REPUBLIC OF AZERBAIJAN

On the rights of the manuscript

ABSTRACT

of the dissertation for the degree of Doctor of Science

PROBLEMS OF DEVELOPMENT OF PRIVATE ENTREPRENEURSHIP IN THE TRANSPORT SECTOR OF THE REPUBLIC OF AZERBALIAN

Speciality: 5312.01- "Field economy"

Field of science: 53 - Economic sciences

Applicant: Kamran Nureddin Abdullayev

The work was performed at the department "Economics of the service sphere" of the Institute of Economics of the Ministry of Science and Education of the Republic of Azerbaijan.

Official opponents:

Doctor of Economic Sciences, Professor

Makhabbat Ashir Mammadov

Doctor of Economic Sciences, Professor

Vilayat Ibrahim Ismayilov

Doctor of Economic Sciences, Professor

Nizami Calal Qafarov

Doctor of Economic Sciences,

Associate Professor

Yashar Azimaga Mammadov

Dissertation Council ED 1.10 of Supreme Attestation Comission under the President of the Republic of Azerbaijan operating at the Institute of Economics of Ministry of Science and Education of the Republic of Azerbaijan

- S:

natronan of the Dissertation

Doctor of Economic Sciences,

Professor

Nazim Muzaffarli (Imanov)

Scientific secretary of the Dissertation Council:

Doctor of Philosophy in

Economics

Sevda Mammad Seyidova

Chairman of the scientific seminar:

Doctor of Economic Sciences,

Professor

Tarbiz Nasib Aliyev

GENERAL DESCRIPTION OF THE RESEARCH

Relevance and degree of development of the topic. In a context where international integration processes are strengthening in developed European Union countries, minimizing total transportation costs for each type of transport (mainly during short delivery times), ensuring safety, etc. are considered important conditions in assessing the economic efficiency of the transport sector in the transportation of various types of cargo, including passengers.

In recent years, there have been declines in economic indicators in the state-monopoly railway, sea, and air transport sectors, including in the transit transport corridor ("Europe-Caucasus-Asia"). It is from this perspective that in a modern market economy, in order to form a free, open competitive environment in accordance with the mechanism of market relations, continuous structural reforms in the railway, sea, and air transport sectors, the elimination of state monopoly in the mentioned sector, the management of state transport companies and transport infrastructure sectors based on the public-private partnership model, and the free entry of private transport companies into the domestic market can ultimately be the main factors that stimulate the creation of a healthy competitive environment, the development of sectoral private entrepreneurship, and the attraction of local and foreign investors (as well as investments), etc.

In "Azerbaijan 2030: National Priorities of Socio-Economic Development" and the corresponding "Strategy of Socio-Economic Development of the Republic of Azerbaijan for 2022-2026", ensuring the operation of a new transit transport corridor in the liberated territories was considered one of the main priorities, and measures were envisaged to develop transport communication projects in the direction of the "Zangezur" corridor, and to increase the volume of transportation and transit revenues for individual types of transport.

The "Development Strategy of the Transport Sector of the Republic of Azerbaijan" noted the necessity of public-private joint management

3

¹ Strategy of socio-economic development of the Republic of Azerbaijan for 2022-2026 [Electronic resource] / E-qanun.az. – Baku, July 22, 2022 URL: https://e-qanun.az/framework/50013

in the management of transport infrastructure². In the "2024-2026 Action Plan on Increasing the Potential of the International Transport Corridor Passing Through the Territory of the Republic of Azerbaijan and Promoting Transit Freight Transportation," paragraph 6.1.2.3.1 noted the necessity of forming transport and logistics centers with the support of the private sector and attracting private foreign investments³.

The decision of the Cabinet of Ministers of the Republic of Azerbaijan "Approval of the list of Natural Monopoly Entities" also identified the areas of activity of such railway and air transport companies that are included in the natural monopoly, especially issues related to infrastructure management⁴. However, state transport companies have not yet fully created the opportunity to ensure free competition in the domestic transport services market by using their monopoly advantage and not allowing private transport companies to enter the domestic market, while at the same time not allowing the use of transport infrastructure areas.

Since 2000, major international financial institutions such as the European Bank for Reconstruction and Development, the World Bank, the European Commission, etc. have recommended and proposed structural reforms in the transport of state railway, maritime, and air companies in the post-soviet countries (including Azerbaijan), the elimination of state control and monopoly in this area, the gradual start of the privatization process, and the participation of private business entities in the management process together with the state unit. Although these processes have been gradually implemented in

_

² "Development Strategy of the Transport Sector" of the Republic of Azerbaijan // Baku: Ganun, -2000, - 15 p.

³ Action plan for 2024-2026 to increase the transit potential of international transport corridors passing through the territory of the Republic of Azerbaijan and stimulate transit cargo transportation [Electronic resource] / Static.president.az. — Baku, November 23, 2023. URL: https://static.president.az/upload/Files/2023/11/23/f3c8be9a0b9c0a07c03c8ac2a48 b5afd 2621987.pdf

⁴Approval of the "List of Natural Monopoly Entities" [Electronic resource] / Nk.gov.az. Resolution of the National Assembly of the Republic of Armenia. – Baku, August 2, 2024. URL: https://nk.gov.az/az/senedler/qerarlar/tebii-inhisar-subyektlerinin-siyahisinin-tesdiq-ed-8241

some post-soviet countries, serious measures have not yet been implemented in this area in our country⁵. In general, it has been recommended to improve all regulatory aspects that limit the free competition environment for the listed types of transport within the country in order to freely enter the international transport services market⁶. However, despite the economic downturns, costs exceeding revenues, reduction in transportation volumes, and economic losses observed in the mentioned transport sectors in our country, state transport companies have continued their activities at the expense of state subsidies and investments.

Among the well-known scientists and specialists in our country, mainly in the field of transport, are S.Q.Cumshudov, F.M.Haciyev, on the regulation of economic relations in the field of transport, improvement of transport policy carried out in relation to automobile transport, A.M. Asadov, on the formation and sustainable development of a new transport system, B.Q.Xasiyev, on the impact of transport infrastructure on economic growth, E.M.Hacizade, F.Alizade, E.Y.Mamedov, A.S.Shakaraliev on the development of regional transport infrastructure, coordination of transit traffic transport corridors, expansion of regional cooperation on the BTK railway line, M.A.Mammadov the role of the transport sector in the restoration of post-conflict territories, M.H.Zeynalov in the service sector, including increasing investment in the transport sector, T.I. Imanov, N. Shabanli improvement of transport and logistics services, Z.S.Mamedov, A.Kerimov regulation of transport and economic relations, Y.A.Mamedov analysis of financial relations in the transport sector, T.A. Yadigarov on the management of maritime transport, creation of econometric models in the field of transport, A.Bayramov on increasing economic efficiency in the field of air transport, implementation of economic reforms, A.Mehtiyev on increasing

_

⁵An, I. The World Bank gave an order to Kaspar. // Delovoy Azerbaijan. - 2003, July 22-29. No. 29, p.5.

⁶The Role of Public and Private Sectors in Providing Transport Infrastructure and Transport Services (Operational Guide). / - Washington: WB Publishing House: - 2014, - 35 p.

economic efficiency in the field of railway transport, E.Shahveranova on development of logistics transport services in transit corridors, E.A. Aliyev, Z.M. Qafarov on the application of international transport law in our country, M. Humbatov, K.Sari on regulation of activities in the field of transport -logistics and transport services in the turkicspeaking region states, etc. conducted research on these issues. Among foreign scientists in the field of transport, M.Arystan mainly studied the growth of transit freight traffic by rail, E.A.Belova the main features of the development of the world transport and logistics market, E.V.Budrina the implementation of economic regulation in the transport sector, M.A.Boykachev ensuring competition in the transport services market, D.V.Kuzmin, V.M.Nazarenko the impact of the sector on increasing competitiveness, Y.I.Shelistov regulation of transport policy in the European Union, P.Andre efficient organization of transport services in the transport sector, J.Covie the role of financial issues in the development of modes of transport, O.Epner state regulation of economic relations in rail transport, M.T. Humphreys improving transport policy in Europe, M.Civoni ensuring the integration of companies in the transport sector, organizing multimodal transportation, M.Jarocka defining innovative policies for assessing transport services, F.Mustilli, J.Pelkmans removing barriers to entry into the international transport services market, J.Michalek transportation country, efficient organization by N.B.Puri implementing economic reforms in state-owned companies in the sector. J.P.Rodrigue developing transport H.Stevens expanding transport policy in the EU countries, C.Stuart improving investments in the transport sector, etc. were reflected in the research of scientists.

However, without diminishing the importance of the abovementioned research scientists, it is important to note that there are a number of factors that positively affect the development of private entrepreneurship in the transport sector of our country and there is a need to use them effectively. Thus, in modern times, the issues of more in-depth study of the problems of the development of private entrepreneurship in the transport sector attract attention due to their importance.

The transport sector, along with other infrastructure sectors, is an important means of achieving socio-economic, foreign policy and other goals, and also plays an important role in improving the quality of life of the population. Without solving problems in the transport sector, it is impossible to achieve radical changes in economic activity as a whole. The unity of economic space and the free movement of goods and services are possible only as a result of rational and sustainable development of the transport sector. In modern economic conditions, the transport sector is becoming an increasingly important part of people's lives. In general, the transport sector can be considered not only as an industry that carries goods and passengers, but also as an inter-industry system that forms living conditions and economic relations. For example, in recent years, the transport strategy adopted in the post-soviet countries, including Azerbaijan, has increasingly paid attention to technological progress and innovative development in the development of the transport sector, as well as the involvement of the private sector which once again confirms that this is a more important area. The development of the transport sector should, first of all, be based on the criteria of the quality of transport services at the level of the needs of the innovative development of the country's economy. To achieve this, it is necessary, first of all, to develop and ensure the functioning of a competitive market model of transport services, which will be considered innovative for the national transport system. The envisaged model should define the standards and parameters of the quality of transport services, a technological model for ensuring quality and the need for a regulatory framework, the issue of responsibility taking into account these parameters, as well as a mechanism for stimulating the modernization of transport systems. At this time, it is necessary to create open conditions for the provision of transport services to the population by private entrepreneurs. The functioning of the transport system of Azerbaijan is of strategic importance for its economic development, has the potential to ensure the transition of the national economy to an innovation-oriented nature of activity and improve the standard of living of the population. In the

context of innovative development of the country's economy, new quality requirements are imposed on the transport complex and the necessary measures are required to ensure its advanced development. For the development of the transport system, first of all, it is necessary to attract new innovative technologies, additional sources of financing, expand public-private cooperation in this area. It is necessary to increase the technological level of the country's transport sector, as well as the use of digital management and ICT in modern transport processes. Without this, it is impossible to ensure the competitiveness and effective functioning of the transport system.

In order to increase the throughput and transportation capabilities of transport infrastructure in the regions, improve the safety and service quality of transport facilities, expand the composition of transport fleets, as well as renew them, it is necessary to apply public-private sector partnerships in the transport sector, and attract private investments. All this has conditioned the relevance of the chosen topic and made it possible to formulate the goals and objectives of the study as follows.

The object and subject of the research. The transport sector of the Republic of Azerbaijan serves as the object of the study.

The subject of the research is the study of theoretical, methodological and empirical issues of economic processes related to state regulation of the formation and development of private entrepreneurship in the transport sector in the Republic of Azerbaijan.

The purpose and objectives of the study. The purpose of the study is to comprehensively analyze and evaluate the current state of private entrepreneurship in the transport sector of the Republic of

Azerbaijan using various research methods, to identify relevant organizational-economic, promotional and regulatory reserve opportunities, to determine ways of their effective use and directions of its strategic development, taking into account international experience. To achieve this goal, the following tasks are envisaged:

- to investigate scientific and theoretical approaches and determine preliminary results related to the formation and development of competitiveness and private entrepreneurship in the modern transport sector;

- examining the main features of the implementation of a unified transport policy and determining the possibilities of its application based on them;
- identification of the main advantages of private entrepreneurship in the transport sector based on the international experience of developed countries;
- to analyze the current economic situation of the national transport sector, to identify problems that have arisen in this direction and to determine directions for their elimination;
- to analyze the issues of forming public-private joint cooperation activities and stimulating private investments in the transport sector, taking into account international experience in the country's transport sector :
- Assessment of the impact of joint activities on public-private partnership in enhancing Azerbaijan's strategic role in international transport transit projects;
- to assess the role of private entrepreneurship in the integration of the country's national transport services market into the international single transport services market;
- -digitalization of private entrepreneurial activity in railway, sea and air transport based on public-private sector partnership, application of modern technologies, identification of possible prospects for free entry into the international transport services market, etc.

Research methods. In the scientific work, comparative economic and mathematical statistical analysis methods were mainly used. In addition, econometric analysis, including "NLS and ARMA" methods, was used. At the same time, econometric correlation, as well as multivariate regression analysis, and "SMA" forecasting methods were applied.

The principal theses of the defense

- An econometric model of the relationship between revenues from transport services in the air, sea and rail transport with the costs of transporting general cargo and passengers, investments in fixed assets and the costs of putting fixed assets into operation has been developed

and substantiated. It has been established that revenues from the provision of transport services on these types of transport are formed under the influence of the following factors:

- The analysis has shown that in recent years, a decrease in the volume and cost of freight and passenger transportation on state-controlled rail, sea and air transport, as well as a significant difference between costs and revenues have led to a tendency to losses;
- an analysis of the relationship between the costs of transporting goods by rail and investments in fixed assets, revenues and expenses has been conducted and it has been established that there is a dependence between the indicators based on the elasticity coefficient;
- there is a correlation between transport revenues and expenses, expenses and investments, transport expenses and investments in fixed assets in sea and air transport, and there is also a relationship between the indicators based on the elasticity coefficient;
- In order to eliminate the losses recorded in the transportation of general cargo, as well as in rail and sea transportation, especially in transit transportation, in the Europe-Caucasus-Asia Transport Corridor (ECA), the creation and joint management of a public-private partnership. transport companies and the private sector have determined the need for active participation of transport companies in the domestic transport services market;
- Based on the calculation of the forecast indicators of freight and passenger transportation along the ECA transport corridor (in our part of the country), as well as transit freight transportation, it was determined that in the near future the trend of these indicators in the ECA transport corridor in our part is possible to decrease. Involvement in this process of transport companies, which will be jointly managed on the basis of a public-private partnership, will increase the volume of transportation along the corridor;
- The projected trend of increasing costs for general transportation by rail, sea and air in the Republic of Azerbaijan in the coming years, as well as the organization of public-private joint and fully private transport companies can play an exceptional role in eliminating the emerging problems;

- The participation of private transport companies in expanding transport links with the states of the region within the framework of the international transit project "North-South" will increase the transit potential of our country;
- The influence of private entrepreneurship in the transport sector will increase during the development of the international transit and transport project "Zangezur".

Scientific novelty of the research. The scientific novelty of the dissertation work consists of the following:

- -Mechanisms have been developed for the development of publicprivate partnerships in state-controlled transport companies, the free entry of private transport companies (entrepreneurial entities) into the domestic market, and the gradual improvement of the management process in state transport companies together with the private sector [19, p.83-85];
- the feasibility of establishing new competitive public-private partnership transport companies, including low-budget small, medium and large-scale freight and passenger transportation, vehicle production and repair enterprises established with the status of a legal entity, was substantiated and its principal organizational structure was proposed [19, p.83-85; 22, p.5-20];
- it was proposed to expand private entrepreneurial activity in transport companies re-formed on the basis of public-private partnership, to ensure the attraction of local and foreign private investments to the activities of the companies, and to sell a certain part of the shares and bonds of these transport companies (with an annual revenues of 5-7%) on domestic and international stock exchanges [19, p.83-85; 22, p. 5-20];
- Taking into account international experience in the railway, sea, and air transport sectors, the directions of establishing joint companies with public-private partnerships, maintaining transport infrastructure under state control and managing it jointly with the private sector, free entry of local and foreign private transport companies into the domestic transport services market, development of private entrepreneurship in the transport sector, and formation of a free

competitive environment between state and private transport companies have been developed [20,p.6-15; 22, p. 5-20];

- -The importance and impact of organizing joint management with public-private partnerships in state-owned companies by types of transport and attracting private investment in these processes in order to eliminate the trend of declining transportation volumes and income in our part of the "ECA" international transit transport corridor in recent years has been shown [28, p.156-165];
- A principled structure for the activities of joint and private transport companies, which must be established through public-private partnerships to promote digitalization and the application of modern innovative technologies in the transport sector of Azerbaijan, has been developed [29, p.153-163];
- The main directions of the process of unhindered entry of Azerbaijan transport companies into international transport corridors and the transport services market and the expansion of their activities there have been determined [13, p.171-183];
- The directions for ensuring the internal and external economic security of the national transport sector of the Republic of Azerbaijan have been determined, and a strategy for managing state-owned transport companies through public-private partnerships has been developed [22, p.5-20];
- A forecast for the transport sector covering the coming years on changes in key economic indicators in freight and passenger transportation has been provided. The role of the private sector in implementing the existing forecasts has been substantiated [28,p.156-169];
- the economic impacr of the proposed public-private partnership model based on state-owned companies in improving our country's position in the rating covering economic indicators of individual transport types and infrastructure sectors in International Rating Reports have shown [30,p. 43-54];
- The volume of losses of state-controlled railway, sea, and air transport companies in cargo and passenger transportation in recent years, including losses between expenses and revenues, was calculated in million tons (million passengers) and million US dollars, and the

management of state-owned companies, which must be formed through public-private partnerships, and the possible potential of companies engaged in private entrepreneurial activity in eliminating these processes was assessed [21, p.6-20];

- A modern theoretical methodological approach has been put forward to determine the level of dependence of transportation services in the transport sector, and new econometric models have been developed to determine the relationship between transport services [31, p.139-142].

Theoretical and practical significance of the research. The results and recommendations of the conducted study can be used in the implementation of regulatory legal documents necessary for the development of public-private partnership in the transport sector, including private entrepreneurship, at the state level, including state programs, concepts, strategies, new economic measures to increase the competitiveness of transit transport corridors, in the preparation of new strategic roadmaps for the expansion of private entrepreneurship in the transport sector, in increasing the opportunities for private transport companies in the development of transport corridors, and in improving the position of our country in the transport sector in international rating reports. The results of the study can be recommended for use in higher technical and economic schools, colleges in the subjects of "International Economic Relations", "Transport Economics", "Transport Logistics", "Organization of Transport Transportation", "Transport Management", "Transport Statistics", etc.

Approbation and application of the results of the research. The results of the dissertation work were reflected in 31 articles and theses published in local and foreign journals. Speeches were made at conferences held in our country and other foreign countries regarding the results obtained. They are: "The problems forming and development private entrepreneurship according to world practice on railway transport sector in Azerbaijan Republic" (Ukraine, 2018), "The main directions creating private entrepreneurship in sea transport sector of Azerbaijan Republic" (Ukraine, 2018), "Directions for improving Azerbaijan's position in international rankings on transport services indicators" (Azerbaijan, 2019), "Assessment of the role of

private entrepreneurship in the development of the transport sector of the Republic of Azerbaijan" (Azerbaijan, 2019), "Assessment of the role of the Zangezur corridor in the creation of a new regional transit line" (Azerbaijan, 2021), "Main features of the development of the digitalization process in the transport sector" (Azerbaijan, 2022), "The current condition of public-private partnership in the transport-logistics services sector of Azerbaijan Republic" (Russia, 2024) etc. At the same time, the results of the dissertation work were presented and discussed at a scientific online seminar organized at the Institute of Economics of the Ministry of Science and Education of the Republic of Azerbaijan on September 20, 2021 and March 13, 2023.

The structure and volume of the dissertation. The volume of the dissertation work is 547191 characters, including the introduction 27713 characters, Chapter I 74325 characters; Chapter II 162288 characters; Chapter III 117041 characters; Chapter IV 130086 characters, the conclusion 35738 characters and the list of used literature 42714 characters. The volume of the dissertation excluding tables, graphs, and the list of used literature is 450000 characters.

THE STRUCTURE OF THE DISSERTATION WORK Introduction

Chapter I: The scientific and methodological basis of the formation and development of the competitiveness of the modern transport sector

- 1.1. Scientific and methodological basis of the formation and development of the competitiveness of transport services in a market economy
- 1.2. The main features of implementing a unified transport policy in the modern globalized world
- 1.3. The main advantages of private entrepreneurship in the transport sector of developed countries

Chapter II: The study of the current situation in the transport sector of the Republic of Azerbaijan and the possibilities of establishing private entrepreneurship in this field

- 2.1. Economic analysis of the current situation on recent years in the national transport sector.
- 2.2. Issues of stimulating the attraction of private investment in the national transport sector
- 2.3. Issues of formation and development of private entrepreneurship on the transport sector of the Republic of Azerbaijan, taking into account international experience.

Chapter III: The assessment of the impact of private entrepreneurship activity on increasing the strategic role of the Republic of Azerbaijan in international transport transit projects

- 3.1. The influence of the private transport sector for increasing the strategic role of the Republic of Azerbaijan in the "Europe-Caucasus-Asia (ECA)" international transit project
- 3.2. Issues of increasing the potential capabilities of the Republic of Azerbaijan in expanding transport relations with regional states under the "North-South" international transport transit project
- 3.3. The role of private entrepreneurship of the transport sector in the development of the "Zangezur" international transit transport project

Chapter IV: Perspective directions of development of private entrepreneurship in the transport sector of the Republic of Azerbaijan

- 4.1 Identification of the main directions of development of private entrepreneurial activity in the railway transport sector
- 4.2. Main directions of development of private entrepreneurship in the field of sea transport
- 4.3. Prospects for the development of private entrepreneurship in the field of air transport
- 4.4. The role of digitalization and the application of modern innovations in the transport sector of the Republic of Azerbaijan for the development of private entrepreneurship
- 4.5. Main directions of integration of the national transport services market of the Republic of Azerbaijan into the international transport services market

Results

List of used literature

MAIN CONTENT OF THE RESEARCH

In the introduction part of the dissertation, the relevance of the topic is justified, the goals and objectives of the research, and the methods are determined, the main provisions presented for defense are explained, and important scientific innovations, theoretical and practical significance, and approbation of the research are presented.

The first chapter of the dissertation entitled "The scientific and methodological basis of the formation and development of the competitiveness of the modern transport sector" consists of three subchapters. The first subchapter of the first chapter is called "Scientific and methodological basis of the formation and development of the competitiveness of transport services in a market economy". This subchapter mainly examines the features of increasing the competitiveness of transport services, different scientific approaches, etc.

The conducted researches shows that the scientific approaches to the competition process in the research works of internationally renowned economists were different. They gave different explanations to the concept of competition. For example, M. Porter mainly put forward the theory of "competitive advantages" in his works and justified it from a scientific point of view. In his research, he noted that "the competitiveness of each country's companies depends on economic factors such as competitive strategy and competitive advantages⁷". S.M.Abalonin, who is considered one of the well-known scientists of the post-soviet space, noted in his work that "competition should perform several basic functions in the economy: motivation, regulation, control, adaptation⁸". As can be seen, economists have paid significant attention to competitive relations.

⁷ Vavilova, Y.V. International trade / Y. Vavilova. - Baku: Publishing House of the Economic University, - 2009, - 340 p.

 $^{^8}$ Abalonin, S.M. Competitiveness of transport services / S.M. Abalonin. - Moscow: Akademkniga, - 2004, - 101 p.

Another researcher D.V.Kuzmin showed in his work that " a country's competitive advantages in economic areas are the quality that determines its business attractiveness⁹".

For example, American John Coyle, one of the most prominent economists of the 20th century, showed in his research work "Transportation" that " transportation is one of the most important means for modern civilized person to organize the chaotic world. "It is undoubtedly one of the most important areas in the world when viewed from an economic, political and military point of view. The more complex our lives become, the more we need to depend on transportation services¹⁰".

Andre P. notes in his scientific research that "it is necessary to take into account that the relationship between the transport sector and economic development is complex. Transport infrastructure plays an important role in the development of the national economy¹¹".

Subchapter 2 of the chapter I is entitled "The main features of implementing a unified transport policy in the modern globalized world". This subchapter examines the main advantages of implementing a modern transport policy, issues related to its impact on the quality of transport services, etc.

The conducted analyses show that in the implementation of a single transport policy in developed countries, three main ISO quality standards in the field of transport services are taken into account. They include: terms for transport services and the procedure for their definition; a set of quality indicators for passenger transport services; a set of quality indicators for freight transport services. The mentioned quality standards for transport services primarily take into account the economic interests and needs of transport service users.

The third subchapter of the first chapter is called "The main advantages of private entrepreneurship in the transport sector of developed countries". This subchapter analyzes the creation and

¹⁰ Nazarenko V.M. et al. Transport support for foreign economic activity. / V.M. Nazarenko. - Moscow: Center for Economics and Marketing, - 2015, - 512 p.

⁹ Kuzmin, D.V. National competitiveness, global instability and macroeconomic equilibrium / D. Kuzmin. - Moscow: Vostok-Zapad, - 2010. - 224 p.

¹¹ Andre P. and etc. A handbook of transportation. USA, New-York, Edwar Elgar Publishing, 2011, 928 p.

development of private entrepreneurship in various types of transport in a number of countries of the world, its impact on the country's economy, etc. issues. The privatization process of transport companies among the European Union countries initially began in Great Britain at the end of the last century. Newly established private railway companies continue their activities at the expense of their issued shares.

The rail transport network in Canada and America has been privatized and completely transferred to the private sector for many years. In South American countries such as Mexico, Brazil and Argentina, rail transport has been transferred to the private sector on a concession basis.

In modern countries, the air transportation services market operates on the basis of various market models. These include:

In countries where the paternalistic model operates, the main stateowned airlines own 2/3 of the market. The state itself supports the activities of these companies. Financial assistance is allocated from the state budget to update the aircraft fleet with new models and maintain the infrastructure. Private air transport companies can control up to 50% of the market. Their cargo and passenger traffic volumes are lower than those of state-supported airlines.

Typically, this type of market model is used in countries such as the UAE, Thailand, Singapore, etc. is used in countries such as. In the paternalistic market model, state regulation policy in the air transport sector is carried out by the state.

In countries where the free market model operates, the level of government regulation of the air transport sector is very low. The main goal at the moment is to reduce the costs allocated to this area from the state budget. This model is used in America, Japan, Canada, as well as in the developed countries of the European Union. As a result, many private air transport companies have begun to operate in these countries, and tariffs for cargo and passenger services have decreased.

They have higher volumes of cargo and passenger transportation, as well as revenues, compared to state-supported airlines¹².

The joint air transport market model encompasses various features of both models mentioned above. This model is used to govern the air transport sector in countries such as Argentina, Russia, Italy and Brazil.

Russia was the first of the post-soviet countries to privatize seaports in the 1990s. At that time, the state sold 75-80% of its shares through public auctions. The private sector's share in shipping companies and repair facilities was increased to 49%.

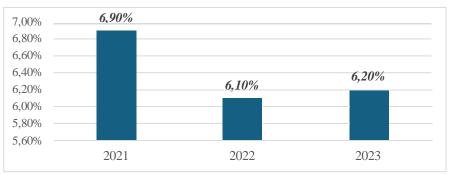
In Georgia, serious economic reforms have been carried out in the maritime transport and its infrastructure sectors in recent years. The seaport located in the city of Batumi, Georgia, was transferred to the control of a private foreign company for 49 years. In addition, 49% of the shares of the port of Poti were purchased by another foreign company. It should also be noted that this foreign company belongs to the UAE. In Poland, shares of several seaports have been floated. The privatization of seaports is planned to be carried out first with shares owned by seaport employees. In the next stages, the privatization of production facilities included in this sector and the participation of foreign companies are planned¹³

The second chapter of the dissertation entitled "The study of the current situation in the transport sector of the Republic of Azerbaijan and the possibilities of establishing private entrepreneurship in this field" consists of three subchapters. The first sub-chapter of the second chapter is called "Economic analysis of the current situation on recent years in the national transport sector". This sub-chapter analyzes the current economic situation observed in individual transport modes in recent periods, analyzes existing problems, issues of their elimination, etc.

20

¹² Bayramov, A. Current situation in the air transport sector and ways to increase efficienc [Electronic resource] /Edf.az.—Bakı,-2022,URL: http://edf.az/uploads/documents/Abil_BayramovAZALda_s%C9%99m%C9%99r %C9%99lilik m%C9%99s%C9%99l%C9%99l%C9%99ri-Hesabat.pdf

¹³ World experience of port privatization - (Center for Transport Strategies) [Electronic-resource]/Cfts.org.ua.-Kiev,2011.URL: https://cfts.org.ua/articles/39772



Graph 1. Share of transport and storehouses in the GDP structure of the Republic of Azerbaijan in recent years (in percent)

Source: Compiled by the author based on the "Azerbaijan in Figures – 2024" annual statistical report [Electronic resource]/ stat.gov.az.—Baku,2024.

URL:https://www.stat.gov.az/menu/6/statistical_yearbooks/source/az figures_2024.pdf [p.99-100].

While the share of transport and warehousing in the GDP structure of the Republic of Azerbaijan in recent years was 6.9% in 2021, this indicator decreased to 6.1% in 2022 and 6.2% in 2023 (Graph 1). The main reason for all this was the decrease in the volume of income generated from transport services in freight and passenger transportation in recent years in the transport sector of our country, including in transit corridors, rail, sea, and air transport.

Table 1. Forecast assessment of the possible potential of the transport sector in the Republic of Azerbaijan for transportation services in the next years.

Cargo transportation in the transport	In 1990 - 565.6 million tons
sector of Azerbaijan (Real statistical	In 2023 - 229.2 million tons
indicators)	
In the context of the Strategic	
Roadmap (SR) for development of	
logistics and trade in the Republic of	Possible opportunities
Azerbaijan, the aims to increase the	Minimum - 230 million tons (additional
country's additional freight	potential)
transportation potential (road, rail, sea,	Maximum – 336.4 million tons (real
air transport) by involving the private	potential to reach 1990 level)

sector in international transport corridors ("North-South", "East- West", "Middle Corridor" etc.) Total cargo transportation potential of the transport sector of Azerbaijan, million tons	Total (thousand) = 229.2 million tons (actual 2023) + minimum 230 million tons (additional potential) = 459.2 million tons
	Total (max)=229.2 million tons (actual 2023) + maximum 336.4 million tons (additional potential)=565.6 million tons
Market value of total cargo transportation potential in the transport sector as a result of private sector involvement in Azerbaijan, billion US dollars	Minimum average market value of 1 ton of cargo is 50 USD 230 million tons (additional potential) x 50 USD = 11.5 billion USD 336.4 million tons x 50 USD = 16.8 billion USD
Projected potential share of private transport sector in Azerbaijan's GDP by transportation	GDP in 2023 72.3 billion USD 11.5 billion USD = 15.9% share in GDP 16.8 billion USD = 23.2% share in GDP
In the case of the creation of a private sector in air transport (in the SR for the development of logistics and trade in the Republic of Azerbaijan) Annual possible cargo transportation	It can increase the GDP of the Republic of Azerbaijan by up to 15 million manats. It can increase the net income by 5%. 9.3 million tons in the Caspian Sea
potential of "Azerbaijan Caspian Shipping " CJSC.	2.4 million tons outside the Caspian Sea

Source: Compiled by the author based on the Strategic Roadmap (SR) for development of logistics and trade in the Republic of Azerbaijan [14,p.2-5] and "Transport in Azerbaijan (1995-2024)", ASCO corporate catalog [15,p.1-17].

The conducted analyses show that while 565.6 million tons of cargo were transported in the transport sector of Azerbaijan in 1990, this figure will decrease by 2 times to 229.2 million tons in 2023 (Table 1). In the SR on the development of logistics and trade of our country, it was noted that the additional cargo transportation potential of our country through the use of international transport corridors (North-South, East-West, Middle Corridor, etc.) in the transport sector is 230

million tons¹⁴. The conducted calculations show that the maximum possible potential to reach the current cargo transportation level in 1990 is 336.4 million tons. The total cargo transportation potential in the transport sector of Azerbaijan, including transit transportation, can be 459.2 million tons - 565.6 million tons. If we take the average market value of 1 ton of cargo as 50 USD, we can see that the amount of cargo to be attracted is 11.5 billion and 16.8 billion USD. If we take the GDP of the Republic of Azerbaijan in 2023 as 72.3 billion USD, we can see that the predicted possible share of the private transport sector in transportation services is 15.9%-23.2%. At the same time, the SR predicts that as a result of the creation of a private sector in air transport, the GDP volume will be increased to 15 million manats. The annual possible cargo transportation potential of "Azerbaijan Caspian Shipping" CJSC is 9.3 million tons in the Caspian Sea and 2.4 million tons outside the Caspian Sea. This is also a very low indicator. That is why the involvement of the public-private sector is necessary to meet the growing demand for transportation¹⁵. The analysis conducted shows that it is not possible to fully utilize the potential of freight transportation in the transport sector in the foreseeable future with the support of state transport companies alone. For this, it is absolutely necessary to have transport companies based on the public-private partnership model, as well as private transport companies.

Although the following targets are envisaged in the "SR on the Development of Logistics and Trade in the Republic of Azerbaijan", since the public-private partnership model in the transport sector, including private entrepreneurship in railway, sea, and air transport, has not been provided, serious progress has not been made in this direction.

In the second sub-chapter of Chapter II of the scientific work, entitled "Issues of stimulating the attraction of private investments in the national transport sector", the current state of investments in the

_

¹⁴ Strategic Roadmap for the Development of Logistics and Trade in the Republic of Azerbaijan [Electronic resource] / E-qanun.az. – Baku, December 6, 2016 URL: https://e-qanun.az/framework/57128

¹⁵ ASCO Corporate Catalog [Electronic resource] / Asco.az. – Baku, 2023. URL: https://www.asco.az/uploads_files/2024/05/07/542341715084866.pdf

national transport sector in recent years was analyzed, issues related to private investments, etc. were investigated.

Table 2. Difference in decrease of directed investments (in million manats) to different types of transport in the Republic of Azerbaijan

By type of	2019	2023	Reduction
transport			difference
Railway	1.2	0.1	1.1
transport. mln.			
manats			
Other land	235.8	73.6	162.2
transport, million			
manats			
Sea transport,	98.4	49.6	48.8
million manats			
Air transport,	33.7	1004.7	971 (+ increase)
million manats			

Source: compiled by the author on the base annual statistical reports "Transport in Azerbaijan (2024)" [Electronic resource] /Stat.gov.az.—Baku,2024.URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/source/transport_2024.pdf [p.23].

In recent years, the volume of investments directed to individual types of transport in the Republic of Azerbaijan has also been experiencing a decline. For example, in 2019, 1.2 million manats were invested in railway transport, while in 2023 this figure decreased by 1.1 million manats to 0.1 million manats, in sea transport decreased by 48.8 million manats to 49.6 million manats, and in air transport increased by 971 million manats to 1004.7 million manats. The analysis shows that in recent years, the processes of decline in investments have become even more intensive (Table 2).

Table 3. Revenues from cargo and passenger transportation in road transport in recent years (million manats)

Years	2017	2018	2019	2020	2021	2022	2023
Freight	620.2	635.1	994.2	639.5	642.3	787	842.7
transpor							
tation							
Passenger							
transpor	653.6	761.7	850.1	542.3	632.2	905.5	1102.1
tation							

Source: compiled by the author based on annual statistical reports "Transport in Azerbaijan (2024)" [Elektronic resource] / Stat.gov.az. —Baku,2024.URL:

 $https://www.stat.gov.az/menu/6/statistical_yearbooks/source/transport_2024.pdf~[p.17-18].$

In recent years, a significant increase has been recorded in the volume of revenue from freight transportation by road transport in the Republic of Azerbaijan. For example, in 2017, 620.5 million manats of revenue were generated, while in 2019 this figure increased to 994.2 million manats. As a result of the effects of the COVID-19 pandemic, the volume of revenue from freight transportation in our country decreased in 2021 compared to 2019 and reached 642.3 million manats (Table 3). Compared to 2022, the volume of revenue from freight transportation by road transport in 2023 increased again and reached 842.7 million manats. Compared to 2022, the volume of revenue from freight transportation by road transport in 2023 increased to 1102 million manats. Revenue from passenger transportation in bus transport amounted to 870.6 million manats. manat, and for taxi transportation it reached 231.5 million manats.

In general, the analysis shows that, taking into account the positive effects of the privatization process in road transport, as well as the free competitive activity of private transport companies, it is necessary to implement new economic reforms in railway, sea, and air transport based on existing experience. In addition, it is necessary to take into

account the increase in private road transport companies in international transit transportation in recent years .

In the of chapter II of the study, third subchapter entitled "Issues of formation and development of private entrepreneurship on the transport sector in the Republic of Azerbaijan, taking into account international experience", the issues of creation and development of private entrepreneurship in the Republic of Azerbaijan, international experience in the transport sector, were examined.

Table 4. The losses difference between the revenue generated from general railway transportation (including freight and passenger transportation) and the expences incurred for transportation (million manats)

Indicators	2019	2020	2021	2022	2023
Revenues from	299.7	274.8	284.7	398.9	439.5
transportation,					
million manats					
Transportation					
expences,					
million manats	340.6	399	364	397.9	501.1
Losses				+increase	
difference,	40.9	124.2	79.3	1 million	61.6
million manats				tons (no	
				damage)	

Source: Compiled by the author based on the annual statistical report on "Transport in Azerbaijan" (2024). [Electronic resource] / Stat.gov.az.—Baku,2024.URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/source/transport_2024.pdf [p.27].

The analysis shows that the volume of losses in general rail transport (including passenger and freight) was 40.9 million manat in 2019, 79.3 million manat in 2021, and 61.6 million manat in 2023 (Table 4). All this confirms the serious strains in the activities of the rail transport sector.

Table 5 Differences (losses) between expenses and revenues for sea transport freight transportation in our country in recent years, in thousand manats

Years	Expenses	Revenues	Differences
			(Losses)
2013	105351 thousand	96642 thousand	8709 thousand
	manats	manats	manats
2014	116654.0 thousand	101329.2 thousand	15324.8 thousand
	manats	manats	manats
2016	170702.8 thousand	159397.8 thousand	11,305 thousand
	manats	manats	manats
2018	171413.9 thousand	168951.5 thousand	2462.4 thousand
	manats	manats	manats

Source: Compiled by the author based on annual statistical reports "Transport in Azerbaijan (2006-2024)" [Electronic resource] / Stat.gov.az.—Baku,2024.URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/

In recent years, serious differences have been observed between costs and revenues in the field of maritime cargo transportation in the Republic of Azerbaijan. For example, in 2013, the amount of costs for maritime transport was 105351 thousand manats, and the volume of revenues was 96642 thousand manats. The difference between expences and revenues was 8709 thousand manats. In 2014, the difference between costs and revenues was 15324.8 thousand manat, in 2016 it was 11305 thousand manats, and in 2018 it was 2462.4 thousand manats (Table 5).

Table 6.
The volume of differences (losses) between expenses and revenues in the field of passenger transportation by sea transport in our country in recent years (in thousand manats)

Years	Expenses	Revenues	Losses
	5990	424	5566
2000	thousand manats	thousand manats	thousand manats
2005	15045	684	14361 thousand
	thousand manats	thousand manats	manats
2010	1842.3	1166.5	675.8
	thousand manats	thousand manats	thousand manats
2015	2898	812.3	2085.7
	thousand manats	thousand manats	thousand manats
2018	3262.8 thousand	1615.1 thousand	1647.7 thousand
	manats	manats	manats
2019	3168.6	2284.4	884.2
	thousand manats	thousand manats	thousand manats
2020	3053.0	1128.2	1924.8 thousand
	thousand manats	thousand manats	manats
2021	3200.4	2995.9	204.5
	thousand manats	thousand manats	thousand manats

Source: Calculated and compiled by the author based on the annual statistical reports "Transport in Azerbaijan (2006-2024)" [Electronic resource]/Stat.gov.az.—Baku,2024.URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/illik

In recent years, differences between expenses and revenues have been observed in passenger transportation by sea transport. For example, in 2000, expenses in the field of passenger transportation by sea transport were 5990 thousand manats, and revenues were 424 thousand manats. The difference between expenses and revenues was 5566 thousand manats. In 2010, the difference between costs and revenues was 675.8 thousand manats, in 2020 it was 1924.8 thousand manats, and in 2021 it was 204.5 thousand manats (Table 6). The analysis shows that in the near future, the creation and expansion of private entrepreneurial activity in maritime transport can ensure

greater competitiveness of this sector and positive dynamics in transportation.

Table 7.

Differences (losses) between expenses and revenues in general transportation of air transport

(in thousand manats)

	Transportation	Transportation	Losses					
Years	expenses,	revenues,	differences,					
	in a thousand	in a thousand	thousand					
	manats	manats	manats					
2000	70729 thousand	63655 thousand	7074 thousand					
	manats	manats	manats					
2005	210474 thousand	179527 thousand	30947					
	manats	manats	thousand					
			manats					
2009	393650 thousand	331503 thousand	62147					
	manats	manats	thousand					
			manats					
2010	437695 thousand	388870 thousand	48825					
	manats	manats	thousand					
			manats					
2018	2187832 thousand	2066918 thousand	120914					
	manats	manats	thousand					
			manats					

Source: Compiled by the author based on annual statistical reports "Transport in Azerbaijan (2006-2019)" [Electronic resource] / Stat.gov.az.—Baku,2024.URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/

In recent years, differences have also been observed between revenues and expenses in the field of general air transport. For example, in 2000, the volume of revenues from air transport was 63655 thousand manat, and expenses from transportation were 70729 thousand manat, with a difference in losses of 7074 thousand manat. In 2010, the difference between expenses and revenues from transportation was 48825 thousand manat, and in 2018 it was 120914 thousand manat (Table 7).

Table 8. Differences between expenses and revenues for air passenger transportation, in thousand manats

Years	Expenses, in	They come in a	Difference in
	thousand manats	thousand	losses, in
		manats.	thousand manats
2000	40370 thousand	32925 thousand	7445 thousand
	manats.	manats.	manats.
2005	123350 thousand	96680 thousand	26670 thousand
	manats.	manats.	manats.
2010	252175 thousand	132319 thousand	119856 man man.
	manats.	manats.	
2015	361667 thousand	296907 thousand	64760 thousand
	manats.	manats.	manats.
2017	634330 thousand	461998 thousand	172332 thousand
	manats.	manats.	manats.
2018	736692 thousand	528459 thousand	208233 thousand
	manats.	manats.	manats.
2020	548364 thousand	343383 thousand	204981 thousand
	manats.	manats.	manats.
2022	1381628 thousand	1261872 thousand	119756 thousand
	tons	manats	manats

Source: Compiled by the author based on annual statistical reports "Transport in Azerbaijan (2006-2023)" [Electronic resource] / Stat.gov.az. –Bakı, 2024. URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/

In recent years, the differences between expenses and revenues in the field of air passenger transportation has been increasing (Table 8). For example, in 2000, the costs incurred for air passenger transportation were 40370 thousand manats, and revenues were 32925 thousand manats. Expenses exceeded revenues by 7445 thousand manats. In 2005, air transport costs exceeded revenues by 26670 thousand manats, in 2010 by 1119856 thousand manats, in 2018 by 208233 thousand manats, and in 2020 by 204981 thousand manats. In 2022, air passenger transportation costs exceeded revenues by 119.7 million manats.

Chapter III of the dissertation entitled "The assessment of the impact of private entrepreneurship activity on increasing the

strategic role of the Republic of Azerbaijan in international transport transit projects" consists of 3 subchapters.

In the third chapter of the research work, first subchapter entitled "The influense of the private transport sector in enhancing the strategic role of the Republic of Azerbaijan in the "Europe-Caucasus- Asia (ECA)" international transit project", the current economic situation of our country in the field of transportation in the mentioned international transport transit corridor and issues related to eliminating existing problems were analyzed.

Table 9.

Transport sector activity in the "ECA" transport corridor (cargo transportation, million tons, in our part of the country)

By years	2012	2013	2014	2015	2016	2019	2020	2021	2022	2023
Total cargo transpo rted. million tons	56.8	59	58.1	52.2	50	52.7	38.4	39.6	51.4	9.3
Railwa y transpo rt.	21.3	21.3	19.8	15.5	13.8	13.3	12.8	13.4	16.8	-
By sea transpo rt	10.3	10.2	9.3	6	4.9	4.8	5	4.5	6.6	-
Transit cargo transpo rtation, million tons	15.7	14.7	12.7	9.4	7.9	8	8.3	8.8	13.6	6.4
By railway	7.3	6.6	4.5	3.9	3.7	3.79	4.1	4.5	7.4	-
By sea transpo rt	8.3	8.1	8.2	5.5	4.2	4.28	4.25	4.24	6.1	-

Source: compiled by the author based on annual statistical reports "Transport in Azerbaijan (2012-2024)" [Electronic resource]/ stat.gov.az.—Baku,2024.

URL:https://www.stat.gov.az/menu/6/statistical_yearbooks/source/transport_2024.pdf

Compared to 2012-2013, the volume of transit transportation on the "ECA" transport corridor in 2022 decreased to 13.6 million tons. In 2023, the volume of total cargo transportation decreased to 9.3 million tons, and the volume of transit cargo transportation decreased to 6.4 million tons (Table 9).

Table 10.

Transport activity in the "ECA" transport corridor, passenger transportation (in our part of the country)

By years	2012	2013	2014	2015	2016	2019	2020	2021	2022
Passenger transportation (million passengers)	260	285	307	331	338	360	158	75.7	111.8
Railway transport. (millions of passengers)	2.1	1.8	1.89	1.6	1.8	3.5	1	-	-
Sea transport, thousand passengers.	17	14	15	9	20	22	20	18	22

Source: Compiled by the author based on the annual statistical report "Transport in Azerbaijan (2023)". [Electronic resource]/ stat.gov.az.—Baku,2023.URL:

https://www.stat.gov.az/menu/6/statistical_yearbooks/ [p.26]

In recent years, serious changes have been recorded in the passenger transportation sector in the Azerbaijani part of the "ECA" transport corridor. For example, compared to 2016, the volume of passenger transportation in 2020 decreased by 2 times, reaching 158,411 thousand passengers. The volume of passenger transportation by rail along the transit transport corridor decreased by 2 times in 2020 compared to 2019, reaching 1,047 thousand passengers. In sea transport, the volume of passenger transportation in 2020 decreased by 2 thousand people compared to 2019, reaching 20 thousand passengers (Table 10). Compared to 2021, the volume of transportation by sea transport increased in 2022, reaching 22 thousand passengers. An analysis of the activity of rail and sea transport on the "ECA" transport corridor in terms of freight and

passenger transportation shows that it is necessary to attract new companies with public-private partnerships and private transport companies to increase the volume of transportation.



Graph 2. Forecast indicators for transit cargo transportation in the Europe-Caucasus-Asia (ECA) transport corridor (in our part of the country), (2022-2033), thousand tons

Source: The graph was calculated by the author in the MS LTSC Excell software package. [Electronic resource]/stat.gov.az. —Baku, 2023. URL: https://www.stat.gov.az/menu/6/statistical_yearbooks/ [p.26].

The forecast analyses conducted show that the volume of transit cargo transportation will decrease to 3,393.9 thousand tons in 2030, and to 1682.9 thousand tons in 2033 (Graph 2). In general, it is considered appropriate to strengthen the transport and trade relations of the Republic of Azerbaijan with the European Union and Central Asian countries in the near future. It is necessary to continuously implement measures in this direction

The second subchapter of Chapter III of the research work is entitled "Issues of increasing the potential capabilities of the Republic of Azerbaijan in expanding transport relations with regional states under the "North-South" international transport transit project". In this subchapter, the current economic situation in the field of transportation in the mentioned transport corridor is analyzed, the potential capabilities of our country, etc. are investigated.

Table 11. Cargo transportation along the "North-South" transport corridor in 2023 , thousand tons

	Volume of transported cargo, thousand tons
	9271.1 thousand tons
	Transit cargo transported, thousand tons
For 2023	1829.7 thousand tons
	Freight turnover, million t-km
	2494.7 million t-km

Source: Compiled by the author based on the statistical report "Transport in Azerbaijan 2024" [Electronic resource]/ stat.gov.az. – Baku,2024.

URL:https://www.stat.gov.az/menu/6/statistical_yearbooks/source/transport_2024.pdf [p.26].

In 2023, the volume of transportation in the Azerbaijani part of the "North-South" international corridor was 9.2 million tons, and the volume of transit transportation was 1.8 million tons (Table 12). The fact that the "North-South" international transport corridor has a wide potential for trade relations between the founding countries such as Russia, Iran and India also makes it necessary for the Republic of Azerbaijan, as a participant in the corridor, to make full use of favorable transit opportunities.

The third subchapter of Chapter III of the research work is entitled "The role of private entrepreneurship on the transport sector in the development of the "Zangezur" international transit transport project." This subchapter examines issues related to the development of the "Zangezur" international transport corridor and the possible prospects of this area.

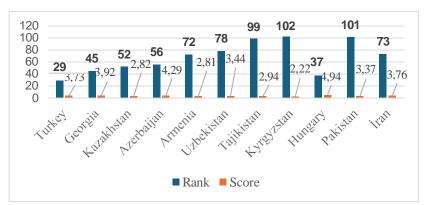
There is a distance of 40 km between the NKR and the Zangilan region of Azerbaijan. The planned "Zangezur" corridor connects the mentioned territories. After the opening of the Azerbaijan-Nakhchivan (Zangezur) corridor, our country will use the new corridor along with the BTK railway line. As a result, the volume of transit transportation between Nakhchivan-Azerbaijan-Turkey will increase several times.

The establishment of transport companies based on public-private partnership on the basis of Azerbaijani state transport companies, and the activities of private transport companies in this corridor will have a positive impact on the activity of the "Zangezur" corridor.

In the development of the "Zangezur" international transport corridor, in the implementation of transport services along this corridor, it is important to involve railway, sea, air transport companies, which must be established in a public-private partnership, as well as fully private transport companies in this area. At the same time, it is necessary to ensure the management of airports, automobile, railway, infrastructure in the liberated territories in a public-private partnership, or the activities of fully private transport companies. All this will allow attracting private investments, along with investments allocated from the state budget, in the development of the "Zangezur" transport corridor, in the creation of new transport infrastructure areas along this corridor. In this case, the number of transport companies providing transport services will increase, and the expences of transport processes may decrease. Steps taken in this direction can increase the competitiveness of the "Zangezur" transport corridor. The development of the "Zangezur" international transport corridor can also have a positive impact on the expansion of micro, small, medium and large entrepreneurial activities in the production and service sectors in the liberated territories.

The IV Chapter of the dissertation entitled "Perspective directions of development of private entrepreneurship in the transport sector of the Republic of Azerbaijan" is composed of 5 subchapters.

The first subchapter of the research work is entitled "Identification of the main directions of development of private entrepreneurial activity in the railway transport sector." In this subchapter international rating indicators were analyzed, and a development of private entrepreneurship in main directions, etc. have been investigated.

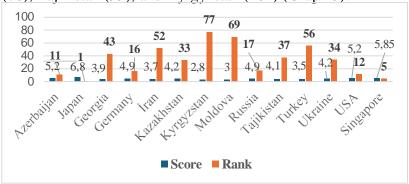


Graph 3. Ranks and scores of Azerbaijan and some regional states on the travel and tourism development index and its structure for land and air infrastructure (among 119 countries)

Source: Compiled by the author based on Travel_and_Tourism Development Travel_and_Tourism Development Index 2024 (WEF) [Electronic-resource]/weforum.org—Geneva,2024.URL:

https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf [p.34-37].

The analysis shows that Azerbaijan ranked 56th in the relevant international ranking report for land and port infrastructure indicators with a score of 4.29. According to this indicator, our country was ahead of countries in the region such as Armenia (72), Uzbekistan (78), Tajikistan (99), and Kyrgyzstan (102) (Graph 3).

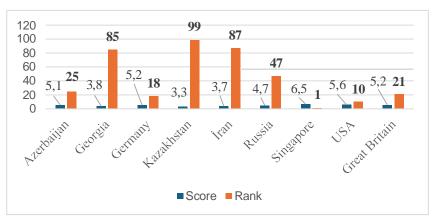


Graph 4. Dynamics of changes in the position on the efficiency of railway services in some countries

Source: Compiled by the author on the base "The Global Competitiveness Report 2019" (World Economic Forum Insight Report). [Electronic resource]/ Weforum, -Geneva, 2020. URL: https://www3.weforum.org/docs/WEF_The Global Competitiveness Report 2019.pdf

In the 2019 Global Competitiveness Report (GCR 2019), Japan (1), Singapore (5), Azerbaijan (11), and the United States (12) were ranked first among 141 countries in terms of rail service efficiency. It should be noted that the Republic of Azerbaijan was ahead of countries such as Georgia (43), Germany (16), Iran (52), Kazakhstan (33), Kyrgyzstan (77), Moldova (69), Russia (17), Tajikistan (37), Turkey (56), and Ukraine (34) in terms of rail service efficiency (Graph 4).

The second subchapter of chapter IV of the research work is entitled "Main directions of development of private entrepreneurship in the field of sea transport." This subchapter analyzes international rating indicators in sea transport and identifies the main directions of development of private entrepreneurial activity in this field.

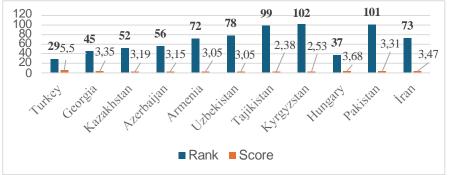


Graph 5. Efficiency of seaport services 1-7 (best) according to the Global Competitiveness Report.

Source: Compiled by the author on the base "The Global Competitiveness Report 2019" (World Economic Forum Insight Report). [Electronic resource] / Weforum, -Geneva, 2020. URL: https://www3.weforum.org/docs/WEF_The Global Competitiveness Report 2019.pdf

The latest Global Competitiveness Report (GCR-2019) recorded a significant change in the rating indicators of the Republic of Azerbaijan on sea transport compared to other countries. For example, in 2019, Singapore was in 1st position among 144 countries in terms of efficiency of seaport services with 6.5 points. The USA was in 10th place with 5.6 points, and the UK was in 21st place with 5.2 points. Compared to neighboring countries, Azerbaijan was in 25th place with 5.1 points. According to this indicator, our country was ahead of Georgia by 3.8 points (85th place), Iran by 3.7 points (87th place), Russia by 4.7 points (47th place), and Kazakhstan by 3.3 points (99th place) (Graph 5).

The third subchapter of chapter IV of the research work is entitled "Prospects for the development of private entrepreneurship in the field of air transport." This subchapter analyzes international rating indicators for air transport, issues of development of private entrepreneurship in this field, etc.



Graph 6. Ranking and scores of Azerbaijan and some regional states in 2024 according to the air transport infrastructure indicator included in the structure of the travel and tourism development index (among 119 countries)

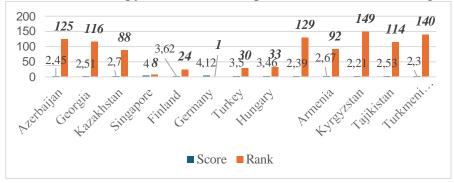
Source: compiled by the author on the base "Travel_and_Tourism Development Index 2024" (WEF) https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf"https://www3.weforum.org/docs/WEF_Travel_and_Tourism_Development_Index_2024.pdf [p.34-37]

The analysis conducted shows that, in 2024, a significant change was observed in the ranking and scores of Azerbaijan and some

regional states in terms of the travel and tourism development index and the air transport infrastructure included in its structure. For example, according to the relevant ranking, Azerbaijan was ranked 56th among 119 countries in terms of the quality of its air transport infrastructure with a score of 3.15. According to this indicator, our country was ahead of countries such as Armenia (72), Uzbekistan (78), Tajikistan (99), Kyrgyzstan (102), Pakistan (101), and Iran (73). Countries such as Turkey (29), Georgia (45), Kazakhstan (52), and Hungary (37) were ahead of only our country (Graph 6).

The fourth subchapter of IV chapter is entitled "The role of digitalization and the application of modern innovations in the transport sector of the Republic of Azerbaijan for the development of private entrepreneurship". This subchapter analyzes the issues of digitalization in the transport sector, examines the role of modern innovations in the development of transport modes, etc.

The analysis conducted confirms that Azerbaijan's international rating indicators for LPI are low compared to other post-soviet countries and occupy one of the lower places in the overall ranking.



Graph 7. Comparison of Logistics Performance Index (based on a scale of 1-5) between Azerbaijan (LPI) and regional neighboring and Turkic-speaking countries

Source: Compiled by the author based on LPI 2014 [Electronic resource] / worldbank.org. —Washington, 2024. URL:https://lpi.worldbank.org/2014 [p.1-2].

In 2014, Azerbaijan was ahead of Uzbekistan, Kyrgyzstan, Turkmenistan only in terms of LPI. Georgia, Kazakhstan, Hungary, Tajikistan were ahead of Azerbaijan in terms of this indicator (Graph

7). According to the World Bank and the latest annual Logistics Performance Index (LPI) structure for 2014, Azerbaijan was ranked 125th among 160 countries with a score of 2.45. This rating was organized according to 6 parameters: customs activity, 2.57 points (82nd place), infrastructure 2.71 points (67th place), international transportation 2.57 points (112th place), logistics competence and quality 2.14 (148th place), route registration and tracking 2.14 points (142nd place).

During 2015-2023, the Republic of Azerbaijan was not included in this international rating, as it was the lowest in comparison with other terms of indicators such as customs infrastructure, international transportation, quality of logistics services, registration and tracking of transportation routes, and frequency of delivery. As can be seen from the analysis, the state monopoly of certain types of transport in Azerbaijan (except for road transport), their ineffective operation, and the lack of provision of private entrepreneurship in the transport sector are the main factors slowing down the development of the LPI rating indicators. In Georgia and Kazakhstan, Turkey, the representation of the private sector in air, sea, rail transport, seaports and airports leads to an increase in the international rating indicators for LSG. That is why the creation and development of joint public-private or private enterprises in the transport and logistics sector in Azerbaijan, the full implementation of the digitalization process in the activities of transport modes, and the application of modern innovations can ensure the sustainable development of this sector and our re-participation in international rating reports on LPI.

The fifth subchapter of the fourth chapter is entitled "Main directions of integration of the national transport services market of the Republic of Azerbaijan into the international transport services market." This subchapter analyzes the problems that arise when certain types of transport enter the international transport services market and issues of their elimination.

In order to ensure the integration of the Azerbaijani transport services market into the single transport space of the European Union and to determine the development directions, it is important to strengthen the competitive environment in this market, first of all, within the field of activity of each type of transport (as well as between these types of transport). At the same time, it is necessary to draw up perspective development programs, strategies, concepts, plans, reports in this area. Ensuring management through public-private partnership for transport companies can play an important role in this direction.

In general, it is more important to investigate and analyze the internal and external economic threats that can be considered in terms of ensuring the economic and political security of the national transport sector, and to determine ways to eliminate them.

As a result of the formation of traditions of independent statehood in the Republic of Azerbaijan since the early 1990s, as well as the implementation of relevant measures in the main areas of development of the country, the scope of activity of the national transport sector has expanded even more. It is for this reason that after the conference on the restoration of the Great Silk Road held in Baku in 1998, each of its participants, including our state, began to take serious steps to implement its national security strategy in international transport projects. In modern conditions, our state considers ensuring national security in all spheres of the national economy, including the transport complex, as well as ensuring domestic political stability and consolidation of society as the most important priority area. For example, in international relations, most post-soviet countries have undergone a number of economic, political, legal, etc. changes in recent years. They face problems in various areas, which in turn affects the national security system of each country and requires solving numerous problems arising in the direction of protecting national sovereignty. Taking this into account, the development of a special concept of economic security of the transport sector should be considered a very important step in terms of protecting the economic interests of society and the state, as well as eliminating potential internal and external threats to stable and safe development sustainability in the region.

The main priority in ensuring national security in Azerbaijan is, first of all, the earliest possible elimination of deep economic crises that may arise in all sectors of the national economy, the creation of

effective market relations, the development of national entrepreneurship, the elimination of monopolies in the transport sector, ensuring free competition and creating a competitive new transport sector, the creation of private entrepreneurship entities, the implementation of consistent measures in the processes of integration into the international economic space, etc. belongs. It is important to note that in modern conditions, national security is based, first of all, on the sustainability of economic security, which, in turn, ensures the creation of favorable conditions for the comprehensive development of the national economy at the macro level. It is from this point of view that the transport complex is capable of playing a key functional role in the economic security system, since it is a leading segment in the national economy, as well as a potentially labor-intensive industry.

Recently, the Azerbaijani state has been taking very important steps to develop its national transport complex. However, despite all this, it is currently necessary to bring the level of transport communications systems in line with the current standards of the European Union, provide them with modern vehicles, integrate them into the single European transport network as soon as possible, export transport services, stimulate investments in this area, etc. is considered one of the main issues for the future. In general, more important is the study and analysis of internal and external economic threats that can be considered from the point of view of ensuring the economic and political security of the national transport sector, and determining ways to eliminate them.

Results and suggestions for the dissertation work

The solution of the issues raised in the dissertation work allowed us to determine the following effective results:

- 1. Formation and effective management of transport companies with public-private partnership, elimination of state monopoly in this area, increasing their competitiveness, in particular, attracting local and foreign investors (as well as investment flows), increasing the volume of export of private transport services to the world market, etc. can have a stimulating effect on the directions. As a result of the implementation of the above measures, it is possible to completely prevent the decline in annual indicators of freight and passenger transportation and, at the same time, income in the transport industry, as well as reduce annual expenses, public investments and subsidies in this area.
- 2. The analysis showed that in recent years there has been a decrease in the volume and cost of freight and passenger transportation on state-controlled rail, sea and air transport, as well as a significant difference between costs and income, and a tendency to losses. This is due to the lack of cost-effective management of state-owned transport companies and infrastructure sectors, the lack of public-private partnerships, as well as the lack of opportunities for private transport companies to operate in the domestic market due to the fact that state-owned transport companies own the country's transport infrastructure, etc. is related to:
- 3. Based on the conducted analyses, it was determined that while 565.6 million tons of cargo were transported in the transport sector of Azerbaijan in 1990, this figure decreased by 2 times to 229.2 million tons in 2023. In the Strategic Roadmap for Development of Logistics and Trade in the Republic of Azerbaijan, it was noted that the additional cargo transportation potential of our country through the use of international transport corridors (North-South, East-West, Middle Corridor, etc.) in the transport sector is 230 million tons. It should be noted that after the "Zangezur" transport corridor starts operating, this indicator will increase further. The calculations show that the maximum possible potential to reach the current cargo transportation

level in 1990 is 336.4 million tons. The total cargo transportation potential in the transport sector of Azerbaijan, including transit transportation, is 565.6 million tons. If we take the average market value of 1 ton of cargo as 50 USD, we can see that the amount of cargo to be attracted is 16.8 billion USD. If we take the GDP of the Republic of Azerbaijan in 2023 as 72.3 billion USD, we can see that the predicted possible share of the private transport sector in transportation services is 23.2%. The implementation of this transportation volume is possible only as a result of attracting private transport companies to the domestic transport services market.

- 4. The losses recorded in general cargo transportation, as well as in rail and sea transportation, especially in transit transportation, in the Europe-Caucasus-Asia ("ECA") transport corridor were determined and analyzed in terms of both weight (million tons) and value (million US dollars). In order to eliminate these processes, the need to establish and jointly manage transport companies with public-private partnerships and to involve private transport companies in the domestic transport services market was substantiated;
- 5. Forecast indicators for transit cargo transportation covering the near future years on the "ECA" transport corridor (in our country's part) have been calculated. It has been determined that in the near future, the trend of decreasing indicators on the "ECA" transport corridor in our country's part will be observed (the volume of transit cargo transportation in 2030 will be 3393.9 thousand tons, and in 2033 1682.9 thousand tons). The issues of increasing the role of transport companies and private transport companies, which will be jointly managed on the basis of public-private partnership, in the process of increasing the volume of transportation on this corridor have been substantiated;
- 6. The regression line model obtained based on the Eviews-12 application software package on the factors affecting revenue from sea transport will be as follows:

Y = 1.1317*X1 + 1.6070*X2 - 0.1866*X3 - 0.0964538188426*X4 + 893.50

Based on the established relationship equation, it is possible to conclude that a one-unit increase in the volume of expenses incurred on freight transportation (X1) in sea transport of Republic of

Azerbaijan can lead to a 1.1317-unit increase in the revenue from transportation, a one-unit increase in expenses incurred on passenger transportation (X2) can lead to a 1.6070-unit increase in the revenue from transportation, a one-unit increase in the volume of investments (X3) directed to fixed capital can lead to a 0.1866-unit decrease in the revenue from transportation, and a one-unit increase in the volume of fixed assets (X4) put into use can lead to a 0.0964-unit decrease in the revenue from transportation.

7. The regression linear model obtained based on the Eviews 12 application software package on the factors affecting revenue from air transportation will be as follows:

$$Y = 1.1318*X1 + 0.8584*X2 + 0.2731*X3 + 0.0176*X4 - 32129$$

Based on the established relationship equation, it is possible to come to this conclusion. In the Republic of Azerbaijan, a one-unit increase in the volume of expenses incurred on air freight transportation (X1) leads to a 1.1318-unit increase in the revenue from total transportation, and a one-unit increase in the volume of expenses incurred on passenger transportation (X2) leads to a 1.1318-unit increase in the revenue from total transportation. A one-unit increase in fixed capital investments (X3) leads to a 0.8584-unit increase in revenue from general transportation, and a one-unit increase in the cost of putting fixed assets into use (X4) leads to a 0.0176-unit increase in revenue from general transportation.

8. Based on the Eviews-12 application software package on the factors affecting revenue from railway transportation can be expressed as follows:

$$Y = 0.2260*X1 + 0.8651*X2 + 4.1643*X3 - 3.8576*X4 + 136392$$

Based on the established relationship model, the following results can be noted: a one-unit increase in the volume of expenses incurred on freight transportation (X1) in the railway transport of the Republic of Azerbaijan leads to an increase in the income from transportation by 0.2260 units, a one-unit increase in the volume of expenses incurred on passenger transportation (X2) leads to an increase in the income from transportation by 0.8651 units, a one-unit increase in investments directed to fixed capital leads to an increase in the income from transportation (X3) by 4.1643 units, a one-unit increase in the cost of

putting fixed assets into use (X4) leads to a decrease in the income from transportation by 3.8576 units.

- 9. We have determined the elasticity coefficient that determines the percentage change in the relationship between rail transportation costs and investments in fixed capital. Based on the elasticity coefficient E=-1.57, it can be shows that a 1% increase in rail transportation costs leads to a 1.57% decrease in fixed capital investments in this type of transport.
- 10. Determined the elasticity coefficient, which determines the percentage change in the relationship between revenues from rail transportation and transportation expenses. Based on the elasticity coefficient E=1.06, it can be shows that a 1% increase in revenues from rail transportation leads to a 1.06% increase in transportation expenses.
- 11. Determined the elasticity coefficient, which determines the percentage change in the relationship between the revenue from sea transport and the costs incurred for transport. E=0.8, if we examine the elasticity coefficient, we can obtain the following result. A 1% increase in revenue from sea transport causes a 0.8% increase in transport costs.
- 12. We have determined the elasticity coefficient that determines the percentage change in the relationship between fixed capital investments in sea transport and transportation expenses. Based on the elasticity coefficient E=-0.47, it can be said that a 1% increase in transportation expenses in sea transport leads to a 0.47% decrease in fixed capital investments.
- 13. An elasticity coefficient has been determined in the Republic of Azerbaijan, which determines the percentage change in the relationship between air transport expenses and fixed capital investments. Based on the elasticity coefficient E=0.12, it can be shows that a 1% increase in air transport expenses leads to a 0.12% increase in fixed capital investments.
- 14. An elasticity coefficient has been determined in the Republic of Azerbaijan, which determines the percentage change in the relationship between revenues from air transportation and transportation expenses. Based on the elasticity coefficient E=0.96, it

can be told that a 1% increase in revenues from air transportation leads to a 0.96% increase in transportation expenses.

15. For the first time, the main indicators of the quality index of transport services (TSQI) in the Azerbaijan part of the international transport corridor "Europe-Caucasus-Asia" ("ECA") have been calculated. These indices can also be used in other countries, on international transport corridors: TSQI (1)=RFT/GDP*100%, in percentage (%); TSQI (2)=RPT/GDP* 100%, in percentage (%); TSQI(3)=RTFT/RFT* 100%, in percentage (%); TSQI(4)=RFT/P, in manats; TSQI(5)=RPT/P, in manats; TSQI(6)=RTFT/P, in manats; TSQI(7)=VTFT/VFT*100%, in percentage (%)

RFT — Revenue from freight transportation in the "Europe-Caucasus-Asia" ("ECA") international transport corridor, in thousand manats (in the Azerbaijan part); RPT - Revenue from passenger transportation in the "ECA" transport corridor, in thousand manats (in the Azerbaijan part); RTFT — Revenue from transit freight transportation in the "ECA" transport corridor, in thousand manats (in the Azerbaijan part); P- Population of the Republic of Azerbaijan, million people; VTFT - Volume of transit freight transported in the "ECA" transport corridor, in thousand tons (in the Azerbaijani part); VFT - Volume of freight transported in the "ECA" transport corridor, in thousand tons (in the Azerbaijan part).

Based on the analysis conducted, it can be said that TSQİ (1) was 0.03% in 2022; TSQİ (2) was 0.03% in 2022; TSQİ (3) in 2022 this indicator was 31.5%; TSQİ (4) in 2023 this indicator was 73 manats. NXKI (5) - in 2022 this indicator was 4.3 manats. TSQİ (6) - in 2022 this indicator reached to 23 manats; TSQİ (7) - in 2022 this indicator was 26.5%. The analysis conducted shows that economic measures should be continuously implemented to eliminate the current declines in the indicators recorded in the indices recorded on the "ECA" transport corridor.

16. For the first time, the author conducted a SWOT analysis of the prospects for public-private partnerships and management by private business entities of state-owned companies operating in the transport sector, taking into account international experience. Based on the

analysis, strengths and weaknesses, potential sides, opportunities and threats were identified for the transport sector.

Based on the results obtained in the dissertation work, the following suggestions were put forward:

- 1. It is necessary to manage railway, maritime, and air transport companies based on the public-private partnership model, maintaining a 51% state share in the overall structure, and selling the remaining 49% to local and foreign investors in the form of shares and bonds (with an annual return of 5-7%);
- 2. Taking into account international experience in the state-monopolized railway, maritime, and air transport sectors, it is important to ensure more efficient use of the related transport infrastructure, with 51% of the total structure being under state control and the remaining 49% being managed jointly with the private sector;
- 3. It is necessary to develop the activities of transport and logistics companies on the basis of public-private sector partnership in railway transport, to create favorable opportunities for the entry of local and foreign private transport operators into the domestic market, and to increase the competitiveness of companies;
- 4. In the railway transport sector, the road infrastructure and its management process should be under the control of the state, and favorable opportunities should be created for private railway transport companies with their own wagons and locomotives to participate in freight and passenger transportation using the existing road infrastructure;
- 5. It is important to strengthen competition between companies established on the basis of public-private sector partnerships in the national air transport sector and foreign air transport companies, increase the participation share of private national transport companies in domestic and international flights, reduce the price of air tickets for short-haul areas, and ensure the operation of several low-budget national private air transport companies in the domestic market;
- 6. The state's share in the management of central and regional airports for air transport should be maintained at 51%, while the remaining 49% should be jointly managed with the private sector on the basis of public-private partnership, or the state should transfer the

management of inactive airports in the regions to private companies on the condition that they are fully operated for a certain period and returned. Central and regional airports should issue bonds (with an annual yield of 5-7%) and shares to ensure self-financing;

- 7. It is advisable to create new seaports, logistics centers and free economic zones in the cities around the Caspian Sea of Azerbaijan, which can be managed on a 51% state-owned and 49% private partnership basis or can be fully transferred to the private sector for a short period of time. In order for these areas to be self-financing, it is necessary to issue shares and bonds with an annual yield of 5-7%. In this case, it is possible to increase the volume of transit transportation by sea transport (on international transport corridors);
- 8. In order to accelerate the process of opening the "Zangezur" corridor between Nakhchivan and Azerbaijan in the liberated territories of our country, it is necessary to stimulate and involve large transport companies from neighboring regional states as interested parties in these processes;
- 9. Considering the existence of the state-owned Baku International Sea Trade Port, the Baku-Tbilisi-Kars railway line, new airports in the occupied territories, the Alat free economic zone, road infrastructure in line with international standards, and modern transport and logistics companies, it is important to involve them in joint management with private transport companies;
- 10. The possibility of opening the "Zangezur" corridor and the establishment of national private transport companies to increase the efficiency of the operation and volume of transportation of international transport transit corridors such as "North-South", "East-West", "Central Corridor" passing through our country should be considered, and these processes should be involved;
- 11. In order to ensure international integration with regional states in the services provided by transport modes in transit transport corridors passing through the territory of the Republic of Azerbaijan, the application and coordination process of digital technologies should be accelerated, intelligent transport network systems should be used in the management process, and the scope of application of digital

infrastructure and digital intermodal transport services should be expanded;

- 12. It is important to create a common digital platform for transport services covering the scope of activities of companies in the transport sector in the Republic of Azerbaijan. Transit is an important condition for the implementation of transport operations. An information system should be formed on companies with public-private partnerships and private companies in the transport services market in the country;
- 13. It is necessary to stimulate the production and export to regional countries of new alternative modes of transport, solar-powered electric batteries, electric vehicles, and their spare parts that can be used in the transport sector by companies operating in our country under public-private partnership;
- 14. In order to strengthen the cooperation of the Republic of Azerbaijan with the European Union, it is necessary to liberalize our country's access to the Trans-European transport infrastructure system and their transport services market (achievement of a bilateral agreement), and to eliminate the economic obstacles that have arisen in this direction;
- 15. It is possible to use sea vessels in the Caspian Sea as a means of public transport on the basis of public-private partnerships, as well as by private business entities. It is important to provide transportation services from the seaport to the Caspian littoral states, including the city of Sumgayit, Hovsan, etc. residential areas, and our regional southern cities for passenger and tourism flows.

The main content of the dissertation is reflected in the following published scientific works of the author:

- 1. Abdullayev, K.N. Issues of regulation of investment activity in the transport services market in Azerbaijan // -Baku: ANAS News, Economic Sciences Series, 2009, №3, p.140-143.
- 2. Abdullayev, K.N. Main directions of development of related road-infrastructure areas for transport services // Baku: Scientific Works, Institute of Economics of ANAS, -2009, № 4, p. 255-261.
- 3. Abdullayev, K.N. Issues of the impact of the national transport services market on the tourism sector / -Baku: ANAS News, Economic Sciences Series, -2010, №1, p.66-70.
- 4. Abdullayev, K.N. Main features of the transport and transit potential of the Republic of Azerbaijan // -Baku: Scientific Works, Institute of Economics of ANAS, 2010, №3, -p. 213-218.
- 5. Abdullayev, K.N. The role of the transport sector in the development of tourism services // -Baku: ANAS News, Economic Sciences Series, 2011, №3, p.108-111.
- 6. Abdullayev, K.N. Main directions of increasing investments in the transport sector of the Republic of Azerbaijan under the conditions of globalization // Baku: Scientific Works, Institute of Economics of ANAS, 2011, No. 1, p.327-332.
- 7. Abdullayev, K.N. Directions for determining quality criteria in the field of transport, communication and information technologies in the conditions of modern economic integration // -Baku: Scientific Works, Institute of Economics of ANAS, 2012, №2, p.314-320.
- 8. Abdullayev, K.N. Issues of increasing investment attractiveness in ensuring the competitiveness of the transport system // -Baku: Scientific Works, Institute of Economics of ANAS, 2012, N_2 3, p.95-99.
- 9. Abdullayev, K.N. Issues of improving the quality of transport services in the formation of a competitive economy // -Baku: Scientific Works, Institute of Economics of ANAS, 2013, №1, -p.290-294.
- 10. Abdullayev, K.N. Directions for improving the quality of information and communication services in modern economic

- conditions // Baku: Scientific Works, Institute of Economics of ANAS, 2013, №2, p.25-30.
- 11. Abdullayev, K.N. The role of the state in increasing the competitiveness of the transport sector in the Republic of Azerbaijan // Baku: Scientific Works, Institute of Economics of ANAS, 2014, №1, p.88-92.
- 12. Abdullayev, K.N. The role of the state in increasing the competitiveness of the ICT sector in the Republic of Azerbaijan // Baku: Scientific Works, Institute of Economics of ANAS, 2014, N_{2} , p.68-72.
- 13. Abdullayev, K.N. Issues of creating private entrepreneurship in the transport sector in the Republic of Azerbaijan: reality and prospects. // Baku: Strategic Analysis Journal (Publication of the Center for Strategic Studies), CPS PP LLC, 2015, p.171-183.
- 14. Abdullayev, K.N. The question sustainable development of service field in Azerbaijan Republic (in the context of transport and information communication technologies (ICT) // Kherson: Scientific news of Kherson State University, 2015, №11, p.9-12.
- 15. Abdullayev, K.N. The development transport connection Azerbaijan Republic with European Union's countries on the basis of international transit transport projects "East-West" (TRACECA), "North-South" and "South-West" // Rostov -na -Don: Accounting and Statistics , 2018, №3, p.108-116.
- 16. Abdullayev, K.N. The problems of forming and developing private entrepreneurship according to world practice on railway transport sector in Azerbaijan Republic // Actual problems using by potential of state economy: world experience and national reality (International scientific and practical conference) Pridneprovsk State Academy Building and Architecture, Dnepropetrovsk: p.h. Pdaba, -2018, -p.23-26.
- 17. Abdullayev, K.N. The main directions creating private entrepreneurship in sea transport sector of Azerbaijan Republic // Actual aspects of the mechanism of modernization of economy and financial system of the country, (International scientific and practical conference), Zaporizhia State Engineering Academy, Zaporizhia: p.h. Science, 2018, p.22-27.

- 18. Abdullayev, K.N. Directions for improving Azerbaijan's position in international rankings on transport services indicators // "Transport of Azerbaijan: achievements, problems and prospects" (materials of the Republican scientific conference), Ministry of Science and Education of the Republic of Azerbaijan, Azerbaijan Technical University, State Automobile Transport Service under the Ministry of Transport, Communications and High Technologies, -Baku: -2019, -p.28-30.
- 19. Abdullayev, K.N. Assessment of the role of private entrepreneurship in the development of the transport sector of the Republic of Azerbaijan // Development prospects of the non-oil sector of Azerbaijan (Scientific-practical conference), -Sumgayit: SDU p.h., -2019, p.83-85.
- 20. Abdullayev K.N. The questions according to world practice to carry out sustainable, radical, structural reforms and privatization policy in national transport sector of Azerbaijan Republic / Corporate management: processes, strategies, technologies» (collective monograph), Ministry of Education and Science of Ukraine, Kherson State University. Kherson: Science p.h., 2019, p. 6-15.
- 21. Abdullayev, K.N. The impact of private entrepreneurship on transport in raising international rating indicators of the transport sector of the Republic of Azerbaijan. / "Institutionalization as a factor in the development of the investment-innovation security system of Ukraine" (collective monograph), Ministry of Education and Science of Ukraine, Classic Private University, Zaporozhye: Science p.h., -2019, p. 6-20.
- 22. Abdullayev, K.N. The opportunities of improving position of transport sector of the Azerbaijan Republic on international rating indicators in Global Competitiveness Report / Economic safety of national energy sector under the globalization (coll. monograph) Ministry of Education and Science of Ukraine, Classic Private University, Zaporozhye: Science p.h., 2020, p.5-20
- 23. Abdullayev, K.N. Directions for improving the position of the railway transport sector of the Republic of Azerbaijan in international comparative ratings // Baku: Economic growth and social welfare, -2021, №2, -p.99-110.

- 24. Abdullayev, K.N. Main directions of improving the international rating of Azerbaijan's air transport in the Global Competitiveness Report // Baku: Economic growth and social welfare, 2021, №3, p.108-118.
- 25. Abdullayev, K.N. Issues of ensuring the development of the digital economy // -Baku: ANAS news. Economics series. 2021, №1, -p.134-140
- 26. Abdullayev, K.N. Assessment of the role of the Zangezur corridor in the creation of a new regional transit line // "Sustainable development strategy: global trends, national experiences and new goals" (I International scientific conference), Mingachevir: 2021, p.132-134.
- 27. Abdullayev, K.N. Directions for improving the international rating of maritime transport of the Republic of Azerbaijan // -Baku: Economic growth and social welfare, -2022, №2, -p.90-105
- 28. Abdullayev, K.N. Main directions of eliminating economic recessions in general transportation in the international transport transit corridor of "Europe-Caucasus-Asia" (TRACECA) // -Baku: Economic growth and public welfare, 2022, №3, -p.156-169.
- 29. Abdullayev, K.N. Main features of the development of the digitalization process in the field of transport . // -Baku: Economic growth and social welfare, 2022, №4, p.141-150.
- 30. Abdullayev, K.N. Factors influencing the ranking of maritime transport in the Global Competitiveness Report: the developing country case // Sumy: Corporate & Business strategy review, 2022, N_{2} , p.43-54.
- 31. Abdullayev, K.N. The current condition of public-private partnership in the transport-logistics services sector of Azerbaijan Republic // Economy , business , innovation : current questions theories and practice (IV international scientific practical conference) , Penza : Science p.h.- December 5 , 2024. p. 139-142



The defense will be held on 19/2 march, 2025 at 11:00 at the meeting of the Dissertation Council ED 1.10 of Supreme Attestation Comission under the President of the Republic of Azerbaijan operating at the Institute of Economics of the Ministry of Science and Education of the Republic of Azerbaijan.

Address: AZ 1143, Baku city. H.Javid ave., 115, Institute of Economics e-mail: economicscomaz@gmail.com

Dissertation is accessible at the Library of the Institute of Economics of the Ministry of Science and Education of the Republic of Azerbaijan.

Electronic versions of the abstract is aviable on the official website of the Institute of Economics of the Ministry of Science and Education of the Republic of Azerbaijan (https://economics.org.az)

Abstract was sent to the required addresses on Of february, 2025.

Signed for print: 22.01.2025 Paper format: A5 Volume: 79826 characters Number of hard copies: 30