of the 21st Century

# 3.1. Cooperation and Competition of Eastern Baltic Ports: An Analysis of the Second Decade of the 21st Century

In the first chapter, a theoretical substantiation was found for the use of the strategy of coopetition as a promising mechanism not only for survival, but also for the development of the majority ports of the Baltic countries. This section will evaluate the feasibility of applying the strategy of coopetition by the management of the main ports of the Eastern Baltic region. We have expanded the object of study to include the ports of the Baltic basin of the Russian Federation, which are obvious competitors to the Baltic ones.<sup>226</sup> Let us formulate and test the hypothesis (H1): cooperation between ports in the transshipment of some cargoes, while simultaneously competing for attracting others, has a positive impact on the activities of the ports of the Eastern Baltic to a greater extent than a purely cooperative or competitive strategy.

In the process of statistical analysis, data were used from the Administrations of the studied ports, official statistical services of the Russian Federation, the Republic of Estonia, the Republic of Latvia, the Republic of Lithuania, as well as data provided by national port associations, state organizations regulating port activities and the ministries of transport of these countries. The performance of ports is assessed using the indicator of cargo turnover. The choice of the period (2010 - 2019) is explained by the availability of comparable official statistics and the recommended duration (5-10 years) for a visual statistical study. The availability of statistical data for 10 years makes it possible to use correlation analysis to identify dependencies in the volume of port cargo turnover. It should be noted that official state statistics and data published by individual ports and port associations have minor differences by country. Therefore, in a number of cases, the authors carried out additional calculations or were forced to narrow (expand) the compared indicators. Data for 2020 is not analyzed due to the sharp decline in international trade and transport. An assessment of the duration and consequences of a force majeure (COVID-19 coronavirus pandemic) can be carried out at least five years after it has been overcome.

To identify the nature of the relationship between international seaports in the Eastern part of the Baltic Sea, the case study method is used. Within the framework of this method, it is supposed to study the specialization and capabilities of ports, their competitive advantages. As the

<sup>&</sup>lt;sup>226</sup> More details in: Efimova E. G., Volovoy V., Vroblevskaya S. A. Sea ports of the Eastern Baltic and the transit policy of the Russian Federation: competition or cooperation? // Baltic region. 2021 Vol. 13, No. 3 S. 125-148.

main indicator characterizing the success of the seaport and determining its financial results, cargo turnover is considered, both in general and for individual types of cargo.

There are seven majoritarian<sup>227</sup> Russian seaports: Big Port of St. Petersburg, Primorsk, Vysotsk, Vyborg, Ust-Luga, Kaliningrad and the passenger Port of St. Petersburg<sup>228</sup>. The listed ports are the end points of the Russian sections of international transport corridors. The study of their transit potential is of academic and commercial interest. Opportunities to attract international cargo traffic to the port of Kaliningrad and the passenger Port of St. Petersburg are not considered in this article. Statistics on the cargo turnover of the passenger port are not published separately: cargo carried by ferries is included in the turnover of the Big Port of St. Petersburg. The peculiarities of the geographical location of the Kaliningrad region do not allow considering the port of Kaliningrad as a transit hub for foreign trade cargo of the "mainland" regions of the Russian Federation, as well as Eurasian countries that do not have access to the sea. In addition, in terms of cargo turnover, this port ranks fifth among the Russian ports of the Baltic basin, ahead of only the port of Vyborg. Its share in the total cargo turnover ranges from 6.34% in 2013 to 4.31% in 2019.<sup>229</sup>

At the end of 2019, the Russian seaports of the Baltic basin took the second place in Russia in terms of cargo turnover. It amounted to 256.44 million tons (+4.1%), including the volume of dry cargo transshipment - 110.19 million tons (+0.4%), liquid cargo - 146.24 million tons (+7, one%). Seaports of the Azov-Black Sea basin with a cargo turnover of 258.08 million tons, but with a negative dynamics (-5.2%), took first place. We note the greater specialization of the southern ports in the transshipment of liquid cargo - 162.02 million tons (+5.8%). Transshipment of dry cargo in the southern ports had a negative trend (-9.4%)<sup>230</sup>. In January 2020, the Russian seaports of the Baltic basin took a leading position. Their cargo turnover amounted to 22.17 million tons (+5.4%), including the volume of dry cargo transshipment amounted to 8.71 million tons (-0.1%), liquid cargo - 13.47 million tons (+9.3%)<sup>231</sup>.

<sup>&</sup>lt;sup>227</sup> With a turnover of more than 1 million tons per year.

<sup>&</sup>lt;sup>228</sup> Ferries arriving at the Passenger Port of St. Petersburg carry both passengers and rolling cargo. By Order of the Chairman of the Government of the Russian Federation No. 413-r dated March 13, 2015, the classification of the checkpoint across the state border of the Russian Federation in this port was changed from passenger international traffic to cargo-passenger.

<sup>&</sup>lt;sup>229</sup> Author's calculations based on data of the Federal State Budgetary Institution "Rosmorport"http://www.rosmorport.ru/filials/spb\_seaports/ (дата обращения: 10.11.2020)

<sup>&</sup>lt;sup>230</sup>URL:http://morcenter.ru/news/gruzooborot-morskih-portov-rossii-za-yanvar-dekabr-2019-goda (date of access: 05/10/2020)

<sup>&</sup>lt;sup>231</sup>URL:http://morcenter.ru/news/gruzooborot-morskih-portov-rossii-za-yanvar-2020-g(date of access:: 10.05.2020)

Leading positions in terms of the total volume of transshipped cargo among the ports of other sea basins of Russia, their geographical proximity to European countries and national industrial regions suggest that the ports of the Baltic basin will retain their leading position in the future. Various cargoes are handled in the Russian ports of the Baltic, which enhances their competitive advantages.

In recent years, the cargo turnover of the ports of the Baltic countries (Latvia, Lithuania, Estonia) has generally been declining. The situation in the Russian ports of the Baltic basin during the period under study looked different. In Russian and foreign ports, the worst situation was observed in 2015-2016. According to the press services of the ports, in 2016 it decreased by 4.5% compared to the previous year, to 138.94 million tons. However, despite the relatively low share of the ports of neighboring countries in the total volume of transshipment of Russian cargo (17.1% in 2011), for individual cargo this share is still quite high. Thus, in 2017, about 56% of coal and 54% of Russian mineral fertilizers, gravitating to the ports of the Baltic basin, were transshipped in the port of Klaipeda, while in 2016 the total cargo transshipment of this port amounted to a little less than 20% of all Russian ports of the Baltic<sup>232</sup>. If ten years ago these ports were considered as ordinary competitors in the transport services market, then at present the geopolitical situation in the region has changed significantly. As a result, the volume of transportation of Russian foreign trade cargo through the seaports of the Baltic States, Ukraine, Finland in January 2020 decreased by 30.8% compared to the same period in 2019 and amounted to 2.95 million tons.<sup>233</sup>

In the ports of neighboring countries, significant volumes of Russian oil products and packaged cargo are transshipped so far. The need to switch all Russian cargo flows from the ports of neighboring countries to Russian ports is not so obvious. Strategically, the reorientation of Russian raw materials to Russian ports should primarily concern containerized cargo, which can provide high added value. "Problem" cargoes from an environmental point of view are not commercially attractive. Therefore, there is no particular urgency in their transfer to the Russian ports of the Baltic. At the same time, the performed statistical analysis led to different results.

The dependence of the dynamics of port cargo turnover is studied using correlation analysis. The Pearson and Spearman correlation coefficients were calculated using the SPSS statistical data processing software package. Yearly data were studied, which make it possible to neglect seasonal

<sup>&</sup>lt;sup>232</sup> URL: http://www.rusexporter.ru/research/country/detail/2142/ (дата обращения: 10.05.2020) <sup>233</sup>URL:http://morcenter.ru/news/gruzooborot-morskih-portov-rossii-za-yanvar-2020-g(accessed 10.05.2020)

peaks and recessions in the transportation of a number of commodity groups. The calculations are accompanied by a clear statistical analysis, comparison of the dynamics of cargo turnover by ports in general and by individual commodity items.

When formulating our conclusions, we proceeded from the fact that the reorientation of foreign trade cargo is possible only if there are free capacities in alternative ports of the Baltic basin. This situation is observed, as practice has shown, not always. In particular, transshipment of potash fertilizers in the Russian ports of the Baltic Sea is limited by the capacity of the terminals. The currently implemented projects Lugaport, Ultramar, EuroChem and Primorsky UPC will only by 2025 allow expanding cooperation opportunities and, at the same time, create prerequisites for competition between Russian and Baltic ports.

To test our hypothesis about the advisability of using the coopetition strategy by the main ports of the eastern Baltic region, we use the case stage method, as well as quantitative estimates of the dependence of port cargo turnover, made on the basis of correlation analysis.

As noted, this study is limited to the study of the cargo turnover of the ports of the Baltic countries, St. Petersburg and the Leningrad region. In table. 17 presents the technical capabilities for the transshipment of goods of these ports.

Table 17 - Throughput of cargo terminals of Russian ports of the Baltic basin, thousand tons per year.

	BP St. Petersburg	Ust-Luga	Primorsk	Vyborg	Vysotsk	Total by ports	Freight turnover in 2019
Total throughput	110 189	120 880	89 500	1 970	21 200	343 735	245374
Liquid	19 084	78 837	89 500	300	12500	200221	143768
Dry	26 619	32 683		1 670	8700	69672	58403
containers (thousand TEU)	5 173	780	-	-	-	5953	2283

Source: Official website of the Federal State Budgetary Institution "Rosmorport" URL: http://www.rosmorport.ru/filials/spb\_seaports/ (date of access: 05/10/2020)

In the context of ongoing sanctions and the consequences of overcoming the economic crisis, it is important to understand the main trends in the development of the port industry. Let's look at the dynamics of cargo turnover in Russian and foreign ports of the Baltic. Table 18 presents the performance indicators of the Russian ports of the Baltic basin (excluding the port of Kaliningrad).

Table 18 - Cargo turnover of the Russian ports of the Baltic basin, excluding the port of

1	1	7	

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All cargo	154,8	172,3	194,5	202,1	209,6	218,0	224,9	233,7	232,3	245,4
Liquid cargo	81,7	92,0	112,1	128,8	130,2	139,9	144,5	139,3	133,5	143,8
Oil	71,8	70,1	82,5	77,8	65,6	72,0	80,8	76,8	66,4	74,0
Oil products	26,0	37,4	43,4	50,9	63,4	66,4	61,7	60,3	64,6	67,3
Bulk cargo	22,1	24,8	26,7	32,9	37,2	40,8	42,7	53,5	54,4	58,1
Ore	0,6	0,7	0,8	0,9	0,8	1,0	1,1	0,7	0,8	0,7
Coal	13,5	16,1	19,4	23,4	25,3	27,8	29,1	38,5	38,3	40,9
Mineral fertilizers	6,6	6,5	5,4	7,1	8,7	10,2	10,3	11,8	11,4	12,4
Bulk cargo	0,1	0,0	0,0	0,4	0,4	0,4	0,2	0,3	0,3	0,3
Corn	0,2	0,2	0,2	0,2	0,1	0,1	0,2	0,3	0,3	0,3
Timber cargo	0,5	0,5	0,5	0,5	0,6	0,7	0,6	0,5	0,9	1,0
General cargo	1,5	1,7	2,5	1,9	1,5	1,6	1,6	1,8	14,2	12,3
Containers, million tons	19,0	22,0	23,1	23,6	24,7	20,7	21,6	23,7	26,6	28,0
Containers, million TEU	1,9	2,4	2,5	2,6	2,5	1,8	1,8	2,0	2,2	2,3

Kaliningrad (thousand tons).

Source: Author's calculations based on data Official website of the Federal State Budgetary Institution "Administration of the Seaports of the Baltic Sea" URL:http://www.pasp.ru/morskie\_porty\_baltiyskogo\_morya (date of access: 10.05.2020)

With the overall positive dynamics, we note the volatility of indicators for the transshipment of bulk, general cargo, oil, containers (in TEU). In the largest port of the basin, Ust-Luga, in 2018, for the first time, cargo turnover decreased by 4% compared to 2017, to 98.73 million tons. The fall was caused, first of all, by a decrease in oil transshipment (by 15%) and coal (by 4%)<sup>234</sup>. The decrease in coal transshipment in the port was due to the replacement and commissioning of new loading equipment at the Universal Transshipment Complex and Rosterminalugol JSC. The technical re-equipment was caused by a lack of specialized capacities in the face of growing exports of Russian coal. The ports of Vysotsk and Vyborg in 2018 showed a significant increase in coal transshipment, so there was no noticeable decrease in the basin. In terms of oil and containers, there is a geographic reorientation of cargo flows. The decrease in the turnover of containers in 2015 is associated with the introduction of sanctions and countersanctions in the second half of 2014. It should be noted that the weight indicators of transshipped containers changed slightly (-12.5% for the period 2013-2015) compared to TEU (-30.0% for the

<sup>&</sup>lt;sup>234</sup> Chernov V. Baltic results. Information portal PortNews. 2019. URL: URL:https://portnews.ru/comments/2619/. (accessed: 20.04.2020)

same period), which indicates an average "weight" of the container. Due to the volatility of world commodity prices and the unstable exchange rate of the ruble, as well as the use of cost indicators for accounting for foreign trade, in this study we do not consider the impact of the size of Russian exports and imports on the loading of domestic ports. Under these prerequisites, it is difficult to talk about attracting containerized cargo, previously handled in the ports of the Baltic countries, to Russian ports.

The dynamics of the cargo turnover of the largest ports of Estonia is shown in Table 19. Table 19 - Cargo turnover of major Estonian ports (million tons).

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All cargo	43,6	45,7	40,6	39,5	40,2	32,7	31,7	32,6	33,8	35,8
Liquid cargo	29,1	31,4	26,6	25,7	26,0	17,0	14,4	13,9	14,8	15,2
Bulk cargo	6,5	5,1	5,3	4,5	4,8	5,1	5,8	6,4	6,6	8,1
Containers	1,3	1,5	1,6	1,8	2,0	1,7	1,8	2,0	2,0	2,0
Ro-Ro	3,5	3,7	3,8	3,7	4,0	5,6	5,9	6,4	6,7	6,7
Other cargo	3,2	4,0	3,3	3,7	3,3	3,4	3,8	3,8	3,8	3,7

Source: Author's calculations based on Statistics Estonia URL: http://pub.stat.ee/px-web.2001/I\_Databas/Economy/34Transport/16Water\_transport/16Water\_transport.asp (accessed 10.05.2020)

The decrease in the cargo turnover of Estonian ports occurred in 2013-2017. by 22.5%, mainly due to liquid cargoes (46.8%). Container cargo and Ro-Ro cargo showed positive dynamics: 12.6% and 35.4% respectively. An analysis of the commodity structure of cargo transshipped through Estonian ports, including transit cargo, made it possible to identify the following structural changes (Table 20). In terms of terms and commodity groups, the dynamics, in general, corresponds to Russian trends.

Table 20- Commodity structure of cargo transshipped through the ports of Estonia, thousand tons.

	2013	2014	2015	2016	2017	2018	2019
			Transs	shipped,	total		
Total, including	42908	43579	34962	33623	34797	35924	37690

Agricultural products, fish	2975	2988	3249	3271	3214	3173	3351		
Coal, Crude Oil and Natural Gas, Shale	118	310	39	16	104	47,8	220		
Timber industry products	1263	1119	1039	1133	1656	1880	1882		
Coke and Oil products	24238	24046	15687	12733	12294	12301	12229		
Chemical products	3724	4481	4374	5099	5159	6191	7224		
Metals and metalworking products	97	158	110	123	109	123	225		
	Outgoing transit								
Total,	22889	20800	15556	12662	12733	13965	14591		
including									
Agricultural products, fish	3	17	22	12	65	125	76		
Coal, Crude Oil and Natural Gas, Shale	68	133	39	5	67	0	50		
Timber industry products	117	91	46	22	70	0	8		
Coke and Oil products	18793	16022	10958	7466	7134	7653	7200		
Chemical products	3500	4221	4176	4883	4972	5814	6910		
Metals and metalworking products	7	71	11	23	11	5	70		

Source: author's calculations based on Statistics Estonia URL:http://pub.stat.ee/px-

web.2001/I\_Databas/Economy/34Transport/16Water\_transport/16Water\_transport.asp (10.05.2020)

The most dangerous dynamics is observed in the commodity group "Coke and Oil Products": a drop in total transshipment by 49.54%, including outgoing transit cargo - by 61.69%. To overcome the extremely negative trend in 2017, the Estonian joint-stock company Alexela Terminal extended the contract with PJSC NK Rosneft for the provision of services for the organization of transportation, unloading, storage and loading of oil products of 3.4 million tons of fuel oil and vacuum gas oil<sup>235</sup>. The total transshipment significantly increased (31.11%) with a decrease in outgoing transit (40.19%) of timber industry products. The volumes of the total transshipment of outgoing transit of crude oil, coal and natural gas are changing dramatically.

At the same time, official statistics show a positive trend in transshipment and outgoing maritime transit of chemical products (+93.87% and +97.43% respectively), as well as metals (+131.79% and +902.86). Note the noticeable volatility in the volumes of outgoing transit of metals.

The dynamics of transshipment of agricultural and fish products is stable (+8.04%) with a noticeable increase in outgoing transit (by 20.7 times). In 2016, the emergence of large volumes of incoming transit of food, beverages and tobacco was noted. Experts explain this by the changed

<sup>&</sup>lt;sup>235</sup> Meizer A. Ports - 2017: transit games and the search for bypassing Russia. IA REGNUM.07.01.2018. URL:https://regnum.ru/news/2364954.html

requirements for the circulation of alcoholic beverages on the Russian market: it must be labeled. For this, Estonian port warehouses are used<sup>236</sup>.



Figure. 3. Cargo turnover of the largest ports of Estonia, million tons.<sup>237</sup>

Shown in fig. 1 the dynamics of the cargo turnover of the ports of Tallinn and Sillamäe shows multidirectional trends in their development. The success of the second port in Estonia in terms of cargo turnover can be explained by the fact that it is a private port owned by equal shares of representatives of Russian and Estonian businesses<sup>238</sup>. The dynamics of cargo turnover in Latvian ports is shown in Table 5.

Table 21. Cargo turnover of the major ports of Latvia (million tons)

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All cargo	61,2	68,8	75,2	70,5	74,2	69,6	63,1	61,9	66,2	62,4
Liquid cargo	21,2	23,1	24,9	23,6	26,5	25,6	19,5	16,9	15,0	14,6
Bulk cargo	28,1	33,3	36,8	34,7	35,3	32,8	32,1	32,6	36,6	34,2
General cargo	10,4	10,9	12,1	10,8	10,8	9,7	10,0	10,8	12,7	11,8
Container	2,6	3,1	3,5	3,8	4,0	3,7	3,9	4,4	4,7	4,6

<sup>&</sup>lt;sup>236</sup> Goloviznin A. Russian ports lack the capacity to take everything from the Baltics. Interview with "DP" Director for "Analytics and Logistics" LLC "Morstroytekhnologiya" Alexander Goloviznin. 09.03.2018, https://www.dp.ru/a/2018/09/02/Nam samim nikak.

<sup>&</sup>lt;sup>237</sup> Source: Statistics Estonia URL:http://pub.stat.ee/px-

web.2001/I\_Databas/Economy/34Transport/16Water\_transport/16Water\_transport.asp (дата обращения: 10.05.2020)

<sup>238</sup> Port of Sillamae. Booklet. 2018. p. 4 URL:http://www.silport.ee/SILPORT\_booklet\_ru.pdf

Container.TEU	209	247	284	309	321	281	294	316	356	353
Ro-Ro cargo	2,2	2,8	3,1	3,2	3,1	2,6	2,8	3,2	3,5	3,4

Source: author's calculations based on Central Statistical Bureau of Latvia URL:

http://www.csb.gov.lv/en/stats table metadata/35/ TARGET= blank>Detailed information</A>, URL:

http://data1.csb.gov.lv/pxweb/en/transp\_tur/transp\_tur\_transp\_kravas\_ikgad/TRG260.px/(accessed 10.05.2020)

The largest drop in cargo turnover occurred in the liquid cargo group. The niche of Russian companies was occupied by enterprises of the Republic of Belarus. In November 2017, the Belarusian Oil Company (BNK) and the Latvian WT OIL Terminal signed an agreement on joint activities in the field of organizing the transshipment of Belarusian oil products in the Freeport of Riga. The oil company also entered into a contract for the sale and purchase of dark oil products with the Novopolotsk Refinery in 2016 for the supply of goods to Woodison Terminal in 2018-2022.<sup>239</sup>

The decrease in the cargo turnover of the ports of Latvia in 2019 compared to 2013 (-12.33%) was due to the deterioration in the performance of the ports of Ventspils (-28.88%) and Riga (-7.63%). At the same time, the cargo turnover of the port of Liepaja increased by 51.61% (Fig. 2).



Rice. 2. Cargo turnover of the largest ports of Latvia, million tons.<sup>240</sup>

<sup>240</sup> Source: Authors' calculations based on Central Statistical Bureau of Latvia URL:

 $\label{eq:http://www.csb.gov.lv/en/stats_table_metadata/35/TARGET=_blank>Detailed information</A>, URL: http://data1.csb.gov.lv/pxweb/en/transp_tur/transp_ur_transp_kravas_ikgad/TRG250.px/table/tableViewLayout1/$ 

<sup>&</sup>lt;sup>239</sup> Meizer A. Ports - 2017: transit games and the search for bypassing Russia. IA REGNUM.07.01.2018. URL: URL:https://regnum.ru/news/2364954.html. (accessed: 20.04.2020)

The drop in the cargo turnover of the two largest ports of Latvia occurred primarily due to oil and oil products, as well as coal (Fig. 5, 6). At the same time, all ports increased their transshipment of grain crops (Fig. 7).



Unlike the ports of Estonia and Latvia, the port terminals of Lithuania show an overall positive trend (Table 22). The exception is liquid cargo. During the period presented, the turnover increased by 12.48%. However, the transshipment volumes of these cargoes varied annually from -34.19% (2013/2014) to

+18.83% (2014/2015). Such volatility can be explained by multidirectional trends within this group of goods (see Fig. 8)

Table 22 - Cargo turnover of Lithuanian port terminals (minion to	turnover of Lithuanian port terminals (million tor	IS)
---	--	-----

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
All cargo	40,3	45,5	43,8	42,4	43,7	45,7	49,3	52,9	56,2	46,3
Liquid cargo	18,8	20,0	18,7	17,7	15,2	18,1	20,3	21,3	20,0	19,9

<sup>&</sup>lt;sup>241</sup> Source: Author's calculations based on Central Statistical Bureau of Latvia URL:

http://www.csb.gov.lv/en/stats\_table\_metadata/35/TARGET=\_blank>Detailed information</A>, URL: http://data1. csb.gov.lv/pxweb/en/transp\_tur\_transp\_tarsp\_kravas\_ikgad/TRG250.px/table/tableViewLayout1/, URL: http://data1.csb.gov.lv/pxweb/en/transp\_tur/transp\_tur\_transp\_kravas\_ikgad/TRG260.px/

<sup>&</sup>lt;sup>242</sup> Source: Author's calculations based on Central Statistical Bureau of Latvia URL: http://www.csb.gov.lv/en/stats\_table\_metadata/35/ TARGET=\_blank>Detailed information</A>, URL: http://data1. csb.gov.lv/pxweb/en/transp\_tur\_transp\_tarsp\_kravas\_ikgad/TRG250.px/table/tableViewLayout1/, URL: http://data1.csb.gov.lv/pxweb/en/transp\_tur/transp\_tur\_transp\_kravas\_ikgad/TRG260.px/

<sup>&</sup>lt;sup>243</sup> Source: Author's calculations based on Central Statistical Bureau of Latvia URL: http://www.csb.gov.lv/en/stats\_table\_metadata/35/ TARGET=\_blank>Detailed information</A>, URL: http://data1. csb.gov.lv/pxweb/en/transp\_tur/transp\_tur\_transp\_kravas\_ikgad/TRG250.px/table/tableViewLayout1/, URL: http://data1.csb.gov.lv/pxweb/en/transp\_tur/transp\_ransp\_kravas\_ikgad/TRG260.px/

Bulk cargo	11,8	14,5	14,1	14,0	17,0	16,7	16,7	19,1	19,9	20,7
General cargo	9,7	11,0	10,9	10,6	11,5	11,0	12,3	12,5	16,4	15,3
Containers	1,9	2,5	2,5	2,6	2,9	2,3	2,9	3,0	4,8	4,5
Containers thousands TEU	295,2	382,2	381,4	402,7	450,2	350,4	441,7	474,2	749,1	705,2
Ro-Ro	2,3	2,6	2,6	2,6	2,5	2,5	2,8	2,9	3,1	3,3

Source: Official site of Port of Klaipeda URL: http://www.portofklaipeda.lt/statistika-porta-klaipeda, Statistics Lithuania. Official Statistics Portal URL: https://osp.stat.gov.lt/statistinu-rodikliu-analize?#/ (accessed 10.05.2020)

Steady positive dynamics of port indicators is provided by bulk, general cargo and containers. It should be noted that the container load in the port first grew (from 16.22 tons/TEU in 2014 to 17.52 tons/TEU in 2015), and then began to decrease to 13.43 tons/TEU in 2018. The dynamics is explained by an increase in the share of not fully loaded containers, as well as a change in the range of goods transported in containers. The share of empty containers during the study period ranged from 19.98% (2014) to 29.52% (2018). No relationship was found between the fullness of containers and the proportion of empty containers. On fig. 8 shows the dynamics of transshipment indicators for the main non-container types of cargo in the state port of Klaipeda.



Figure. 8. Transshipment of non-containerized cargo in the ports of Lithuania<sup>244</sup>

<sup>&</sup>lt;sup>244</sup> Source: Statistics Lithuania. Official Statistics Portal URL: https://osp.stat.gov.lt/statistiniu-rodikliu-analize?#/

The success of the port of Klaipeda is determined by the transshipment of Belarusian cargo. Despite political differences (in particular regarding the BelNPP and the 2020 elections), Belarus continues close cooperation with the Lithuanian port.<sup>245</sup> Participation in the assets of Lithuanian terminals allows us to assume with a high degree of certainty that Belarusian companies will not abandon transportation routes through Lithuanian ports in the coming years.

The Lithuanian port industry is represented by two transshipment facilities: the State Port of Klaipeda and the Butinge oil terminal, which is the Lithuanian division of the Polish oil company ORLEN (Fig. 9). The narrow specialization of the terminal, the different structure of ownership and management, the technical capabilities of the terminals made it possible to develop specialization in the port industry. This strategy has led to some commercial success in attracting and retaining customers.



Figure 9. Cargo turnover of Lithuanian ports.<sup>246</sup>

In general, the Lithuanian port industry is in a better position compared to other Baltic countries, where, in addition to international rivalry between ports, there is also an internal struggle to attract cargo. However, the choice of strategy for the ports of the Eastern Baltic largely depends

<sup>&</sup>lt;sup>245</sup> Goloviznin A. Russian ports lack the capacity to take everything from the Baltics. Interview with "DP" Director for "Analytics and Logistics" LLC "Morstroytekhnologiya" Alexander Goloviznin. 09/03/2018, URL:https://www.dp.ru/a/2018/09/02/Nam samim nikak. (accessed: 20.04.2020)

<sup>&</sup>lt;sup>246</sup> Source: Authors' calculations based on Statistics Lithuania. Official Statistics Portal URL: https://osp.stat.gov.lt/statistiniu-rodikliu-analize?#/

on the type of goods handled by the port. For liquid, as well as bulk and Oil productses, primarily coal and fertilizers, the strategy of rivalry is more relevant. For general cargo and containers, the cooperation strategy is statistically justified, although even a cursory review of port business cases shows the presence of multidirectional factors that do not allow making an unambiguous choice of a strategy for international industry cooperation. Therefore, the strategy of co-option seems appropriate for doing business in an unstable external environment.

Calculations of the correlation between the cargo turnover of the Russian ports of the Baltic basin and the Baltic countries, both in general and for individual types of cargo, revealed signs of both cooperation and rivalry. The identified dependences on the total cargo turnover of the ports are shown in Table 23.

Table 23. Identified linear and rank correlations of the total cargo turnover of the ports of the Baltic countries and Russia (2010–2019)

Dependence of the total cargo	Correla	R <sup>2</sup>	F-statistics		
turnover of ports	Pearson	Spearman			
Russia - Baltic countries	0,975**	0,952**	0,951	156,916	
Russia – Estonia	-0,846**	-0,770**	0,716	20,124	
Russia–Lithuania	0,821**	0,855**	0,674	16.561	

\*- correlation is significant at the level of 0.05

\*\*- correlation is significant at the level of 0.01

The data in the table show that in 2010-2019. During the period, the studied Russian ports and the ports of the Baltic countries generally showed similar dynamics. This trend can be explained by the successful functioning of the Lithuanian port of Klaipeda and Russian ports. The policy of attracting Belarusian cargo in 2010-2019 and the activization of the Russian government regarding the reorientation of domestic cargo to national ports proved to be effective. The decrease in cargo turnover in the ports of Estonia and Latvia was offset by an increase in this indicator in Lithuania. We note the obvious loss of the cargo base by Estonian ports, while the cargo turnover in the Russian ports of the Baltic basin is growing. The dependence of the volumes of the total cargo turnover of individual ports of the Eastern Baltic was not revealed.

Table 24 shows the significant results of linear and rank correlation calculations for individual commodity groups handled in ports.

Product group	Nationality of ports	Corre	lation	R <sup>2</sup>	F-statistics	
		Pearson	Spearman			
Oil and oil products	Russia- Estonia	-0,829**	-0,855**	0,687	17,537	
Oil	Russia- Latvia	-0,740*	-0,600	0,548	9,681	
Coal	Russia- Estonia	-0, 685*	-0,710*	0,505	8,146	
Fertilizers (all)	Russia- Lithuania	0,880**	0,842**	0,775	27,556	
	Russia-Baltic countries	0,871**	0,782**	0,729	25,240	
Timber industry products	Latvia - Lithuania	0,918**	0,891**	0,842	42,689	
Metals	Russia- Lithuania	0,760*	0,782**	0,577	10,921	
	Russia-Baltic countries	0,818**	0,855**	0,669	16,192	
Containers, thousand tons	Russia- Estonia	0,790**	0,758*	0,624	13,301	
	Russia- Latvia	0,842**	0,842**	0,709	19,528	
	Russia- Lithuania	0,884**	0,903**	0,781	28,529	
	Russia-Baltic countries	0,900**	0,842**	0,809	33,927	
	Estonia- Latvia	0,962**	0,939**	0,926	99,806	
	Estonia - Lithuania	0,724*	0,903**	0,524	8,812	
	Latvia - Lithuania	0,854**	0,964**	0,730	21,581	
Containers, TEUs	Estonia- Latvia	0,858**	0,818**	0,736	22,338	
	Latvia - Lithuania	0,848**	0,939**	0,720	20,524	

Table 24. Identified correlations of transshipment of certain commodity groups in the ports of the Baltic countries and Russia (2010–2019)

\*- correlation is significant at the level of 0.05

\*\*- correlation is significant at the level of 0.01

There is a clear trend to move the transshipment of oil products and coal from Estonia and Latvia to Russia. Russia's transit policy led Global Ports and Royal Vopak to sell their troubled Estonian oil terminal assets VEOS to Liwathon in 2019. The lack of capacities for transshipment of mineral fertilizers in Russian ports has led to active cooperation with specialized terminals in the Baltic countries. However, we note that the revealed dependence is also explained by the successful cooperation in the study period between Belarusian companies and Lithuanian stevedores. The conjuncture of the world metal markets is a determining factor in the transshipment of products of this commodity group, therefore, unidirectional trends are observed in Russian and Baltic ports, primarily Klaipeda, which has its own cargo base.

The situation is different in the container sector. Russia's cooperation with the Baltic countries is apparent. It is observed only by weight indicators. A comparison of the average weight of a container in the study period shows that containers with different goods are handled in the ports of the eastern Baltic. The calculations of the authors showed that the average weight of containers transshipped through the Lithuanian port in 2010-2019. ranges from 6.32 tons to 6.62

tons, Estonian ports - from 7.00 tons to 8.68 tons, Russian ports of the Baltic - from 9.15 tons to 12.25 tons, Latvian ports - from 12.20 to 14.01. At the same time, the weight of Russian and Latvian containers is increasing. The results obtained confirm that different types of goods are transported in containers. Through the port of Klaipeda, mainly products of deep processing are transshipped, and through the ports of Latvia and Russia - raw materials and work in progress. In this case, the container can be considered as a more competitive package of goods, which confirms the presence of rivalry between ports. In general, in terms of the speed of execution and the quality of logistics operations, Russian ports lose to the Baltic ones.

The results of the correlation analysis and the study of the functioning of the ports of the eastern Baltic revealed the presence of situations of both competition and cooperation in different commodity groups. An effective combination of these strategies, when ports interact with each other in order to obtain mutual benefits, has not been found. The behavior of ports is largely determined by the ongoing state policy, interstate relations, their technical capabilities, as well as the conjuncture of world commodity markets. Therefore, possible future port strategies depend on the strength of external factors.

The seaports of the Baltic countries continue to play a significant transit role in the transportation of Russian foreign trade cargo. This study showed that the calls of Russian politicians to process cargoes with a high degree of industrial processing in domestic ports, primarily containers, are still declarative. The reasons for this situation are the current economic sanctions that limit the commodity structure of cargo turnover and negatively affect relations between the countries of the region, and the strict norms of Russian legislation. At the same time, the desire to reorient the transit of their cargoes from the Baltic ports to Russian oil and coal enterprises is obvious. In the future, the Baltic basin may become the main sea gate for the export of Russian raw materials, including hydrocarbons, as well as the largest Russian sea basin in terms of container cargo turnover.

The ports of the eastern Baltic region are competitors rather than partners in transshipment of both domestic and transit cargo. The ports of Estonia, Latvia and Russia have similar commercial interests in attracting cargo. The Lithuanian port of Klaipeda has a cargo base that is different from its neighbors, but the lack of a border with mainland Russia and political differences make cooperation difficult. The cooperation of these ports can be caused by two reasons: the common affiliation of stevedoring companies, owners of terminals and the state policy that regulates the routing of Russian cargo. For most positions, foreign ports of the Baltic Sea can be considered by Russian shippers as reserve capacities. Their use allows optimizing investments in the domestic port business, developing recreational opportunities on the coast. Russian companies, seeking to diversify risks or distribute the load of their transport and logistics terminals, cooperate with stevedores from the Baltic countries. We must not forget that cooperation in the field of transport and logistics allows us to maintain and strengthen business ties with neighboring states.

Thus, the hypothesis put forward by us about the effectiveness of the strategy of cooperation in the ports of the Eastern Baltic in the 2010s. not confirmed. The choice of a cooperation strategy by representatives of the port business and national port organizations of the region under study is expedient in the event of force majeure or during periods of "peak" load generated, in particular, by favorable conditions in the world commodity markets. The seaports of the Baltic countries are not considered as priority participants in the Russian transit policy.

## 3.2 Anti-Russian sanctions as a factor in the modern transit policy of the Baltic countries: results of the first half of 2022

The dependence of the Baltic economies on the transport sector creates the preconditions for the vulnerability of national economic growth in the face of socio-economic and political instability. The introduction of anti-Russian sanctions in connection with a special military operation generally has a negative impact on the use of the Baltic states of their transit potential. The restrictions imposed by the European Union and the Russian government have led to the need to transform the transit policy of these countries.

Over the past decades, the Baltic countries have been considered by Russian entrepreneurs as a convenient logistical route for the delivery of goods not only from the EU, but also from Asian countries, primarily China. After February 24, 2022, cargo traffic from the EU to Russia has more than halved.<sup>247</sup> The reduction in imports from the EU to the Russian Federation, delivered by road, is observed in all industry groups, with the exception of pharmaceuticals. The largest losses of imports in physical volumes for the period March-May 2022 compared to the same period last year occurred in the automotive industry sectors (-91%); electronics and home appliances (-68%); metallurgy (- 61%); pulp and paper products (-61%); industrial equipment (code TH 84; -60%);

<sup>&</sup>lt;sup>247</sup> Import from the EU to the Russian Federation for March-May 2022, with possible movement through Kazakhstan and Turkey URL:https://www.rzd-partner.ru/logistics/news/import-iz-es-v-rf-za-mart-may- 2022-s-vozmozhnym-dvizheniem-cherez-kazakhstan-i-turtsiyu/

drinks, juices, water (-55%); chemical industry (- 54%); building materials (-46%). For the import of a number of goods (clothing, footwear, accessories; food; chemical industry; furniture), the logistics schemes have been transformed: Turkey and Kazakhstan have become transshipment points for European cargo on their way to Russia. Deliveries from the EU to Kazakhstan and Turkey in March-May 2022 increased in most industries. In Kazakhstan, the increase was 29 thousand tons, in Turkey - 166 thousand tons, with a total reduction in European imports to Russia by 1.6 million tons.<sup>248</sup> This means that Russia has lost most of its merchandise imports from the EU. Alternative logistical routes did not compensate for these deliveries. In turn, the Baltic countries also lost a significant share of transit goods.<sup>249</sup> In June 2022, imports of goods from the EU to the Russian Federation in monetary terms increased by 18% compared to May due to the restoration of supplies of perfumes and cosmetics, medical instruments, plastic products, electrical equipment and components. At the same time, alternative routes through friendly countries are being improved.

In general, the cargo turnover of Russian seaports in January-June 2022 decreased by 0.5% compared to 2021 and amounted to 410 million tons. The largest drop was observed in container cargo (-20.9%), growth - in Oil products (+4.1%). Transshipment of export cargoes in the seaports of Russia in the first half of the year decreased by 0.4% and amounted to 356.29 million tons, transshipment of imports fell by 15.3% to 19.36 million tons. Experts note an increase in the flow of goods, in particular, to Estonia due to oil products. In imports, an increase in traffic from Germany and the UK was noticed, mainly due to cargo in containers. Note that in the case of the UK, growth is due to a low absolute base: from 20.4 to 29 thousand tons.<sup>250</sup>

The cargo turnover of the seaports of the Baltic basin amounted to 123.3 million tons (-0.2%), of which the volume of dry cargo transshipment amounted to 48.6 million tons (-15.6%), liquid cargo - 74.7 million tons (+13.3%). The cargo turnover of the port of Ust-Luga amounted to 58.4 million tons (+10.3%), the Big Port of St. Petersburg - 21.4 million tons (-30.1%), Primorsk - 30.5 million tons (+ 16.8%), Vysotsk - 7.9 million tons (-6.0%).<sup>251</sup> It should be noted that BP St.

<sup>&</sup>lt;sup>248</sup> Import from the EU to the Russian Federation for March-May 2022, with possible movement through Kazakhstan and Turkey URL:https://www.rzd-partner.ru/logistics/news/import-iz-es-v-rf-za-mart-may- 2022-s-vozmozhnym-dvizheniem-cherez-kazakhstan-i-turtsiyu

 $<sup>^{249}</sup>$  Note that the main part of the goods from the EU to Russia was transported through the Republic of Belarus.

 $<sup>^{250}</sup>$  Transshipment of exports in Russian seaports in the first half of the year decreased by 0.4% to 356.3 million tons URL:https://portnews.ru/news/334433/

 $<sup>^{251}</sup>$  The cargo turnover of Russian seaports for the first half of 2022 decreased by 0.5% to 410 million tons URL:https://portnews.ru/news/332107/

Petersburg, which successfully survived the crisis associated with the pandemic, suffered the most. The decrease in the cargo turnover of the ports of the Baltic basin generated a potential opportunity to strengthen the transit positions of the Baltic countries. In the final part of the dissertation research, we put forward the second hypothesis (H2): The anti-Russian sanctions introduced help attract transit cargo to the Baltic countries.

Research on this issue should be carried out in several directions:

- 1. the possibility of attracting Russian cargo to the ports of Estonia, Latvia, Lithuania;
- 2. attraction of cargo flows generated by non-Russian shippers;
- 3. prospects for Belarusian transit;
- 4. Kaliningrad transit.

### Opportunities to attract Russian cargo to the ports of Estonia, Latvia, Lithuania

The ports of Latvia and Estonia are historically more focused on Russian transit. In the port of Klaipeda, Russian cargo accounted for an insignificant share of the total volume of cargo. At present, the attitude towards business relations in the Baltic countries varies. Estonian and Latvian ports transship non-sanctioned cargo. In Lithuania, "they are trying to distance themselves from ties with Russia."<sup>252</sup>

However, sanctions measures against Russian vessels were initiated by Latvia<sup>253</sup> and Lithuania. This measure was not initially effective, as only a few Russian-flagged ships called at Klaipeda and the major ports of Latvia. The cargo ban was more painful. Although transit through the Baltic ports has been declining over the past 10 years, Klaipeda handled fertilizer from Belarus before the imposition of sanctions against Minsk. Russian cargo, according to the estimates of the Minister of Transport of Latvia Linkaits, accounted for 20-30% of the cargo turnover of the port of Liepaja, 45% of the Free Port of Riga, 2/3 of the port of Ventspils. According to Russian experts, political disagreements with China also reduce transit volumes by 20-30%.<sup>254</sup>

According to the results of the first half of 2022, 9.8 million tons of Russian cargo were transshipped through the ports of the Baltic countries. In 2022, the volume of cargo increased by

<sup>&</sup>lt;sup>252</sup> Lithuania loses Russian freight traffic URL: URL:https://www.rzd-partner.ru/logistics/news/litva-teryaet-rossiyskie-gruzopotoki/

<sup>&</sup>lt;sup>253</sup> Note that we are talking about limiting ship entries here.

<sup>&</sup>lt;sup>254</sup> Koryakin I. Russian cargo blocked the way. What is fraught with the ban on transit through the Baltic countries URL: URL:https://www.kommersant.ru/doc/5270626

4.5% compared to the first half of 2021. 1.4 million tons of ore, almost 3 million tons of coal, 1.5 million tons of mineral fertilizers, more than 500 thousand tons of grain, about 200 thousand tons of metals and 700 thousand tons of liquid cargo. Moreover, most of the cargo flow fell on Latvia, through the ports of which 6.9 million tons of Russian cargo, or 70% of the total volume going through the Baltic countries, were transshipped.<sup>255</sup> Let's determine whether it is possible to completely reorient them to national ports. The possibilities of attracting Russian cargo through the Baltic ports are determined by the presence of a specialized infrastructure both in Russia and in the ports of the Baltic countries, the policy of the leading maritime carriers and the foreign economic guidelines of the countries of the region.

In the first half of 2022, cargo traffic increased due to the resumption of coal transshipment in the port of Ventspils, where traditionally Russian coal was transshipped through the Baltic Coal terminal, and at the terminal on the island. Krieva, which was put into operation in 2019. Both terminals have a developed infrastructure and depth at the berths, allowing them to receive any vessels capable of entering the Baltic Sea. Technical capabilities, the energy crisis and the imposition of an embargo allowed these terminals to resume transshipment of Russian coal, which in the first half of the year amounted to almost 3 million tons. The terminals located in the port of Ust-Luga are also capable of receiving Capesize bulk carriers, while the terminal in the port of Vysotsk is able to receive Panamax bulk carriers. Through Ust-Luga, Russia, based on the size of the accepted bulk carriers, can export coal to India and China - the most promising markets against the backdrop of the European embargo, and through the terminal in Vysotsk - to Turkey and North Africa.

The volume of coal transshipment in the first half of 2022 in the Russian ports of the Baltic basin decreased significantly (-22%) against the backdrop of an increase in transshipment in the Southern Basin (+29%). The absolute decline in the Baltic basin and the growth in the Black Sea are practically the same - about 5 million tons per year. At the same time, in general, 3 million tons less coal was transshipped through the ports of Russia in the first half of 2022 than in 2021. These cargoes "left" to the Baltic ports. Thus, the cargo flows of Russian coal were redistributed both to the Russian ports of the Black Sea basin, from where it is convenient to export to Turkey

<sup>&</sup>lt;sup>255</sup> Chernov V. Baltic outcome: where will Russian cargoes leave the Baltic ports URL: URL:https://portnews.ru/comments/3221/ August 11, 2022

and North Africa, as well as to the Baltic ports, which provided more profitable logistics for a number of shippers.<sup>256</sup>

There is a possibility that after the imposition of an embargo on the import of Russian coal in Europe, as well as after the decision of the Latvian Seimas to declare Russia a state sponsor of terrorism, this cargo flow through the Baltic terminals will stop. 6 million tons of coal per year will be transshipped in the ports of the Russian Baltic (including the project of the Primorsky UPC) and in Murmansk, where, in addition to the existing coal terminal, a new one is being built in Lavna.

Through the ports of the Baltic States, the cargo flow of Russian ore increased by 10% compared to the first half of 2021. In 2022, Russia significantly increased the export of ore, which is associated with market conditions. At the same time, the volumes of ore transshipment through the ports of Finland decreased significantly. Perhaps part of the cargo traffic was redirected to the Baltic ports. At the same time, the Ultramar terminal (Ust-Luga) was repurposed for ore transshipment in 2022, which transshipped more than 1 million tons of ore in the first half of the year. Despite the fact that Western sanctions against the Russian Federation did not apply to iron ore, the Ust-Luga Sea Port reduced the shipment of iron ore by 44% compared to the first half of 2021 (from 1.69 million tons to 0.95 million tons). The main buyers were Germany (0.66 million tons), as well as China, Poland, Belgium and Slovakia. Shipments to the UK fell sharply, to France and Turkey - stopped.<sup>257</sup>

The transshipment of mineral fertilizers, which previously occupied a large share of Russian cargo traffic in the ports of the Baltic States, fell by almost 70% in 2022, which is associated with the operation of new specialized terminals in the port of Ust-Luga<sup>.258</sup>

There are still no specialized grain terminals in the Russian ports of the Baltic basin. The coal terminal in the port of Vysotsk is being converted for grain transshipment, in addition, it is planned to build a terminal of the Sodruzhestvo group of companies in Ust-Luga. It is also planned to create a grain terminal within the framework of the Primorsky UPC project. At present, grain,

<sup>&</sup>lt;sup>256</sup> Chernov V. Baltic outcome: where will Russian cargoes leave the Baltic ports URL: URL:https://portnews.ru/comments/3221/ August 11, 2022

 $<sup>^{257}</sup>$  Transshipment of iron ore through the port of Ust-Luga fell by almost half over the year URL^ URL:https://www.kommersant.ru/doc/5435757

<sup>&</sup>lt;sup>258</sup>Chernov V. Baltic Outcome: where will Russian cargoes leave the Baltic ports URL^ URL:https://portnews.ru/comments/3221/

apparently, from the ports of the Baltic States will be redirected partly to the south, partly will be reloaded in containers at the terminals of the Russian Baltic.

Russia experience a shortage of specialized terminals for transshipment of chemical cargoes (ammonia, ammonium nitrate, bulk urea and methanol). The port of Ventspils was used for transshipment of ammonia in the Baltic. There is a shortage of capacities for more than half of the volume of transshipment of urea in bulk went before the imposition of sanctions through the ports of Sillamäe, Riga, Kotka. There are no bulk terminals for transshipment of ammonium nitrate in Russia. It is almost impossible to quickly build the appropriate port infrastructure, so the only way out in the short term may be the containerization of these cargoes. A partial solution to the problem may be the conversion of liquefied hydrocarbon gas terminals for the export of ammonia, but there are also few of them in this region (Ust-Luga).<sup>259</sup>

One of the reasons for the "departure" of Russian cargo to neighboring countries is the strategies of shipping companies. The international container lines Maersk, Mediterranean Shipping Company and CMA CGM, serving more than a third of the world market, at the beginning of the Russian-Ukrainian conflict only bypassed the war zone, officially refused to work with Russian participants in the transport market in all basins. Ocean Network Express (ONE) 02/28/2022 suspended booking to Novorossiysk and St. Petersburg. Reception of bookings was stopped by Hapag-Lloyd and Yang Ming (to Novorossiysk) and Shipco (to the Russian Federation and Belarus). Included in the Top 5 COSCO (PRC), also, so far, has stopped communication only with Ukraine. The departure of the players integrated into Russian logistics was unexpected. Experts expected that under the conditions of sanctions, participants in highly competitive markets would try to maintain their positions. Only those players to whom these sanctions are directly directed, or participants in monopoly markets, will leave. However, a different scenario came to fruition. The exit decisions made will inevitably disrupt the existing supply chains that carriers are involved in. The diversified transport and logistics company Maersk has stopped sending goods not only by sea, but also by air and rail to and from Russia. As a result, "the impact of the situation on global supply chains is felt, including the increase in delivery times and the delay of goods by customs authorities at various transshipment hubs."260 Maersk and MSC management clarified that the decisions do not apply to food, medical devices and humanitarian supplies.

 $<sup>^{259}</sup>$  Russia feels a shortage of specialized terminals for transshipment of chemical cargoes - experts URL^ URL:https://portnews.ru/news/329855/

<sup>&</sup>lt;sup>260</sup> Skorlygina N. Farewell, container URL:https://www.kommersant.ru/doc/5238836

Maersk has been deeply integrated into Russian and Chinese logistics. The company has been a key player in Eurasian and Russian transit for a long time. It manufactures the majority of container shipping equipment in China and also has assets in Russian ports. In Maersk's decision, the main factor was not so much reputational considerations as fears of secondary sanctions, a potential risk to assets, and a difficult situation with bank settlements. Even Chinese carriers will not be able to quickly occupy the niche of the company. At the end of August 2022, it became known that Maersk is selling the largest asset in Russia, 30.75% of Global Ports, to the Delo group, which will increase its stake to 61.5%. Following the completion of this transaction, Maersk does not plan to participate in companies operating in Russia or own assets in the country. At the same time, the agreement includes the possibility in the future to return to a joint business with the Delo group. The Global Ports Group operates five container terminals in Russia and two in Finland.<sup>261</sup>

So far, land transportation of containers has suffered less. Although the situation in this sector is not stable. The passage of transit cargo on the Russian-Chinese border is normal, but major congestion occurs at the Belarus-EU borders. The Border Committee of Belarus notes that Lithuania and Poland let through only 70% and 67%, respectively, of the established norm for passing trucks in March, there are no problems with Latvia. Railway container operators, in particular TransContainer, felt the imposition of sanctions at a later date.

It should be taken into account that the refusal of transshipment in the Baltic ports will have a negative impact on Russian companies as well. Not all foreign trade cargo transshipped here will be able to quickly (although it is strategically possible) find alternative routes. The countersanctions introduced by the Russian government, especially in the context of export restrictions from unfriendly countries, the suspension of cooperation with Russia by the largest sea container carriers create conditions for the construction of their own transshipment facilities. In these circumstances, the need for the Baltic ports objectively disappears.

In general, Russia will not have critical difficulties in the event of "zeroing out" transit through the ports of the Baltic States, although for individual shippers this may result in an increase in the cost of logistics and the need to restructure the corresponding routes. For the Baltic States, such a scenario will make it necessary to search for new shippers.

#### Attracting cargo flows generated by non-Russian shippers

<sup>&</sup>lt;sup>261</sup> The world leader in container transportation will sell the last asset in Russia URL:https://www.rbc.ru/business/29/08/2022/630cc9189a794786d27525b4

In 2022, according to experts, the positions of the Latvian ports seem to be the most promising. The cargo turnover of Latvian ports in the first half of the year increased by 15.3%, to 23.59 million tons, the cargo transportation of the Latvian railway company increased by 17.6%, to 12.23 million tons.<sup>262</sup> Thus, slightly more than half of the cargo is delivered to Latvian ports by rail. The railway company Latvijas dzelzcels is currently subsidized by the state, although it was previously self-sustaining and made millions of deductions to the budget. The search for new directions, which began in the pre-pandemic period, turned out to be poorly effective. The planned business contact with the dry port of Duisburg was intercepted by Lithuanian logistics companies due to belated decisions made by the political authorities and business representatives in Latvia.

EUR 11.7 million was invested in the development of the Freeport of Riga infrastructure in 2021.<sup>263</sup> The funds were directed to digitalization and development of alternative energy. These measures seem justified: up to 80% of the cargo turnover of the Freeport of Riga is transit cargo sent to or received from the CIS countries.<sup>264</sup> The excess of port revenues over costs amounted to 2.26 million euros, which management attributes to effective financial planning.

In 2021, the port of Riga handled 21.5 million tons of cargo, which is 2.2 million tons, or 9.8%, lower than in 2020. The reason was the impact of the pandemic on the transit industry, as well as a significant drop in volumes of transshipped energy resources: the volume of transportation of coal and oil products decreased by 2.1 million tons. In the last quarter of 2021, the cargo turnover of this commodity group recovered. The total volume of other cargo, amounting to 18.2 million tons, in 2021. remained at the level of 2020. In 2021, 220 commercial companies operated in the Freeport of Riga, providing more than 4 thousand jobs, whose contribution to the Latvian economy amounted to about 230 million euros.<sup>265</sup>

The cargo turnover of the Freeport of Riga for 6 months of 2022 reached 11.32 million tons, which is 11.5% or 1.2 million tons more than in the same period of 2021. <sup>266</sup>

<sup>&</sup>lt;sup>262</sup> Plus in the ports of Latvia - relative value URL: https://www.rzd-partner.ru/wate-transport/comments/plyus-v-portakh-latvii-otnositelnaya-velichina-/ (accessed: 31.08.2022)

<sup>&</sup>lt;sup>263</sup> The Port of Riga invested 11.7 million euros in the development of its infrastructure in 2021 URL:https://portnews.ru/news/332523/ (accessed: 19.07.2022)

<sup>&</sup>lt;sup>264</sup> Port of Riga signed a memorandum of cooperation with Uzbekistan URL:https://portnews.ru/news/334323/ (accessed: 29.08.2022)

<sup>&</sup>lt;sup>265</sup> The Port of Riga invested 11.7 million euros in the development of its infrastructure in 2021 URL:https://portnews.ru/news/332523/ (accessed: 19.07.2022)

<sup>&</sup>lt;sup>266</sup> The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons <u>URL:URL:https://portnews.ru/news/332161/07/12/2022</u> (accessed: 12.07.2022)

In the first half of 2022, there is a significant increase in the volume of transshipment in the container cargo segment: 2.36 million tons, which is 14.5% more compared to the same period last year.<sup>267</sup>

In the first half of 2022, the port of Riga handled 2.82 million tons of timber cargo, which accounted for 25% of the port's total cargo turnover. In June 2022, 0.37 million tons of timber cargo was transshipped, however, a decline was recorded in this segment in July, which is explained by a decrease in the flow of pellet exports.<sup>268</sup> Timber cargoes are followed by containerized cargoes and coal<sup>269</sup>. Each of these cargo groups accounts for 21% of the total cargo turnover. Agricultural products still make up a significant share in the total cargo portfolio, 14% or 1.16 million tons.<sup>270</sup> For other cargo groups, including oil products, ores and metals, chemical cargoes, which together accounted for 23% of the total volume of cargo, a decrease in transshipment volumes was observed: 0.8 million tons of liquid cargo (-30%), 0.6 million tons. The decline is directly related to the impact of international sanctions against Russia and Belarus.<sup>271</sup>

In June 2022, 1.89 million tons of various cargoes were handled at the Port of Riga, which is 17.5% or 0.28 million tons more than a year earlier. Coal still has a significant impact on transshipment volumes: in June, 0.46 million tons of coal and coke were handled, in total, the port served 14 ships, including five large Panamax class ships.<sup>272</sup> The positive dynamics in the port is associated with the growth in the segment of energy carriers from Kazakhstan. From autumn 2021 the transshipment of coal of Kazakh origin in the ports of Latvia resumed after a long break.<sup>273</sup>

<sup>&</sup>lt;sup>267</sup> The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons URL:https://portnews.ru/news/332161/07/12/2022 (accessed: 12.07.2022)

<sup>&</sup>lt;sup>268</sup> The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons <u>URL:URL:https://portnews.ru/news/332161/07/12/2022</u> (accessed: 12.07.2022)

<sup>&</sup>lt;sup>269</sup> In the first half of the year, Latvian majority ports handled 4.44 million tons of coal, which is 20.6 times more than in the same period in 2021. The significant increase is especially noticeable against the backdrop of a sharp decrease in coal handling from 9-10 million tons in 6 months in the period up to 2019 against 2 million tons for 6 months of 2020 and 2021 In total, in 2020, the country handled 3.47 million tons of coal, in 2021 - 1.76 million tons. For comparison: in 2019, ports handled 16.8 million tons of coal per year, in 2018 - m - 20.8 million tons per year. Vostrukhova N. Latvia attracts coal to its ports URL:https://www.rzd-partner.ru/logistics/news/latviya-privlekaet-ugol-v-svoi-porty/ (accessed: 27.07.2022)

<sup>&</sup>lt;sup>270</sup> The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons <u>URL:URL:https://portnews.ru/news/332161/07/12/2022</u> (accessed: 12.07.2022)

<sup>&</sup>lt;sup>271</sup> The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons <u>URL:URL:https://portnews.ru/news/332161/07/12/2022</u> (accessed: 12.07.2022)

<sup>&</sup>lt;sup>272</sup> The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons URL:URL:https://portnews.ru/news/332161/07/12/2022

<sup>&</sup>lt;sup>273</sup> Vostrukhova N. Latvia attracts coal to its ports URL:URL:https://www.rzd-partner.ru/logistics/news/latviya-privlekaet-ugol-v-svoi-porty/ 27.07.2022

In connection with the difficulties that have arisen in the transportation of Kazakh cargo through Russian ports (St. Petersburg, Novorossiysk, Ust-Luga, Taman), associated with the conduct of a special military operation, the need for Kazakhstan to use the port facilities of Latvia has increased dramatically. Transshipment transit ports (Hamburg, Antwerp, Pyrenees, Rotterdam and Mugga) refused to accept Kazakh cargo. On March 03, 2022, an agreement was reached between the Vice Minister of Industry and Infrastructure Development of Kazakhstan B. Kamaliev and the Deputy State Secretary of the Ministry of Transport of Latvia U. Reimanis, with the participation of JSC NC "Kazakhstan Railways" and large forwarding companies from the Kazakhstan side and the general directors of three majority Latvian ports.<sup>274</sup> The Latvian participants presented the capacity and throughput of the Latvian ports, assuring their readiness to receive Kazakhstani cargo. The agreement at the ministerial level between Latvia and Poland on the mutual use of port facilities for coal transshipment also contributes to strengthening cooperation with Kazakhstan. Polish companies attract the capacities of Latvian ports, which are able to process up to 23 million tons of coal annually. In the future, it is planned to expand cooperation by creating a coal processing point in one of the ports of Latvia.<sup>275</sup>

The Latvian company Magnat Group has started a long-term strategic cooperation with the representative of the world's leading manufacturer and distributor of mineral fertilizers Yara (Norway), Yara Latvija, having started transshipment, packaging and storage of Yara mineral fertilizers at the Riga Nordic Terminal. The industrial partners of the enterprise are factories for the extraction of raw materials and the production of fertilizers in Finland, Norway, Germany and Denmark. The planned annual volume of transshipment and packaging of mineral fertilizers is up to 100 thousand tons per year, the packaging capacity is up to 150 tons per hour. Prior to this, small-scale packaging of mineral fertilizers was carried out at the Duna terminal of the port of Liepaja with further delivery of finished products to customers through the ports of the near abroad.276

The volume of transshipped agricultural cargo in June 2022 amounted to 0.21 million tons, which is the same as in May 2022. This was facilitated by the emergence of a new transit cargo cane sugar from Brazil, which was transported in transit to Uzbekistan. Stabilization of the

<sup>274</sup> Kazakhstan redirects cargoes located on the territory of the Russian Federation to Latvian ports URL:https://portnews.ru/news/326175/

<sup>275</sup> Vostrukhova N. Latvia attracts coal to its ports URL:https://www.rzd-partner.ru/logistics/news/latviyaprivlekaet-ugol-v-svoi-porty/ <sup>276</sup> Yara Latvija opens a warehouse for packaging and storage of mineral fertilizers in the port of Riga

URL:https://portnews.ru/news/333751/

transshipment of agricultural products was facilitated by the signing by the Riga Port Authority of a memorandum of cooperation with the national railway company of Uzbekistan during the visit of the Minister of Transport of Uzbekistan I. Makhkamov to Latvia. The memorandum provides the Port of Riga with the opportunity to promote information about its services on the official website of the Uzbek railway company to inform cargo owners and potential customers. In 2021, containers with agricultural and food products, machinery and equipment, electrical appliances, metal products, pharmaceutical and chemical goods were sent from the port of Riga to Uzbekistan. Mostly plastic products, fruits and nuts, seeds, vegetables and cotton were brought from Uzbekistan in containers. Since February 2022, Uzbek entrepreneurs have begun searching for new logistics routes. This led to an increase in the transshipment of goods to / from Uzbekistan: 48.9 thousand tons of cargo were delivered to the port of Riga by rail: plastics, nuts and fruits, mineral fertilizers; 52 thousand tons of cargo were sent to Uzbekistan, including 42.8 thousand tons of can be used for the Bort of Riga.

Negative dynamics is observed for bulk oil cargoes. The outlook for this sector is low. The Russian side is diversifying bulk flows to Asian markets. An optimistic assessment is given in the container transportation segment: mechanisms for the delivery and handling of containers in Latvian ports have been adjusted, container lines and ferries are functioning.

In general, pre-pandemic indicators in the ports of Latvia have not yet been achieved. According to Latvian experts, there is a "positive dynamics" in a number of segments: wood chips, grain, pellets, coal, mineral fertilizers. The published figures depend not only on transshipment volumes, but primarily on the system of payment for goods.<sup>278</sup> The players of the Latvian transport market are forced to choose a short planning horizon in the face of increased uncertainty in the implementation of the sanctions policy. Thus, in anticipation of the ban on the export of wooden materials from Russia and Belarus, there are market participants whose business volumes will decrease: only Baltic or Latvian timber is available for transshipment in ports. Starting from June 2022, the transshipment of grain from Russia and Belarus has also stopped. However, the stevedoring company of the Port of Riga, WT Terminal, has invested €2.6 million in the construction of a hangar for the storage and handling of grain cargo, which will increase the terminal's capacity for storing grain and grain products by 60%. WT Terminal management hopes

<sup>&</sup>lt;sup>277</sup> The port of Riga signed a memorandum of cooperation with Uzbekistan URL:https://portnews.ru/news/334323/
<sup>278</sup> Plus in the ports of Latvia - relative value URL: https://www.rzd-partner.ru/wate-transport/comments/plyus-v-portakh-latvii-otnositelnaya-velichina-/

for partial compensation of previous volumes through cooperation with Ukrainian shippers<sup>279</sup>, which is not certain.

Experts associate the missed opportunities of the Latvian transport system with weak analytical work. Transportation of Ukrainian grain is carried out by competitors. However, the main rail and road transportation of Ukrainian grain is carried out by Polish and Romanian companies. The reasons for losing the competitive war are the lack of a common border and the problem of diversifying corridors. In Latvia, unlike Lithuania, there is no European gauge of 1435 mm. In general, the situation for the Latvian economy is unstable. The onset of the winter period exacerbates the situation associated with the introduction of sanctions. The internal situation in Latvia requires the adoption of cardinal decisions, involving the introduction of a state of emergency in the energy sector and a ban on the export of sawn timber. However, national producers are motivated to send chips and pellets for export, and not to ensure the energy security of the country.<sup>280</sup>

Against the background of the relative prosperity of the majority Latvian ports, after Lithuania refused Russian and Belarusian cargo, the port of Klaipeda saw a decrease in cargo turnover by 19%.<sup>281</sup> However, there is notable activity in the country's transport sector to attract flows from third countries. In addition to the grain mentioned above and the container route to Duisburg, Lithuanian companies transport oil cargo from Poland to Ukraine.<sup>282</sup> They are involved in the process of transportation through the territories of foreign countries. Unlike Latvia (and Estonia), Lithuania has a land border with Poland and is directly connected to European recipients of goods. Lithuanian carriers win in terms of transportation costs, since they do not need to reload cargo, change railway chassis twice (compared to the Ukraine-Poland-Lithuania-Latvia route). The port of Klaipeda compensates for transit losses by exporting new crops grown in the country. Up to 80%<sup>283</sup> grains produced in Lithuania and sent for export are usually transhipped in the port of Klaipeda.<sup>284</sup> There are cases of combined transshipment of export cargo and transit. Stevedoring

<sup>&</sup>lt;sup>279</sup> Another hangar for grain will be built in the port of Riga URL:https://www.rzd-

partner.ru/logistics/news/v-rizhskom-portu-vozvedut-eshche-odin-angar-dlya-zernovykh/ 30.08.2022

<sup>&</sup>lt;sup>280</sup> Plus in Latvian ports – relative value URL:https://www.rzd-partner.ru/wate-transport/comments/plyus-v-portakh-latvii-otnositelnaya-velichina-/

<sup>&</sup>lt;sup>281</sup> Lithuania loses Russian cargo traffic URL:URL:https://www.rzd-partner.ru/logistics/news/litva-teryaet-rossiyskie-gruzopotoki/

<sup>&</sup>lt;sup>282</sup> By the middle of summer 2022, 11 trains have followed this route.

<sup>&</sup>lt;sup>283</sup> Lithuanian port of Klaipeda started exporting new crop grains URL:http://www.morvesti.ru/news/1679/97593/ 25.08.2022

<sup>&</sup>lt;sup>284</sup> For reference: in 2021, 3.3 million tons of grain were exported by sea. Importers: Nigeria, Spain and South African countries.

company Bega<sup>285</sup> showed commercial interest in the transshipment of Ukrainian products through the port of Klaipeda to the countries of Western and Northern Europe. The company has carried out work to stabilize the flow of goods delivered from Ukraine by rail and road, and to reduce the delivery time. In addition, the first large export batch of Ukrainian agricultural products (15,000 tons of sunflower oil) was loaded onto a tanker and shipped.<sup>286</sup>

Termination of commercial contacts by the State Company LTG with Russia<sup>287</sup> and Belarus led to a decrease in the volume of cargo transportation in the first half of 2022 compared to the same period in 2021 by 32.9%. The company's revenues decreased by 1.4%<sup>288</sup> and amounted to 202.5 million euros. A net loss of 6.6 million euros was recorded. It was not possible to compensate for the losses by increasing the volume of passenger traffic, although this segment showed an increase of 34.6%.<sup>289</sup>

The attraction of transit cargo, according to the Ministry of Communications and Transport of Lithuania, will be facilitated by the construction of a European standard railway to the port of Klaipeda. The Lithuanian Ministry of Transport and Communications has initiated the recognition of the Kaunas-Klaipeda section (250 km) as a priority project within the EU to receive European funding.<sup>290</sup>

Lithuania has prospects for the transit of liquefied natural gas (LNG). The LNG terminal operating in the port of Klaipeda fully meets the needs of Lithuania. Now 3.8 billion m3 of gas per year passes through the terminal. However, in the current gas market conditions, neighboring regions are in dire need of supplies that are two to three times higher than its capacity. The terminal operator Klaipedos

<sup>&</sup>lt;sup>285</sup> Bega operates three terminals in the port of Klaipeda. It specializes in transshipment of liquid (chemical and food) cargoes, fertilizers, cement, agricultural cargoes. The company's terminal for transshipment of universal bulk agricultural products has an annual throughput of about 4 million tons. Its covered tanks can store up to 450 thousand tons of bulk agricultural products at the same time. For reference: the cargo turnover of the port of Klaipeda in 2021 amounted to 45.6 million tons. Source: Bega official website

URL:http://www.bega.lt/ru/terminaly/nalivnye-gruzy/sypucie-gruzy

<sup>&</sup>lt;sup>286</sup> A large batch of agricultural products from Ukraine was sent through the port of Klaipeda (Lithuania) URL:https://portnews.ru/news/333963/ 16.08.2022

<sup>&</sup>lt;sup>287</sup> We are talking about commercial contracts, Kaliningrad transit is not taken into account

<sup>&</sup>lt;sup>288</sup> A slight decrease in income is explained by the preservation of Kaliningrad transit

<sup>&</sup>lt;sup>289</sup> Railway freight traffic in Lithuania fell by a third due to sanctions against Moscow and Minsk

 $<sup>\</sup>label{eq:url:url:url:https://infranews.ru/logistika/zheleznaya-doroga/60278-zheleznodorozhnye-gruzoperevozki-v-litve-upali-na-tret-iz-za-sankcij-protiv-moskvy-i-minska/ 31.08.2022$ 

<sup>&</sup>lt;sup>290</sup> The Ministry of Transport of Lithuania called for the laying of a European railway track to the port of Klaipeda URL:https://www.rzd-partner.ru/zhd-transport/news/mintrans-litvy-prizval-prolozhit-evropeyskuyuzheleznodorozhnuyu-koleyu-v-port-klaypedy/ 28.08.2022

nafta assesses the needs of the region and is considering two options for increasing capacity by 2025-2026. - up to 5 billion m3 or up to 6.3 billion m3.<sup>291</sup>

The problems of gas transit are also solved by the Estonian authorities. In Paldiski, the construction of a terminal for the reception of liquefied natural gas is underway. A similar terminal is under construction in Inkoo (Finland). Both terminals will be included in a single system. The terminal in Paldiski can only become a backup, since the LNG ship will most of the time be in Finland, where gas consumption is higher. Estonian power grid operator Elering installs gas pipes. The floating gasification unit was leased by the Finnish gas transmission company Gasgrid Finland. The LNG vessel will be serviced by the Finnish side.<sup>292</sup>

The reduction of Russian transit requires the Estonian government to look for new shippers. The geographical position of the country, the great distance from the post-Soviet republics, complicates the process. Nevertheless, the ports of Estonia entered the struggle for Kazakh coal. Cargo is planned to be pulled at the expense of a reduced railway rate.<sup>293</sup>

Of course, the partial or complete rejection of Russian cargo forces the Baltic countries to look for alternative suppliers, which, in modern conditions, is not always effective and efficient.

### **Prospects for Belarusian transit**

From February 01, 2022, Lithuania stopped accepting Belarusian trains with potash fertilizers heading towards the port of Klaipeda, the largest hub for transshipment of export fertilizers from Belarus at that time. In the port of Klaipeda, about 10-11 million tons of Belaruskali fertilizers were transshipped per year. Fertilizers "Belaruskali" in Lithuania accounted for about 20-25% of all cargo transported by rail. As a result of a political decision taken in March 2022, Klaipeda Oil products terminal Biriu kroviniu terminalas (BKT) announced the dismissal of almost all employees due to terminal downtime in the absence of cargo.<sup>294</sup> Due to the sanctions against the fertilizer producer Belaruskali, Lithuanian Railways (Lietuvos gelezinkeliai, LTG) lost not only 11 million tons of cargo per year and lost 61 million euros in income. Belarus' ban on the transit through its territory of oil and products of its

<sup>&</sup>lt;sup>291</sup> The demand of the gas market is two to three times higher than the capacity of the Lithuanian LNG terminal URL:https://tass.ru/ekonomika/15599035 30.08.2022

<sup>&</sup>lt;sup>292</sup> Estonia completes the first phase of LNG terminal construction URL:https://www.interfax.ru/business/860145 31.08.2022

<sup>&</sup>lt;sup>293</sup> Vostrukhova N. Latvia attracts coal to its ports URL:https://www.rzd-partner.ru/logistics/news/latviya-privlekaetugol-v-svoi-porty/ 27.07.2022

<sup>&</sup>lt;sup>294</sup> Belarus lost its share in the Klaipeda terminal BKT URL:https://rupec.ru/news/49698/ 11.08.2022

processing, fertilizers from Lithuania to Ukraine will lead to the loss of LTG 1.4 million tons of these cargoes and 17 million euros. However, transportation of oil products produced by the Orlen Lietuva enterprise (a structure of the Polish oil concern Orlen) for Ukraine bypassing Belarus has begun. It is planned to deliver 30 thousand tons of cargo through the territory of Poland every month.<sup>295</sup>

Overall, LTG is forecast to carry half as much cargo in 2022 as it did in 2021, about 26.5 million tonnes. it will be the biggest decline and the smallest cargo flow in the history of the company. Due to reduced cargo traffic, the company predicts that it could lose around 150 million euros in revenue this year.<sup>296</sup>

In the summer of 2022, Belaruskali lost its 30% stake in BKT. The share that previously belonged to Belaruskali, after agreeing on a deal with the Lithuanian Competition Council (Lithuanian antimonopoly service), will be bought by I. Udovitsky, having received sole control over the enterprise.<sup>297</sup>

Russian ports, as well as the Azov ports of the DPR and the Zaporozhye region are considered as alternative port facilities for the export of Belarusian cargo. The official policy of the Republic of Belarus involves the construction of its own infrastructure in the Russian Federation<sup>298</sup>, as well as the use of Russian ports to increase the volume of cargo transshipment. Belarus cooperates with nine Russian ports on different seas, and for the republic there are special tariffs that are mutually beneficial for both parties.<sup>299</sup> However, according to Russian experts, there is no common understanding to which Russian ports to send potash fertilizers in the absence of specialized capacities. According to the latest open information, it was about the transshipment of potassium through container terminals, but there is no confirmed data on whether it is carried out in practice and in what volumes.<sup>300</sup>

<sup>&</sup>lt;sup>295</sup> "Lithuanian Railways" began to transport oil products for Ukraine bypassing Belarus URL:https://www.interfax.ru/world/852936 19.07.2022

<sup>&</sup>lt;sup>296</sup> "Lithuanian Railways" began to transport oil products for Ukraine bypassing Belarus URL:https://www.interfax.ru/world/852936

<sup>&</sup>lt;sup>297</sup> The main shareholder of the Klaipeda Bulk Cargo Terminal will buy out the share of Belaruskali <u>URL:</u> https://www.interfax.ru/world/860496

<sup>&</sup>lt;sup>298</sup> See, for example, Belarus will build a port in the north-west of Russia

URL:https://www.kommersant.ru/doc/5504274 08/11/2022, Governor: plots for the construction of a Belarusian port in the Leningrad region will be leased URL:http://www.morvesti.ru/news/1679/97777/

<sup>&</sup>lt;sup>299</sup> Belarus in the first half of the year exported about 2 million cargoes through the ports of the Russian Federation URL:https://www.rzd-partner.ru/wate-transport/news/belorussiya-v-pervom-polugodii-postavila-na-eksport-cherez-porty -rf-okolo-2-mln-gruzov/, A delegation from Belarus discussed the transshipment of fertilizers through the port in Murmansk URL: http://www.morvesti.ru/news/1679/97568/

<sup>&</sup>lt;sup>300</sup> Chernov V. Baltic outcome: where will Russian cargoes leave the Baltic ports URL:https://portnews.ru/comments/3221/

#### Kaliningrad transit

In 2021, the volume of transportation of Lithuanian Railways (Lietuvos gelezinkeliai) within the framework of the Kaliningrad transit amounted to about 11.5 million tons of cargo, of which a significant part was food (1.3 million tons).<sup>301</sup> In addition to rail freight traffic, goods from the "mainland" part of the Russian Federation arrived by road, sea and air transport (see Fig.10). The sanctions affected all delivery methods, except for ships.



Figure 10 - Kaliningrad transit<sup>302</sup>

The first sanctions restriction on Kaliningrad transit was already introduced at the end of February 2022. "In connection with Russia's actions to destabilize the situation in Ukraine, on February 28, 2022, the Council adopted Decision (CFSP) 2022/335 amending Decision 2014/512/ CFSP. This decision introduced additional restrictive measures prohibiting Russian air carriers, any aircraft registered in Russia, and any aircraft not registered in Russia, owned or chartered or otherwise controlled by any Russian individual or legal entity, organization or organization, to

<sup>&</sup>lt;sup>301</sup> Lithuanian Railways to resume transit to Kaliningrad on Friday URL:htps://www.interfax.ru/world/853519

<sup>&</sup>lt;sup>302</sup> Source: Skorlygina N. Courtesy transit URL:https://www.kommersant.ru/doc/5448675 07/07/2022
land, accept for outside or flying over Union territory. It also prohibits any transactions with the Central Bank of Russia."<sup>303</sup>

The European Union and Russia have introduced mutual restrictions on international road transport. However, in the fifth package of sanctions against Russia, the European Union made an exception for road transit of goods that are not banned by the EU between the Kaliningrad region and the rest of Russia. This refers to the explanations according to which the restrictions do not imply a ban on the transportation of goods by rail and road to the Kaliningrad region from Russia, since we are talking about transportation between Russian regions.

Currently, the territory of Lithuania is mainly used for rail transit between the Kaliningrad region and the "mainland" part of Russia. Automobile transit is possible, but only for goods that are not under EU sanctions as prohibited for circulation between the Russian Federation and the European Union. Sanctioned goods account for about 30% of the total cargo flow.<sup>304</sup> Among them are building materials (metal structures, cement, wood, glass products, etc.), some types of industrial equipment, car tires and spare parts, etc. At the same time, rail transit is also limited. For each category, volume quotas are set: not higher than the average values in the period 2019-2021. For a number of product groups, these limits have already been exhausted..<sup>305</sup>

The main problems with the transit of goods to Kaliningrad began in June 2022, when the Lithuanian authorities notified that they would not let through goods that fell under EU sanctions.<sup>306</sup> On 06/18/2022, the government of the Republic of Lithuania announced a refusal to allow goods subject to EU sanctions to enter the Kaliningrad region. The Lithuanian Foreign Ministry explained the restrictions imposed by compliance with EU sanctions. EU High Representative for Foreign Affairs and Security Policy J. Borrell ruled out establishing a blockade of the exclave Russian region. However, he confirmed that the Lithuanian government was guided by the restrictive measures adopted by the EU. Such a policy of Lithuania has already found a theoretical explanation. Thus, Emma Ashfort, an associate professor at Georgetown University, in

<sup>&</sup>lt;sup>303</sup> Official Journal of the European Union L 56. Volume 65. 28.02.2022. Quote from:

URL:URL:https://uslugi.tpprf.ru/ru/sanctions\_2022/files/%D0%97%D0%B0%D0%BF%D1%80%D0%B5%D1%8 2%20%D0%BF%D0%B5%D1%80%D0%B5%D0%BB%D0%B5%D1%82%D0%BE%D0%B2%20%D0%95%D0 %A1%20%D1%80%D1%83%D1%81%20.pdf

<sup>&</sup>lt;sup>304</sup> The volume of cargo transit to Kaliningrad through Lithuania can be partially restored by autumn-winter URL:https://www.rzd-partner.ru/zhd-transport/news/obem-tranzita-gruzov-v-kaliningrad-cherez-litvu-k-oseni-zime-mozhet-byt-chastichno-vosstanovlen/ 16.08.2022

<sup>&</sup>lt;sup>305</sup> See, for example, Punegov A. Political scientist Mezhevich spoke about the deplorable situation in Kaliningrad. URL:https://www.osnmedia.ru/obshhestvo/politolog-mezhevich-rasskazal-o-plachevnosti-situatsii-v-kaliningrade/ 23.08.2022

<sup>&</sup>lt;sup>306</sup> We note right away that the European Commission soon came to the conclusion that, subject to control over transportation, transit to the region should not be limited.

an interview with Foreign Policy noted that the Lithuanian sanctions are an extremely dangerous choice and a clear step towards escalation. She believes this is a potential trap "when one member of an alliance - usually a smaller and weaker side - manages to drag their alliance partner into a fight that is not in the interests of that partner."<sup>307</sup> Lithuania proved to be more risk-averse and conflict-ready than the larger allied economies of France, Germany, and the United States.

Anticipating an escalation in relations between Russia and Lithuania, on June 13, 2022, the European Commission, with certain reservations, allowed Russia to transport sanctioned goods by rail to and from the Kaliningrad region through the EU. The European Commission issued guidance: "In accordance with the relevant regulation of the Council of the European Union and the guidance of the EC, as well as the interpretations of the competent authorities, in accordance with the conditions for strengthening the control of transit goods provided for in the EC guidance, LTG Cargo will resume transportation from ... July 22."<sup>308</sup> At the same time, it is specified that the EU must ensure that transit is not used to circumvent sanctions. The transit of military or dual-use goods and technology remains prohibited, regardless of the mode of transport chosen.

On July 22, 2022, LTG Cargo, a subsidiary of Lietuvos gelezinkeliai, resumed the transit of sanctioned goods between Russia and Kaliningrad. The management of LTG Cargo has clarified that the volume of rail freight should not exceed the three-year average, from January 2019 to the end of December 2021. The averages are calculated for each product code separately. Applications for transportation will be rejected if their volume reaches the average annual values. At the same time, goods previously transported by trucks will not be taken into account when calculating the average transportation indicator. The Lietuvos gelezinkeliai manual specifically states that "transportation of the luxury goods indicated in the manual will not be resumed until further clarification."<sup>309</sup>

Another obstacle to the Kaliningrad transit was the termination from August 15, 2022 by the Lithuanian Siauliai Bank<sup>310</sup>, serving the Kaliningrad transit, operations with Russia in rubles. It should be noted that Russian Railways pays for Kaliningrad transit with Lithuania in foreign currency. Intentions were announced to suspend service to all Russian customers. The

<sup>&</sup>lt;sup>307</sup> Ashford E. Will the Kaliningrad Crisis Lead to War? URL:https://foreignpolicy.com/2022/06/24/kaliningradrussia-lithuania-crisis-lead-to-war/ 24.07.2022

<sup>&</sup>lt;sup>308</sup> Lithuanian Railways to resume transit to Kaliningrad on Friday URL:htps://www.interfax.ru/world/853519 22.07.2022

<sup>&</sup>lt;sup>309</sup> The list of luxury items includes thoroughbred horses, truffles, perfumes, household appliances over €750 and other goods.

<sup>&</sup>lt;sup>310</sup> Siauliai Bank is the only bank in Lithuania authorized to service Kaliningrad transit

representative of the European Commission, A. Podesta, stated that the operations of commercial banks to pay for the Kaliningrad freight transit through Lithuania do not violate the sanctions regime. The authorities of the Kaliningrad region made a proposal to Lithuania as a solution to the problem to open a special account in the treasury for direct payment if a commercial bank will not accept payment.<sup>311</sup> In turn, Russian transport and logistics companies have long foreseen the possibility of suspending operations by Šiauliai Bank. A variety of mechanisms have been developed to reduce commercial risks, including payment for transit through foreign territories through agents in other countries.<sup>312</sup>

The situation around the Kaliningrad transit through Lithuania did not find solutions that would suit all those interested. Lithuania categorically rejects the possibility of organizing transit corridors for Russian goods, considering it necessary to have complete control over the goods transported through its territory. Russia is considering a counter ban on the import of all goods through the Baltics. The head of the Federation Council, V. Matviyenko, threatened Lithuania with retaliatory sensitive measures. The governor of the Kaliningrad region, A. Alikhanov, announced "four options for responding to Lithuania's actions, the last of which could be a complete ban on any transit and any import of goods from the three Baltic states to the Russian Federation, with the exception of Kaliningrad." The European Commission is in no hurry to make decisions.<sup>313</sup> Experts do not rule out the introduction of measures prohibited by the Russian Federation, which will exacerbate logistical problems, bringing benefits exclusively to Poland.<sup>314</sup>

The potential benefit to Poland can be explained as follows. A strict ban on transit through the Baltic countries will affect the delivery routes for a sufficient amount of imported goods from Europe to the territory of the Russian Federation that are not under sanctions. The transit of European goods to the Russian Federation will take place along the only possible route, through Poland, which will become a monopolist. This situation may lead to dependence of domestic importers on Poland, a rapid increase in transportation prices and a reduction in imports of European-made goods in Russia.

<sup>&</sup>lt;sup>311</sup> An alternative to paying for transit through a Lithuanian bank has been found URL:URL:https://www.rzd-partner.ru/logistics/news/alternativa-oplaty-tranzita-cherez-litovskiy-bank-naydena/11.08.2022

<sup>&</sup>lt;sup>312</sup> The volume of cargo transit to Kaliningrad through Lithuania can be partially restored by autumn-winter URL:https://www.rzd-partner.ru/zhd-transport/news/obem-tranzita-gruzov-v-kaliningrad-cherez-litvu-k-oseni-zime-mozhet-byt-chastichno-vosstanovlen/ 16.08.2022

<sup>&</sup>lt;sup>313</sup> See, for example, Russia believes that the EU does not put enough pressure on Lithuania on the issue of Kaliningrad transit URL:https://www.kommersant.ru/doc/5458321 11.07.2022

<sup>&</sup>lt;sup>314</sup> Skorlygina N. Transit of courtesy URL:https://www.kommersant.ru/doc/5448675 07.07.2022

Goods that are under sanctions are delivered to the Kaliningrad region by ferry. Complete replacement of land transit by maritime transit is not commercially justified. This will require the operation of 20-22 vessels on the line instead of the five currently plying, and will be 30% more expensive than land-based tariffs, although the Government of the Russian Federation is considering the issue of subsidizing such transportation. Experts warn that the reorientation of cargo to the ferry entails an increase in delivery times. The transit time on a direct route by road through the Baltic States was usually 5-6 days<sup>315</sup>, ferry transportation takes from 15 days<sup>316</sup>. In addition, the number of places on the ferry is limited and booked one to two months in advance. Therefore, the rejection of Lithuanian transit may lead to a shortage of certain groups of goods."

Lithuania is commercially interested in the transit of goods to Kaliningrad. Its desire to permanently lose a significant item of national income is doubtful.

According to experts, "when common sense finally prevails and instead of the emotions underlying the initiatives taken by European states, rationality comes and representatives of the transit countries count their own losses, they will understand how much they are depriving themselves of a significant piece of the" pie ".<sup>317</sup>

In general, against the backdrop of a sharp decline in imports from the EU (according to experts, more than 70%), the redistribution of cargo flows will have a more painful impact on the Baltic countries, up to the suspension of checkpoints on the Latvian-Russian and Estonian-Russian borders. As a result, cargoes are redirected to the Polish-Belarusian corridor, which traditionally attracted about 2/3 of trade between Russia and the EU. Negative consequences will be both the closure of access for Latvian and Estonian carriers to the Russian Federation, and the aggravation of the situation with road transport through Belarus, an increase in queues at the Belarusian-Polish border for two to three days. Due to the departure of Latvian road carriers, tariffs may increase. Russian road carriers will suffer certain losses in the form of securing part of the international transportation route in the direction of the Baltic countries to the state border of the Russian Federation.

<sup>&</sup>lt;sup>315</sup> Including queues at the Lithuanian-Russian border and customs inspections, which usually last from two to five hours

<sup>&</sup>lt;sup>316</sup> Taking into account the time of delivery to the port of Ust-Luga

<sup>&</sup>lt;sup>317</sup> The volume of cargo transit to Kaliningrad through Lithuania can be partially restored by autumn-winter URL:https://www.rzd-partner.ru/zhd-transport/news/obem-tranzita-gruzov-v-kaliningrad-cherez-litvu-k-oseni-zime-mozhet-byt-chastichno-vosstanovlen/ 16.08.2022

Suspension of checkpoints on the border of the Russian Federation with the Baltic countries will impede the movement of goods from the CIS countries in the direction of the Baltic ports, which will create additional difficulties in the formation of their hinterland and the loss of the function of transit countries.<sup>318</sup>

Verification of the hypothesis put forward in this paragraph "Introduced anti-Russian sanctions contribute to attracting transit cargo to the Baltic countries" showed that against the background of a general drop in the cargo turnover of the Baltic ports compared to the prepandemic period, a sharp decrease in the Latvian and Estonian ports and the termination of Russian and Belarusian transit through the port of Klaipeda partly offset by transit services from the former Soviet republics. However, the volume of attracted cargo does not compensate for the lost Russian transit. In addition, it is premature to talk about the stability of flows from third countries due to the long land shoulder and the tense political situation.

In general, one can state an obvious conflict of interest. The EU is pursuing a tough sanctions policy towards Russia. But at the same time, the activity of the private business of the Baltic States in the field of transport and logistics cooperation with Russia is steadily increasing.

In turn, focusing exclusively on the eastern direction of Russian logistics is risky. The Chinese government declares support for Russia, but large Chinese banks refuse to finance foreign trade contracts with the Russian Federation. PRC private companies take a wait-and-see attitude when concluding new deals with Russian enterprises.<sup>319</sup>

<sup>&</sup>lt;sup>318</sup> Transit response URL:https://www.kommersant.ru/doc/5447700 06.07.2022

<sup>&</sup>lt;sup>319</sup> Build a transport framework for a new reality URL:https://www.kommersant.ru/doc/5356864 24.05.2022

## Conclusion

The regional economic policy of the European Union, announced in the Treaty of Rome in 1957, received real development only a quarter of a century later. Country and regional disproportions, and often confrontations, did not allow using its potential to solve economic, social and political problems.

As EU candidate countries, Estonia, Latvia and Lithuania have modernized their transport sector in line with EU rules. They became full-fledged participants in the European regional programs in the fifth program period, in 2007. Since that time, the Baltic countries have received significant financial and technical assistance, exceeding their contributions to the EU budget.

The current transport infrastructure of the Baltic States has organically blended into the European transport network. Roads and railways link the Baltic countries with Central and Western Europe, as well as with neighboring non-EU countries. Thanks to this, Estonia, Latvia and Lithuania were able to participate in cross-border cooperation programs and develop their peripheral regions. The EU-initiated Rail Baltica railway project, which has priority status, is provided with financial, technical and legal support from the European Union. The route of the railway will allow countries to organize high-speed passenger transportation, and possibly solve geopolitical problems. However, countries will hardly be able to attract transit cargo to the railway route. The business circles of the Baltic countries are interested in attracting transit cargo, primarily to ports, in the future. For this to remain possible, the land infrastructure leading to ports needs to be maintained. Historical experience shows that the main factor in the development of the port is the availability of cargo to be delivered to the port. The main way to deliver goods to ports is traditionally the railway. The ports of the Baltic countries received a noticeable impetus for accelerated development in the 19th century, after the completion of the construction of railways connecting them with Russian regions with a rich cargo base. Another opportunity for the development of ports was their narrow specialization in catching and processing fish or performing military functions. However, in both cases, the development of port activities, regardless of the nationality of the ports in the 19th and early 20th centuries, went to the detriment of the development of their commercial potential.

The currently envisaged full transition to the European gauge will create additional obstacles to transit from the territories of the post-Soviet space, while at the same time facilitating supplies from Poland. This will be an additional factor in strengthening the role of Poland as a link

between the EU and Russia. In addition, rail routes between the inland landlocked regions of the EU and the Baltic countries will prove to be more convenient and possibly cheaper.

The hypothesis put forward in the third chapter (clause 3.1.) about the expediency and readiness of the Baltic ports to use the strategy of coopetition as a whole was not confirmed. The choice of a coopetition strategy by representatives of the port business and national port organizations of the region under study is expedient in the event of force majeure or during periods of "peak" load generated, in particular, by the favorable situation on world commodity markets. After the introduction of anti-Russian sanctions, the competition between the ports of the Baltic countries for attracting alternative transit cargo flows has intensified. The seaports of the Baltic countries over the past decade have not been considered as priority participants in the Russian transit policy. At the same time, their use may be of interest to the Eurasian countries that do not have access to the sea, in particular Kazakhstan. The political situation in 2022 does not allow us to make a forecast about the possibilities of delivering transit cargo by land transport to / from the ports of the Baltic countries, although the interests of Russian business are still present in the port industry of these countries.

The imposition of European Union sanctions against the Russian Federation has weakened the transit functions of the Baltic countries. Put forward in clause 3.2. the hypothesis about the attraction of transit cargo flows through the territory of the Baltic countries was partially confirmed. Against the backdrop of a general drop in the cargo turnover of the Baltic ports compared to the pre-pandemic period, a sharp reduction in the Latvian and Estonian ports and the cessation of Russian and Belarusian transit through the port of Klaipeda is partially offset by transit services from the former Soviet republics. However, attracting new customers from the post-Soviet countries did not compensate for the loss of Russian freight traffic. In addition, it is premature to talk about the stability of flows from third countries due to the long land shoulder and the tense political situation. The interests of the transport and logistics business of the Baltic countries, the presence of "windows of opportunity" of the EU sanctions policy allow the transshipment of Russian cargo not subject to sanctions in Latvian and Estonian ports in the context of the anti-Russian state policy.

In general, regional economic policy has a significant impact on the development of the transport sector in the Baltic States. Despite the small share occupied by Estonia, Latvia and Lithuania in European financial programs, the assistance received from the EU is targeted and contributes to the technical modernization of the transport industry. Innovative mechanisms

introduced in this sector of the economy make it possible to create jobs, ensure the accessibility of national territories, and solve environmental problems. At the same time, it should be noted that, despite the opportunity to support the port sector that appeared in 2011, the EU finances only "ancillary" activities of the Baltic ports: rescue services are being reformed, port management is being streamlined, and navigational equipment has been upgraded at an earlier stage. Therefore, ports, as business entities, in the process of implementing development programs should rely on their own resources and limited support from the state.

## **Bibliography**

- An alternative to paying for transit through a Lithuanian bank has been found URL: https://www.rzd-partner.ru/logistics/news/alternativa-oplaty-tranzita-cherez-litovskiybank-naydena/ (accessed: 11.08.2022) (In Russian)
- Antonenko O. Latviyan oligarch Aivar Lembergs has come under US sanctions. The work of the port of Ventspils is under threat // BBC Russian Service, Riga. 12/10/2019. URL: https://www.bbc.com/russian/features-50729930. (accessed:: 20.04.2020) (In Russian)
- 3. Baklanova M.P. Regional planning in Japan. Vladivostok. Dalnauka. 2003. (In Russian)
- Baransky N.N. Selected works. Formation of Soviet economic geography. M. Thought. 1980. (In Russian)
- Barro R., Sala i Martin H. The economic growth. M., Binom. Lab. Knowledge, 2010, 824 p. (In Russian)
- Belarus in the first half of the year exported about 2 million cargoes through the ports of the Russian Federation URL: https://www.rzd-partner.ru/wate-transport/news/belorussiya-vpervom-polugodii-postavila-na-eksport-cherez-porty-rf-okolo-2-mln-gruzov (accessed: 01.08.2022) (In Russian)
- Belarus lost its share in the Klaipeda terminal BKT URL:https://rupec.ru/news/49698/ 11.08.2022 (accessed 11.08.2022) (In Russian)
- 8. Belarus will build a port in the north-west of Russia URL:https://www.kommersant.ru/doc/5504274 (accessed:: 11.08.2022) (In Russian)
- IA BELTA. Official website. URL: https://www.belta.by/ (дата обращения: 26.3.2008) (In Russian)
- Brandenburger A. M., Nalebuff B. J. Co-opetition. Competitive cooperation in business. M. Omega-L. 2012. 352 p. (In Russian)
- 11. Busygina I. M., Klimovich S. A. A coalition within a coalition: the Baltic countries in the European Union // Baltic region. 2017. V. 9, No 1. S. 7-26. (In Russian)
- Busygina I.M., Filippov M.G. Changing the incentives and strategies of national governments under conditions of multilevel governance in the European Union // Polis. Political studies. 2020. No 5. P. 148-163. (In Russian)

- Busygina I., Filipov M. The European Union from particular to general. Limits and perspectives geopolitics of the EU // Russia in global politics. 2010. V. 8, No 1. pp. 121-133(In Russian)
- 14. Another hangar for grain will be built in the port of Riga URL: https://www.rzdpartner.ru/logistics/news/v-rizhskom-portu-vozvedut-eshche-odin-angar-dlya-zernovykh/ (accessed:: 30.08.2022) (In Russian)
- 15. Estonia says Rail Baltica project is several years behind schedule https://tass.ru/ekonomika/12671889(In Russian)
- Port of Ventspils 100 years ago. Electronic news portal «Ventasbalss.lv» URL: <u>https://rus.ventasbalss.lv/zinas/vesti-svobodnovo-porta/35307-ventspilsskij-port-100-let-nazad</u> (In Russian)
- 17. Foreign trade transport operations and logistics / ed. prof. D.S. Nikolaev. M. ANKIL.1998.
- Vostrukhova N. Latvia attracts coal to its ports URL: https://www.rzdpartner.ru/logistics/news/latviya-privlekaet-ugol-v-svoi-porty/ (accessed:: 27.07.2022) (In Russian)
- Vroblevskaya S.A. European Regional Policy as a Factor of Foreign Economic Relations Between Russia and the Baltic States // Economics and Management. 2017(2), pp.12-19. (In Russian)
- Goloviznin A. Russian ports lack the capacity to take everything from the Baltics. Interview with "DP" Director for "Analytics and Logistics" LLC "Morstroytekhnologiya" Alexander Goloviznin. 09.03.2018, https://www.dp.ru/a/2018/09/02/Nam\_samim\_nikak. (accessed:: 20.04.2020) (In Russian)
- 21. Granberg A.G. Fundamentals of regional economy. M. GUVSHE. 2000, p. 403.. (In Russian)
- Granberg A.G., Suslov V.I. Coalition analysis of multi-regional systems: theory, methodology, results of analysis (USSR on the eve of collapse). Scientific report. Novosibirsk. 1993, p. 62(In Russian)
- 23. The cargo turnover of Russian seaports for the first half of 2022 decreased by 0.5% to 410 million tons URL: URL:https://portnews.ru/news/332107/(In Russian)

- Cargo turnover of Russian seaports in January December 2019. JSC «Morcenter-TEK» -URL::http://morcenter.ru/news/gruzooborot-morskih-portov-rossii-za-yanvar-dekabr-2019-goda (accessed: 10.05.2020) (In Russian)
- Cargo turnover of Russian seaports in January 2020. JSC «Morcenter-TEK» -URL::http://morcenter.ru/news/gruzooborot-morskih-portov-rossii-za-yanvar-2020-g (accessed: 10.05.2020) (In Russian)
- The cargo turnover of the port of Riga (Latvia) for the first half of 2022 increased by 11.5% to 11.32 million tons URL: <u>https://portnews.ru/news/332161/</u> (accessed: 12.07.2022) (In Russian)
- Governor of Kuban: as part of the creation of the Southern Hub, the capacity of the ports of the region will be increased by 30% // Sea ports. 2020. No. 1. URL: http://www.morvesti.ru/news/1679/83085/. (accessed:: 20.04.2020) (In Russian)
- Governor: plots for the construction of a Belarusian port in the Leningrad region will be leased - URL: http://www.morvesti.ru/news/1679/97777/ (accessed: 05.09.2022) (In Russian)
- Gugnyak V. Ya. Power as a fundamental principle of economic activity (or a few comments on the economic concept of Francois Perroux) / Economic theory on the threshold of the XXI century. Ed. Yu. M. Osipova, V. T. Pulyaeva. SPb. : Petropolis, 1996. (In Russian)
- A delegation from Belarus discussed the transshipment of fertilizers through the port in Murmansk URL: http://www.morvesti.ru/news/1679/97568/ (accessed: 24.08.2022) (In Russian)
- 31. Demin V., Karelina M., Terentiev A. Methodology for achieving a dynamic balance between the values of throughput capacities of transport and warehouse complexes and cargo flows in logistics systems // Logistics. 2018. №2. pp. 32-36. (In Russian)
- European Transport Policy: Trends and Priorities // Transit Business Bulletin. 1998. No. 41. pp. 6–8. (In Russian)
- Evtikhova S.A., On the issue of scenarios for the development of the transport infrastructure of the Baltic countries in the XXI century // Problems of modern economics. 2023 No. 2. With. 262-266
- The European Union in global economic management / Editor M. V. Strezhneva. M., 2017. (In Russian)

- 35. Unified Transport System / ed. V.G.Galaburdy. M. Transport. 2001. p.288 (In Russian)
- Erasova E.A. Competitiveness of the economy of modern Russia: indicators and expert assessments // Vestnik of St. Petersburg State University. Series Economics. 2002. Issue 2. (In Russian)
- Efimova E. G., Volovoy V., Vroblevskaya S. A. Sea ports of the Eastern Baltic and the transit policy of the Russian Federation: competition or cooperation? // Baltic region. 2021 Vol. 13, No. 3 S. 125-148. (In Russian)
- Efimova E.G., Vroblevskaya S.A. On the issue of the integration of logistics systems In the collection: Science of St. Petersburg State University - 2020. Collection of materials of the All-Russian Conference on Natural Sciences and Humanities with International Participation. St. Petersburg, 2021, S. 864-865.
- Efimova E.G., Vroblevskaya S.A. Innovative environment as a factor in the development of international transport infrastructure In the collection: Science of St. Petersburg State University-2020. Proceedings of the International Conference on Natural and Human Sciences. St. Petersburg State University. 2021. S. 906-907. (In Russian)
- 40. Efimova E.G., Vroblevskaya S.A. Transport and transit policy in the Baltic Sea region: the interests of the Baltic countries and the position of Russia In the collection: Evolution of the international trading system: problems and prospects. Materials of the International conference. 2017. S. 174-189. (In Russian)
- 41. Efremova K. A. From regionalism to transregionalism: theoretical understanding new reality // Comparative Politics. 2017. V. 8, No 2. S. 58-72. (In Russian)
- Railway freight traffic in Lithuania fell by a third due to sanctions against Moscow and Minsk URL:https://infranews.ru/logistika/zheleznaya-doroga/60278-zheleznodorozhnyegruzoperevozki-v-litve-upali-na-tret-iz-za-sankcij-protiv-moskvy-i-minska/ (accessed: 31.08.2022)(In Russian)
- 43. Zverev Yu.M., Mezhevich N.M. Challenges to Regional Security: The Baltic Vector. International life. 2021. No. 1. p. 28. (In Russian)
- Import from the EU to the Russian Federation for March-May 2022, with possible movement through Kazakhstan and Turkey URL:https://www.rzd-partner.ru/logistics/news/import-izes-v-rf-za-mart-may-(accessed: 23.08.2022) (In Russian)
- 45. Kazakhstan redirects cargoes located on the territory of the Russian Federation to Latvian ports URL: https://portnews.ru/news/326175/ (accessed: 04.03.2022) (In Russian)

- 46. China and Eastern Europe: links of the new Silk Road / editors V. Mikheev, V. Shvydko. M. : Institute of World Economy and International relations, Russian Academy of Science 2016. (In Russian)
- 47. Lithuanian port of Klaipeda started exporting new crop grains URL:http://www.morvesti.ru/news/1679/97593/ (accessed: 25.08.2022) (In Russian)
- Korsunsky B.L., Leonov S.N. Management of the development of the problem region / Editors P.A. Minakir. Russian Academy of Science. Far East Branch. Institute of Economics research. Khabarovsk: RIOTIP. 2006. (In Russian)
- Koryakin I. Russian cargo blocked the way. What is fraught with the ban on transit through the Baltic countries URL: https://www.kommersant.ru/doc/5270626 (accessed: 22.03.2022) (In Russian)
- 50. A large batch of agricultural products from Ukraine was sent through the port of Klaipeda (Lithuania) URL: https://portnews.ru/news/333963/ (accessed: 16.08.2022) (In Russian)
- 51. Kuznetsov D. A. The phenomenon of transregionalism: problems of terminology and conceptualization // Comparative Politics. 2016. No 2. P. 14-25. (In Russian)
- 52. Kurenkov P., Safronova A., Kakhrimanova D. Logistics of international intermodal freight transportation // Logistics. 2018. №3. pp. 24-27. (In Russian)
- 53. Loesh A. Spatial organization of the economy. M. Nauka, 2007, 664 p. (In Russian)
- Lithuania received another 100 million litas from the European Regional Development Fund. Lithuanian courier - URL: <u>https://www.kurier.lt/litva-poluchila-eshhe-100-mln-litoviz-evrop/</u> (accessed 15.03.2018) (In Russian)
- Lithuania loses Russian freight traffic URL: URL:https://www.rzdpartner.ru/logistics/news/litva-teryaet-rossiyskie-gruzopotoki/ URL: https://www.rzdpartner.ru/logistics/news/litva-teryaet-rossiyskie-gruzopotoki/ (accessed: 25.08.2022) (In Russian)
- 56. Lithuanian Railways to resume transit to Kaliningrad on Friday URL: https://www.interfax.ru/world/853519 (accessed: 22.07.2022) (In Russian)
- 57. "Lithuanian Railways" began to transport oil products for Ukraine bypassing Belarus URL:https://www.interfax.ru/world/852936 (accessed: 19.07.2022)
- 58. Between principles and pragmatism. A look at the Ukrainian crisis from Brazil, India,

China, South Africa [Electronic resource] / ed. Felix Hett, Moshe Win. Berlin, 2015. P. 5. URL: <u>https://library.fes.de/pdf-files/id-moe/11511.pdf</u> (In Russian)

- 59. Mezhevich N. M., Shamakhov V. A. Belarus and the Baltic states in the transport system policy of Russia and China: scientific report. SPb. : CPI SZIU RANEPA, 2019. (In Russian)
- Mezhevich N.M., Senik N.M. Expert report / St. Petersburg, 2021. Ser. Economy. 37 p. (In Russian)
- Meizer A. Ports 2017: transit games and the search for bypassing Russia. IA REGNUM.07.01.2018. URL:https://regnum.ru/news/2364954.html. (accessed: 20.04.2020) (In Russian)
- 62. The Ministry of Transport of Lithuania called for the laying of a European railway track to the port of Klaipeda URL: https://www.rzd-partner.ru/zhd-transport/news/mintrans-litvy-prizval-prolozhit-evropeyskuyu-zheleznodorozhnuyu-koleyu-v-port-klaypedy/ (accessed: 28.08.2022) (In Russian)
- 63. The world leader in container transportation will sell the last asset in Russia URL: https://www.rbc.ru/business/29/08/2022/630cc9189a794786d27525b4 (accessed:29.08.2022) (In Russian)
- 64. Models in geography. Collection of articles / Ed. R. J. Chorley and P. Hagget. M: Progress, 1971. 381 p. (In Russian)
- 65. Molycorp bought the last shares of Sillamäe plant Silmet URL: https://rus.delfi.ee/statja/60405298/molycorp-kupil-poslednie-akcii-sillamyaeskogozavoda-silmet. (In Russian)
- 66. The volume of cargo transit to Kaliningrad through Lithuania can be partially restored by autumn-winter URL: https://www.rzd-partner.ru/zhd-transport/news/obem-tranzita-gruzovv-kaliningrad-cherez-litvu-k-oseni-zime-mozhet-byt-chastichno-vosstanovlen/ (accessed: 16.08.2022) (In Russian)
- 67. Olenchenko V. A., Mezhevich N. M. The Visegrad Group and the Baltic Assembly: coalitions within the European Union in the Russian foreign policy perception // Baltiyskiy region. 2021. V. 13, No 3. p. 25. (In Russian)
- The main shareholder of the Klaipeda Bulk Cargo Terminal will buy out the share of Belaruskali <u>URL: https://www.interfax.ru/world/860496</u> (accessed: 02.09.2022) (In Russian)

- 69. The European Union. Official Journal. Л 56. Vol. 65. 28.02.2022. URL: https://uslugi.tpprf.ru/ru/sanctions\_2022/files/%D0%97%D0%B0%D0%BF%D1%80%D0 %B5%D1%82%20%D0%BF%D0%B5%D1%80%D0%B5%D0%BB%D0%B5%D1%82 %D0%BE%D0%B2%20%D0%95%D0%A1%20%D1%80%D1%83%D1%81%20.pdf (accessed: 10.08.2022) (In Russian)
- 70. Eesti Raudtee. Official website URL: <u>https://www.evr.ee/ru/o-predpriyatii</u> (In Russian)
- 71. Port of Ventspils. Official website URL: https://www.portofventspils.lv/ru/ (In Russian)
- 72. Bega. Official website <u>URL:http://www.bega.lt/ru/terminaly/nalivnye-gruzy/sypucie-gruzy</u> (In Russian)
- 73. State Port of Klaipeda. Official website URL: https://www.portofklaipeda.lt/ (In Russian)
- 74. Port of Liepaja. Official website URL: https://liepaja-sez.lv/ru/(In Russian)
- 75. Freeport of Riga. Official website URL: https://rop.lv/ru/(In Russian)
- Federal State Budgetary Institution "Administration of SeaPorts of the Baltic Sea". Official website - URL: http://www.pasp.ru/morskie\_porty\_baltiyskogo\_morya (accessed: 10.05.2020) (In Russian)
- 77. Transshipment of iron ore through the port of Ust-Luga fell by almost half over the year URL: https://www.kommersant.ru/doc/5435757 (accessed: 29.06.22) (In Russian)
- Transshipment of exports in Russian seaports in the first half of the year decreased by 0.4% to 356.3 million tons URL: <u>https://portnews.ru/news/334433/</u> (In Russian)
- Pilyasov A.N. Regional industrial policy in the Arctic territories: what is it and what should it be? The North and the Market: Shaping the Economic Order. 2021. No. 3 (73). pp. 7-29. (In Russian)
- Plus in the ports of Latvia relative value URL: https://www.rzd-partner.ru/watetransport/comments/plyus-v-portakh-latvii-otnositelnaya-velichina-/ (accessed: 31.08.2022) (In Russian)
- The Port of Riga invested 11.7 million euros in the development of its infrastructure in 2021 URL: https://portnews.ru/news/332523/ (accessed: 19.07.2022) (In Russian)
- 82. Port of Riga signed a memorandum of cooperation with Uzbekistan URL: https://portnews.ru/news/334323/ (accessed: 29.08.2022) (In Russian)

- Port of Sillamae. Booklet 2018. URL :http://www.silport.ee/SILPORT\_booklet\_ru.pdf (In Russian)
- Porter M. Competitive advantage. How to achieve a high result and ensure its sustainability. M. Alpina Publisher. 2019. 716 p. (In Russian)
- 85. Build a transport framework for a new reality URL: https://www.kommersant.ru/doc/5356864 (accessed: 24.05.2022) (In Russian)
- The demand of the gas market is two to three times higher than the capacity of the Lithuanian LNG terminal - URL: https://tass.ru/ekonomika/15599035 (accessed: 30.08.2022) (In Russian)
- Baltic States: market overview, Russian exports, trade turnover. Unified information portal "Exporters of Russia" - URL: http://www.rusexporter.ru/research/country/detail/2142/ (accessed: 10.05.2020) (In Russian)
- Discussions continue on the status of the port of Liepaja. Information agency RZD-PARTNER.RU URL: <u>https://www.rzd-partner.ru/wate-transport/news/prodolzhaetsyaobsuzhdenie-statusa-liepayskogo-porta/</u> (In Russian)
- Prokhorov V., Adukonis N. Significance of the complex of cargo terminals in the port of Ust-Luga for the Russian economy // Logistics. 2018. №3. pp.32-38. (In Russian)
- Punegov A. Political scientist Mezhevich spoke about the deplorable situation in Kaliningrad. URL:https://www.osnmedia.ru/obshhestvo/politolog-mezhevich-rasskazal-oplachevnosti-situatsii-v-kaliningrade/ (accessed: 23.08.2022) (In Russian)
- 91. Decree of the Government of the Russian Federation of July 10, 2001 N 910-r (as amended on June 6, 2002) "On the program of socio-economic development of the Russian Federation for the medium term (2002 - 2004)". Clause 4.1. - URL: <u>http://www.consultant.ru/document/cons\_doc\_LAW\_32708/3b3b53006caa0494391f22e89</u> <u>8ffba8e1a78716b/</u> (In Russian)
- 92. Regional Development: The Experience of Russia and the European Union / Ruk. ed. coll. and resp. ed. A.G. Granberg. M.: Economics. 2000, p. 155. (In Russian)
- 93. Russia feels a shortage of specialized terminals for transshipment of chemical cargoes experts URL: URL:https://portnews.ru/news/329855/ URL: https://portnews.ru/news/329855/ (accessed: 26.05.2022) (In Russian)

- Russia believes that the EU does not put enough pressure on Lithuania on the issue of Kaliningrad transit URL: https://www.kommersant.ru/doc/5458321 (accessed: 11.07.2022) (In Russian)
- Skorlygina N. Farewell, container URL: https://www.kommersant.ru/doc/5238836 (accessed: 02.03.2022) (In Russian)
- Skorlygina N. Transit of courtesy URL: https://www.kommersant.ru/doc/5448675 (accessed: 07.07.2022) (In Russian)
- 97. The specifics of regional policy in the Baltic countries URL: <u>https://economy-web.org/?p=450</u> (accessed: 21.08.2022) (In Russian)
- Strategic management: region, city, enterprise / Edited by D.S. Lvov, A.G. Granberg, A.P. Egorshina M. Economics, 2004, p. 42 (In Russian)
- Tyrol J. Markets and market power: the theory of industrial organization. in 2 vols. St. Petersburg: School of Economics 2000. XLII+745 p. (In Russian)
- Transit response URL: https://www.kommersant.ru/doc/5447700 (accessed: 06.07.2022) (In Russian)
- 101. Ventspils Freeport Authority, Ventspils Development Agency, Business Development Association and Latvian Transit Business Association. Official web-site. <u>https://www.portofventspils.lv/en</u> (accessed: 26.08.2022) (In Russian)
- 102. Federal State Unitary Enterprise "Rosmorport". Official website. URL: http://www.rosmorport.ru/filials/spb seaports/ (accessed: 10.11.2020). (In Russian)
- 103. Filey A. It all started with Russian trade: why the Port of Riga is in crisis. URL: https://www.rubaltic.ru/article/kultura-i-istoriya/19022020-vse-nachinalos-s-russkoytorgovli-pochemu-rizhskiy-port-perezhivaet-krizis/ (In Russian)
- 104. Khlutkov A. D., Mezhevich N. M. Memories of the Future: Traditional Russian economic practices in the new foreign policy environment. Article one. Industrial policy // Management consulting. 2022. No 4. P. 10–18 (In Russian)
- Kholopov K.V., Rarovsky P.E. Russian market of international container transit in 2019 and prospects for its development // Russian Foreign Economic Bulletin. 2019. No. 9. pp. 61-68. (In Russian)

- L. Tsoukalis, The New European Economy: An Attempt at Rethinking. SPb. Petropolis. 2001. p.310 (In Russian)
- 107. Chernov V. Baltic results. Information portal PortNews. 2019. URL: https://portnews.ru/comments/2619/. (accessed: 20.04.2020) (In Russian)
- Chernov V. Baltic outcome: where will Russian cargoes leave the Baltic ports URL: URL:https://portnews.ru/comments/3221/ August 11, 2022 (accessed 25.08.2022) (In Russian)
- 109. Shamakhov V. A., Mezhevich N. M., Guo Shuhun. Some comments on the assessment of the potential role of transit from the PRC through the Baltic States // Management Consulting. 2021. No 12. P. 10–16. (In Russian)
- Shirov A. A., Yantovsky A. A., Potapenko V. V. Assessment of the potential impact of sanctions on economic development of Russia and the EU // Problems of Forecasting. 2015. No 4. P. 3–16. (In Russian)
- Economic policy: regional dimension. / Ed. P.A. Minakira. Vladivostok: Dalnauka. 2001. (In Russian)
- 112. Estonia completes the first phase of LNG terminal construction URL:https://www.interfax.ru/business/860145 31.08.2022 (accessed: 31.08.2022) (In Russian)
- 113. Estonian national airline "Estonian Air" ceased operations URL: <u>https://www.rbc.ru/business/08/11/2015/563e72a79a79470a747747ef</u> (accessed: 19.08.2022) (In Russian)
- 114. Eesti Raudtee. In constant motion 2019 URL: https://www.evr.ee/images/Files/ER2019 kataloog RU.pdf (In Russian)
- 115. Yara Latvija opens a warehouse for packaging and storage of mineral fertilizers in the port of Riga https://portnews.ru/news/333751/ (дата обращения: 12.08. 2022)
- 116. Arslan B. The interplay of competitive and cooperative behavior and differential benefits in alliances // Strategic Management Journal. 2018. Vol. 39. P.3222–3246. doi: 10.1002/smj.2731.
- Arthur, W. Brian 'Competing Technologies, Increasing Returns, and Lock-In by Historical Events', Economic Journal, (1989), Vol. 97. Pp. 642-665.

- 118. Ashford E. Will the Kaliningrad Crisis Lead to War? URL: https://foreignpolicy.com/2022/06/24/kaliningrad-russia-lithuania-crisis-lead-to-war/ (дата обращения: 24.07.2022)
- 119. Bache I., Bartle I., Flinders M. Multi-Level Governance. Handbook on Theories of Governance / ed. by C. Ansell, J. Torfing. Cheltenham, United Kingdom, 2016.
- 120. Bache I., Flinders M. Themes and issues in multi-level governance // Multi-Level Governance in Theory and Practice / ed. by I. Bache, M. Flinders. Oxford, 2004.
- Barney J.B. Firms resources and sustained competitive advantage // Journal of Management. 1991. Vol.17(1). P. 99-120. doi.10.1177/014920639101700108.
- 122. Baumann O., Eggers J. P., Stieglitz N. Colleagues and Competitors: How Internal Social Comparisons Shape Organizational Search and Adaptation // Administrative Science Quarterly. 2019. Vol.64, No 2, P. 275-309 doi:10.1177/0001839218766310
- Bengtsson M., Kock S. Coopetition—Quo vadis? Past accomplishments and future challenges // Industrial Marketing Management. 2014. Vol.43. P.180–188. doi.org/10.1016/j.indmarman.2014.02.015.
- 124. Borzel T. A., Risse T. Grand Theories of Integration and the Challenges of Comparative Regionalism // Journal of European Public Policy. 2019. Vol. 26, No 8. P. 1231—1252.
- 125. Boudevill J.-R. Problems of Regional Economic Planning. Edinburgh. 1966.
- Bouncken R.B., Clauß T., Fredrich V. Product innovation through coopetition in alliances: Singular or plural governance? // Industrial Marketing Management. 2016. Vol. 53. P. 77– 90. doi.org/10.1016/j.indmarman.2015.11.011.
- 127. Bristow G. Everyone's a "winner": problematising the discourse of regional competitiveness // Journal of Economic Geography. 2005. Vol. 5 P. 285-304.
- 128. Button K., Pentecost E. Regional Economic Performance within European Union. Edward Elgar Publishing Limited. 1999.
- 129. Central Statistical Bureau of Latvia URL: http://www.csb.gov.lv/en/stats\_table\_metadata/35/TARGET=\_blank>Detailed information</A>,

- Chai L., Li J., Tangpong Ch., Clauss Th. The interplays of coopetition, conflicts, trust, and efficiency process innovation in vertical B2B relationships // Industrial Marketing Management. 2020. Vol. 85. P. 269-280. doi.org/10.1016/j.indmarman.2019.11.004.
- 131. Chang Y.T., Lee P.T.W. Overview of interport competition: issues and methods // Journal of International Logistics and Trade. 2007. Vol. 5. No. 1. P. 99–121. doi:10.24006/jilt.2007.5.1.006.
- Chatterjee S., Matzler K. Simple Rules for a Network Efficiency Business Model: the case of Vizio // California Management Review. 2019. Vol. 61(2). P. 84-103. doi:org/10.1177/0008125618825139.
- 133. Chen T., Lee P.T.W., Notteboom T. Shipping line dominance and freight rate practices on trade routes: the case of the far east-south Africa Trade, //International Journal of Shipping and Transport Logistics. 2013. Vol. 5. No. 2. P. 155–173. doi:10.1504/IJSTL.2013.053233.
- 134. COHESION OPEN DATA PLATFORM https://cohesiondata.ec.europa.eu/
- 135. Commission Staff Working Document Ex post evaluation of the ERDF and Cohesion Fund 2007-13 Brussels, 19.9.2016 SWD(2016) 318 final P.5. - URL: https://www.espa.gr/elibrary/expost\_ERDF\_CF\_report\_en\_en.pdf.
- Cozzolino A., Rothaermel F.T. Discontinuities, competition, and cooperation: Coopetitive dynamics between incumbents and entrants // Strategic Management Journal. 2018. Vol. 39. P.3053-3085. doi:10.1002/smj.2776.
- Die Politik der dritten Ebene. Regionen im Europa der Union Nomos. Bullman U. (ed.) Baden-Baden. 1994.
- 138. Doidge M. Joined at the Hip: Regionalism and Interregionalism // Journal of European Integration. 2007. Vol. 29, No 2. P. 229—245.
- 139. Dunford M. Winners and Losers: the New Map of Economic Inequality in the European Union // European Urban and Regional Studies. 1994. Vol. 1. P. 95–114.
- Dunford M., Kafkalas G. Cities and Regions in the New Europe. London. Belhaven Press. 1992.
- 141. Efimova E. G., Volovoy V., Vroblevskaya S. A. Sea ports of the Eastern Baltic and the transit policy of the Russian Federation: competition or cooperation? // Baltic region. 2021 Vol. 13, No. 3 S. 125-148. (In English)

- 142. Efimova E. & Vroblevskaya S. Are Eastern Baltic Ports the drivers of Eurasian trade? // International Journal of Management and Economics. 2019. Vol. 55. No 3. P. 1-14. doi.org/10.2478/ijme-2019-0014.
- 143. Estrada I., Faems D., de Faria P. Coopetition and product innovation performance: The role of internalknowledge sharing mechanisms and formal knowledgeprotection mechanisms // Industrial Marketing Management. 2016. Vol. 53(2). P.56-65. doi.org/10.1016/J.INDMARMAN.2015.11.013.
- 144. European Commission. Official website URL: http://ec.europa.eu/
- 145. Greve H., Rowley T., Shipilov A. Network advantage: How to unlock value from your alliances and partnerships. New York, NY: John Wiley & Sons. 2014. 320 p.
- 146. High Level Group. Report on the Trans-European Transport Network 2003 (известен также как Van-Miert Report) URL: 

   https://ec.europa.eu/ten/transport/revision/hlg/2003\_report\_kvm\_en.pdf
- Hocking B. Regionalism: an international relations perspective // Keating M., Lounhlin J. (eds) The Political Economy of Regionalism. Frank Cass. London. 1996.
- 148. Hooghe L., Marks G. Unraveling the Central State, But How? Types of Multi-level Governance. Vienna, 2003 - URL: ali.pitt.edu/530/2/pw 87.pdf
- Hoyle B.S., Knowles R. Modern Transport Geography In: Modern Transport Geography. Belhaven. London. 1992.
- 150. Interreg Baltic Sea Region URL: https://interreg-baltic.eu/
- Johnson D., Turner C. Strategy and Policy for Trans-European Networks. Palgrave MacMillan. 2007.
- Jorde J.M., Teece D.J. Competition and cooperation: Striking the right balance // California Management Review. 1989. Vol. 31(3). P.25-37. doi: 10.2307/41166568.
- 153. JSC RB Rail. Annual Report for the year ending 31.12.2021. Riga. 2022 URL: https://www.railbaltica.org/wp-content/uploads/2022/05/RB-rail-AS-Annual-report-2021.pdf
- 154. Jung H., Kim J., Shin K.S. Importance Analysis of Decision Making Factors for Selecting International Freight Transportation Mode //The Asian Journal of Shipping and Logistics. 2019. Vol.35(1) P. 055-062. doi: 10.1016/j.ajsl.2019.03.008

- 155. Keating M., Hooghe L. By passing the nation-state? Regions in the EU policy process // J.J. Richardson (ed.) Policy making in the European Union. Routledge. London. 1995.
- 156. Key achievements of Regional Policy 2014-2020. URL: https://ec.europa.eu/regional policy/EN/policy/what/key-achievements/
- Lado A.A., Boyd N.G., Hanlon S.C. Competition, cooperation, and the search for economic rents: A syncretic model // Academy of Management Review. 1997. Vol. 22(1). P.110-141. doi: 10.2307/259226.
- 158. Lee P.T.W., Lam J.S.L A review of port devolution and governance models with compound eyes approach // Transport Reviews. 2017. Vol. 37. No. 4. P. 507–520. doi:10.1080/01441647.2016.1254690.
- 159. Lee P.T.W., Lam J.S.L. Developing the fifth generation ports model // Dynamic shipping and port developments in the globalized economy. Vol. 2: Emerging Trends in Ports / P.T.W. Lee, Cullinane K. (Eds). Palgrave MacMillan. London. UK. 2015 P. 186–210, doi:10.1057/9781137514295.
- 160. Lee T.-C., Wu C.-H., Lee P.T.W. Developing the fifth generation ports model. Impacts of the ECFA on seaborne trade volume and policy development for shipping and port industry in Taiwan maritime policy & management //Maritime Policy & Management. 2011. Vol. 38, No. 2. P. 1–21. doi:10.1080/03088839.2011.556674.
- 161. Leiblein M.J., Chen J.S., Posen H.E. Resource Allocation in Strategic Factor Markets: A Realistic Real Options Approach to Generating Competitive Advantage // Journal of Management. 2017. Vol. 43 No. 8, P. 2588 –2608. doi: 10.1177/0149206316683778.
- 162. Liebowitz S.; Margolis S., Bouckaert B., De Geest G. (eds.). Encyclopedia of Law and Economics. Volume I. The History and Methodology of Law and Economics. Cheltenham: Edward Elgar. 2000. p. 985. - URL: https://web.archive.org/web/20101206033616/http://encyclo.findlaw.com/0770book.pdf
- 163. LIETUVOS RESPUBLIKOS KLAIPĖDOS VALSTYBINIO JŪRŲ UOSTO ĮSTATYMAS 1996 m. gegužės 16 d. Nr. I-1340 Vilnius / The Law of the Republic of Lithuania "On State Maritime Port of Klaipeda" № I-1340 of May 16, 1996 Vilnius - URL: https://rudocs.exdat.com/docs2/index-602953.html
- Managing Multipartner Strategic Alliances. T.K. Das (ed). Charlotte, NC : Information Age Publishing. 2015. 278 p.

- Mathieson R.S. The Soviet Union: an Economic Geography. Heinemann Educational Books. London. 1975.
- 166. Multilevel Governance and Partnership. The Van den Brande Report. Prepared at the request of the Commissioner for Regional and Urban Policy Johannes Hahn. October 2014. P. 10 -URL: https://ec.europa.eu/regional\_policy/sources/informing/dialog/2014/5\_vandenbrande\_repor t.pdf
- 167. Myrdal G. Economic Theory and Under-developed Regions. London. 1957.
- Nelson, R; Winter, S. An evolutionary theory of economic change. Harvard University Press. 1982.
- 169. Nordic Regions and Transfrontier Co-operation. Copenhagen. Nordic Council. 1991.
- 170. North D. N. Institutions, Institutional Change and Economic Performance. Cambridge University Press, 1992.
- 171. North D.C. Institutions, institutional change and economic performance. New York: Cambridge University Press. 1990. 164 p.
- 172. Nowak M.A., Sigmund K., Leibowitz M.L. Cooperation versus Competition // Financial Analysts Journal. 2000. Vol. 56(4). P. 13-22.doi:10.2469/faj.v.56.n4.2370.
- Official Journal Council Directive of 29 July 1991 on the development of the Community's Railways (91/440/EC), OJL 237 of 24 August 1991, pp. 25-8
- 174. Official Journal Directive 2001/16/EC of the European Parliament and European Council of 19 March 2001 on the interoperability of the trans-European conventional rail system, OJL 110 of 20 April 2001, pp.1-27.
- 175. Official Journal. Corrigendum to Decision No 884/2004/EC of the European Parliament and of the Council of 29 April 2004 amending Decision No 169/96/EC on Community guidelines for the development of the trans-European transport network // OJL 201. P. 1–55.
- 176. Official statistics portal of Latvia URL: http://data1.csb.gov.lv/pxweb/en/transp\_tur/transp\_tur\_transp\_kravas\_ikgad/TRG250.p x/table/tableViewLayout1/ (accessed: 20.08.2022)
- Pavuk O.A. Comparison of port activities of the East Coast of the Baltic Sea: 1996–2016.
   2017. Technology Audit and Production Reserves. 4(5(36)):15-19.

- 178. Perroux F. L'économie du XX siecle. Paris. 1961
- 179. Petraite M., Dlugoborskyte V. Hidden champions from small catching-up country: leveraging entrepreneurial orientation, organizational capabilities and Global networks // Global Opportunities for Entrepreneurial Growth: Coopetition and Knowledge Dynamics within and Across Firms / S. Sindakis, Theodorou P (eds).. UK. Emerald Publishing. 2018. P. 91-123. doi.org/10.1108/978-1-78714-501-620171008.
- 180. Pilyasov A.N., Tsukerman V.A. Economic Benefits and Costs of Platform Solutions in the Modern Development of Natural Resources of the Russian Arctic IOP Conference Series: Earth and Environmental Science, Vol. 666, № 4, c. 042088-042088
- 181. Rail Baltica Global Project Cost Benefit Analysis Final Report. Ernst & Young. 2017. P.133
- 182. Regional Problems and Policies in the United Kindom. OECD. Paris. 1994. P.90.
- Regions in the European Community. Jones B. and Keating M. (eds.) Oxford University Press. Oxford. 1995.
- Reuer J. J., Lahiri N. Searching for alliance partners: Effects of geographic distance on the formation of R&D collaborations //Organization Science. 2014. Vol.25 (1). P. 283–298. doi:org/10.1287/orsc.1120.0805.
- Rodrigue J.-P. The Geography of Transport Systems. Fifth Edition. 2020. NY: Routledge. 456 p.
- Science in the Third Reich M. Szöllösi-Janze (ed.). Oxford and New York: Berg Publishers, 2001, 289 p.
- 187. Smart Specialisation Platform EC https://s3platform.jrc.ec.europa.eu/blue-growth
- Special Areas Development Act. Cm. Armstrong H., Taylor J. Regional Economics and Policy. London: Harvester Wheatsheaf. 1993. P.363.
- Spens K.M., Kovács G., Vellenga D.B. Transportation and Logistics Networks in the Baltic States: Keys for Succesful Economic Development and Integration into the EU/Economics. Vilnius University. Research Papers. 2004. Vol.68. pp.121-135.
- 190. Statistics Estonia URL:http://pub.stat.ee (accessed: 20.08.2022)
- Statistics Lithuania. Official Statistics Portal URL:https://osp.stat.gov.lt/statistiniu-rodikliuanalize?#/ (дата обращения: 20.08.2022)

- Storper M. The Regional World. Territorial Development in Global Economy. The Guilford Press. New York; London. 1997. P. 264.
- Strese S., Meuer M.W., Flatten T.C., Brettel M. Examining cross-functional coopetition as a driver of organizational ambidexterity// Industrial Marketing Management. 2016. Vol. 57. P. 4–11. doi.org/10.1016/j.indmarman.2016.05.008.
- Teece D.J; Pisano G., Shuen A. Dynamic Capabilities and Strategic Management // Strategic Management Journal. 1997. Vol. 18(7). P. 509-533. doi:10.1142/9789812796929 0003.
- 195. Temple M. Regional Economics. London: St.Martin's Press. 1994. P.230-239.
- 196. Transport in Latvia. Central Statistical Bureau of Latvia. Riga. 2021. https://admin.stat.gov.lv/system/files/publication/2021-08/Nr\_17\_Transports\_Latvija\_2021\_%2821\_00%29\_LV\_EN.pdf
- 197. Vinois J.-A. Creation of a European railway area against the background of the White Paper on European Transport Policy. 2002. Электронный ресурс: http://europa.eu.int/comm/transport/rail/overview/doc/ri-5jav-en.pdf.
- White H.P. The geographical approach to transport studies. Discussion Paper in Geography N1. Salford University. Salford. 1977;
- Williamson O. E. Behavioral Assumptions // The Economic Institutions of Capitalism. Firms, Markets, Relational Contracting. O.E.Williamson (ed). N.Y.: The Free Press. 1985. P.44–52.
- 200. World Development Indicators. The World Bank Group https://databank.worldbank.org/source/world-development-indicators#, расчеты автора
- Yuill D., Bachtler J., Wishlade F. European Regional Incentives 1997-1998. London. Bowker Saur. 1998.
- Zhang W., Lam J.S.L. Maritime cluster evolution based on symbiosis theory and Lotka-Volterra model // Maritime Policy & Management. 2013, Vol. 40, No. 2, P. 161–176, doi:10.1080/03088839.2012.757375.